

**THE LONDON SCHOOL OF ECONOMICS
AND POLITICAL SCIENCE**

The Boeing / McDonnell Douglas and EADS Mergers:

**Ethnocentric vs. Regiocentric Consolidation
in the Aerospace and Defence Industry
and the Implications for International Relations**

by

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A thesis submitted to the Department of International Relations at the
London School of Economics and Political Science
for the degree of
Doctor of Philosophy

London, November 2010

Declaration

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Abstract

This thesis relies on realist and neo-mercantilist approaches to explain the consolidation of the US and European aerospace and defence industry during the second half of the 1990s. Based on two case studies, the Boeing / McDonnell Douglas (BMD) merger in 1997 and the EADS merger in 1999, the thesis analyses the different political and economic motivations that led these aerospace and defence companies as well as their respective home governments to pursue either ethnocentric consolidation (in the case of the US) or regiocentric consolidation (in the case of France, Germany, and Spain) strategies. The BMD merger is interpreted as an attempt by the American hegemon to ensure that the important military, economic, and technological benefits derived from this strategic sector continue to accrue, above all, to the United States and its aerospace and defence industrial base. The cross-border EADS merger, in contrast, is viewed as a Franco-German-led counterbalancing attempt to guarantee the survival and autonomy of the European aerospace and defence industry, including Airbus, in the face of growing competitive pressures from the rapidly-consolidating US mega-primes like Boeing. The thesis contrasts several high-profile transatlantic M&A deals in a variety of business sectors with the marked absence of similar transactions between US and European aerospace and defence companies. It thus highlights the strategic nature of this particular sector as well as American concerns about the proliferation of advanced US technologies to third countries, including to European NATO allies. Ultimately, realist and neo-mercantilist arguments prevailed over liberal-institutionalist / globalisation arguments among policymakers and business leaders on both sides of the Atlantic (especially in Washington, DC and Paris) – thus paving the way for the BMD and EADS mergers.

Acknowledgements

First and foremost, I would like to thank my LSE PhD supervisor, Professor Lord William Wallace, who spent countless hours reviewing earlier drafts of this thesis. Without his superb intellectual guidance and strong personal commitment to seeing me through on this challenging multi-year endeavour, it would have been truly impossible to complete my thesis. In this context, I would also like to thank my first two LSE supervisors, Professor Christopher Hill and Professor David Stasavage, who helped shape my PhD research design at an early stage, before they both left London.

Second, I would like to thank Professor Klaus Schwab as well as my former colleagues at the World Economic Forum in Geneva, including John Moavanzadeh, Andy Richards, and Kevin Steinberg, for all their crucial support in backing my initial PhD programme enrolment at LSE.

Third, I am grateful to the DAAD (German Academic Exchange Service) for providing me with one of those rare full-tuition and living stipend scholarships to support my PhD studies at LSE.

Fourth, at Sciences Po in Paris, I am indebted to Professor Guillaume Devin, who, as my DEA (MPhil) thesis supervisor first sparked my interest in the political, strategic, and economic dimensions of the aerospace and defence industry. I am also grateful to Professor Bertrand Badie, the head of Sciences Po's DEA programme, for facilitating my successful integration into the French academic system.

Fifth, I would like to thank Professor Jeff Anderson and his team at Georgetown University's BMW Center for German and European Studies for welcoming me as Visiting Scholar to conduct relevant PhD research while living in Washington, DC. As a MSFS Class of 2000 alumn, I am a big fan of Georgetown's Edmund A. Walsh School of Foreign Service, where I am teaching a graduate-level course on "The Aerospace and Defence Industry in a Globalised World".

Sixth, I would like to thank my friends and former classmates at LSE, above all Dr. Steve Donzé and Dr. Bastian Giegerich, for their personal support and encouragement during my PhD endeavour. I am also extending a special thank you to many other friends and colleagues who supported my PhD work in a variety of ways, including Dr. Dimitrios Argirakos, Alf Ivar Blikberg, Dr. Arthur Brothag, August Cole, Professor James Davis, Anne Gantén, Dr. Olaf Groth, Dr. John Hamre, Bjoern Hellmich, Bob Helm, Conrad F. Heede, Dr. Peter C. Hughes, Matthias Lohmann, Dr. Maximilian Martin, Christoph Steinl, Steve Tebbe, Dr. Manfred von Nordheim, Christine Walsh, Dr. Michael Werz, Dr. Cornelia Woll, among others.

The final word of gratitude goes to my family, including my parents, my brother Jan, my sisters Martina and Claudia, my parents-in-law Denise Baillargeon and John West, my aunt Annette and her family as well as Estelle Baillargeon. The biggest thank you of all, naturally, belongs to my wife Christiane. Her tireless prayers made sure that this thesis was finished against all odds. My doctorate is dedicated to her and our two little children, Monika (“Kleine Maus”) and Maximilian (“Max”), as well as baby no. 3 due Summer 2011.

Table of Contents

Chapter 1: The Aerospace and Defence Industry in a Globalising World

- 1.1 *What this thesis is all about* p. 11
- 1.2 *The economic and strategic importance of the aerospace industry* p. 21
- 1.3 *The consolidation of the US and European aerospace industries after the end of the Cold War* p. 33
- 1.4 *International collaboration and governmental intervention in the aerospace industry* p. 39

Chapter 2: The Intellectual Battlefield: Competing Theoretical Frameworks

- 2.1 *Bound to compete: realism and the BMD / EADS mergers* p. 48
- 2.2 *Bound to cooperate: neo-liberal institutionalism and the BMD / EADS mergers* p. 70
- 2.3 *Highlighting actors' beliefs and identities: the role of constructivist theory* p. 80
- 2.4 *PhD thesis methodology: the case for case studies* p. 92

Chapter 3: The Boeing / McDonnell Douglas Merger

- 3.1 *Scaling back: the post-Cold War downturn in military spending* p. 103
- 3.2 *Corporate strategies to deal with the post-Cold War downturn in defence spending* p. 109
- 3.3 *“The Last Supper”: how the US government promoted and constrained aerospace and defence industry consolidation in the United States* p. 113
- 3.4 *The race to scale: US aerospace and defence industry consolidation after the Cold War* p. 120
- 3.5 *Boeing, McDonnell Douglas and the “new” Boeing* p. 123

Chapter 4: The EADS Merger

- 4.1 *Aerospace and defence industrial consolidation, collaboration, and competition in Europe* p. 136
- 4.2 *The failed EADC and BAe / DASA consolidation talks* p. 151
- 4.3 *EADS and its founding companies: Aérospatiale Matra, DASA, and CASA* p. 156
 - 4.3.1 *Aérospatiale Matra (AM)* p. 161
 - 4.3.2 *DaimlerChrysler Aerospace AG (DASA)* p. 163
 - 4.3.3 *Construcciones Aeronáuticas SA (CASA)* p. 164
- 4.4 *The Galileo Global Navigation Satellite System* p. 165
- 4.5 *France's unique approach to the aerospace and defence industry* p. 172

Chapter 5: Going American: Explaining The Boeing / McDonnell Douglas Merger

- 5.1 *The aerospace and defence industry: caught between two worlds* p. 179
- 5.2 *Growing foreign dependence of the US aerospace and defence industrial base* p. 187
- 5.3 *The rise of economic rivalries among Western allies in the post-Cold War world* p. 197
- 5.4 *Major transatlantic M&As after the end of the Cold War* p. 202
 - 5.4.1 *The DaimlerChrysler merger: “a marriage made in heaven”?* p. 203
 - 5.4.2 *Deutsche Bank's take-over of Bankers Trust* p. 206
 - 5.4.3 *Deutsche Telekom's take-over of VoiceStream* p. 209
- 5.5 *Moving both towards and away from aerospace and defence industrial globalisation* p. 213

Chapter 6: Building Europe and Balancing the American Hegemon

- 6.1 *The emergence of CFSP and ESDI* p. 217
- 6.2 *The ESDP breakthrough: from St. Malo to Helsinki and beyond* p. 226
- 6.3 *The US reaction to ESDP: “Yes, but...”* p. 238

6.4	<i>Growing US unilateralism and the rise of transatlantic political clashes</i>	p. 242
Chapter 7: Action and reaction: the BMD vs. the EADS merger		
7.1.	<i>Ethnocentric vs. regiocentric aerospace and defence consolidation</i>	p. 246
7.2	<i>Safeguarding Europe's aerospace and defence industrial base vis-à-vis the United States</i>	p. 250
7.3	<i>Britain and the US Defence Market</i>	p. 273
Chapter 8: Conclusion		
p. 279		
Annex		
p. 293		
<i>Interviews / Bibliography</i>		
p. 297		

List of Abbreviations

A&D	Aerospace and Defence
AECA	Arms Export Control Act
AECMA	Association Européenne des Constructeurs de Matériel Aérospatial
AFL-CIO	American Federation of Labor and Congress of Industrial Organizations
AFP	Agence France Presse
AFSOUTH	Allied Forces Southern Europe
AIA	Aerospace Industries Association
AIC	Airbus Integrated Company
AM	Aérospatiale-Matra
AP	Associated Press
AWACS	Airborne Warning and Control System
AWST	Aviation Week & Space Technology
BAC	British Aircraft Corporation
BAe	British Aerospace
BAE	BAE Systems
BMD	Boeing / McDonnell Douglas
BRIC	Brazil, Russia, India, and China
BT	Bankers Trust Bankers Trust
CASA	Construcciones Aeronáuticas SA
CEE	Central and Eastern Europe
CEPS	Centre for European Policy Studies
CFIUS	Committee on Foreign Investment in the United States
CFR	Council on Foreign Relations
CJTF	Combined Joint Task Force
CoC	Code of Conduct
CRAF	Civil Reserve Air Fleet
CSCE	Conference for Security and Co-operation in Europe
CSIS	Center for Strategic and International Studies
DAC	Douglas Aircraft Corporation
DASA	Daimler-Benz Aerospace AG / DaimlerChrysler Aerospace AG
DB	Deutsche Bank
DCX	DaimlerChrysler Corporation
DG	Directorate-General
DGA	Délégation Générale pour l'Armement
DITB	Defence Industrial and Technological Base
DMZ	Demilitarised Zone
DoC	Department of Commerce
DoD	Department of Defense
DoE	Department of Energy
DoJ	Department of Justice
DoS	Department of State
DSB	Defense Science Board
DT	Deutsche Telekom
DTSI	Defence Trade Security Initiatives
EADC	European Aerospace and Defence Company
EADS	European Aeronautics Defence and Space Company
EC	European Commission
ECAP	European Capabilities Action Plan
EDA	European Defence Agency
EDIG	European Defence Industrial Group

EEA	European Economic Area
EEC	European Economic Community
EDA	European Defence Agency
EDITB	European Defence Industrial and Technological Base
ERRF	European Rapid Reaction Force
ESCS	European Coal and Steel Community
ESDI	European Security and Defence Identity
ESDP	European Security and Defence Policy
EU	European Union
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDI	Foreign Direct Investment
FLA	Future Large Aircraft
FMS	Foreign Military Sales
FTC	Federal Trade Commission
FY	Fiscal Year
GATT	General Agreement on Tariffs and Trade
GAO	General Accounting Office
	Government Accountability Office (renamed since 7 July 2004)
GD	General Dynamics
GDP	Gross Domestic Product
GE	General Electric Company
GEC	General Electric Company plc
GM	General Motors
GIE	Groupement d'intérêt économique
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
ICBL	International Campaign to Ban Landmines
ICBM	Intercontinental Ballistic Missiles
ICC	International Criminal Court
IEPG	Independent European Programme Group
IFRI	Institut Français des Relations Internationales
IISS	International Institute for Strategic Studies
ILSA	Iran-Libya Sanction Act
IMS	Integrated Military Structure
IP	Intellectual Property
IR	International Relations
ITA	International Trade Administration
ITAR	International Traffic in Arms Regulation
ITC	International Trade Commission
JSF	Joint Strike Fighter
JV	Joint Venture
KFOR	Kosovo Force
LCA	Large Commercial Aircraft
LMC	Lockheed Martin Corporation
LSE	London School of Economics and Political Science
MAD	Mutual Assured Destruction
MBB	Messerschmitt-Boelkow-Blohm
MBT	Mine Ban Treaty
MC	Military Committee
MDC	McDonnell Douglas Corporation
MHT	Matra Hautes Technologies

MIC	Military-Industrial Complex
MNC	Multinational Corporation
MoD	Ministry of Defence
MS	Military Staff
MTU	Motoren und Turbinen Union
NAC	North Atlantic Council
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organisation
NDU	National Defense University
NGC	Northrop Grumman Corporation
NSA	National Security Agency
OCCAR	Organisation Conjointe de Coopération en matière d'Armement
OECD	Organisation for Economic Co-operation and Development
ODTC	Office of Defence Trade Controls
OMB	Office of Management and Budget
OSCE	Organisation for Security and Co-operation in Europe
OSD	Office of the Secretary of Defense
OTA	Office of Technology Assessment
P&W	Pratt & Whitney
PSC	Political and Security Committee
QDR	Quadrennial Defense Review
RAF	Royal Air Force
R&D	Research and Development
R&DP	Research and Development, Production
RMA	Revolution in Military Affairs
RSI	Rationalisation, Standardisation, and Inter-operability
R&T	Research and Testing
RTD	Research and Technology Development
SCE	Single Corporate Entity
SDI	Strategic Defence Initiative
SDR	Strategic Defence Review
SEC	Securities and Exchange Commission
SE	<i>societa europea</i>
SIPRI	Stockholm International Peace Research Institute
SNECMA	Société Nationale d'Étude et de Construction de Moteurs d'Aviation
STP	Strategic Trade Policy
SWF	Sovereign Wealth Fund
TEU	Treaty on European Union
TRP	Technology Reinvestment Programme
UAV	Unmanned Aerial Vehicle
USAF	US Air Force
USG	US Government
USTR	US Trade Representative
VS	VoiceStream
WEAG	Western European Armaments Group
WEAO	Western European Armaments Organisation
WEU	Western European Union
WJC	World Jewish Congress
WMD	Weapons of Mass Destruction
WTO	World Trade Organisation

Chapter 1: The Aerospace and Defence Industry in a Globalising World

1.1 What this thesis is all about

In my PhD thesis at LSE I analyse the consolidation of the American and European aerospace and defence (A&D) industries in the late 1990s. Based on two case studies – the 1997 Boeing / McDonnell Douglas (BMD) merger in the United States and the creation of EADS (European Aeronautics Defence and Space Company) in Europe in 1999 – I set out to answer the following questions:

- Why did the Americans consolidate their A&D industry at a purely national level, with virtually no involvement from other Western allies?
- By contrast, why did the French, Germans, and Spaniards decide to merge their leading national A&D companies into EADS?
- What do these two case studies tell us about the potential for competition and cooperation in international relations (IR)?
- Are national security concerns the real reason or just a convenient pretext used by policymakers and business leaders on both sides of the Atlantic to justify the treatment of the A&D industry as a “special” sector?

The A&D business has three key characteristics that make it a strategic industry: “(1) it produces goods or services directly related to national security; (2) it generates special benefits for the rest of the economy; and (3) it is prestigious.”¹ As a result, the A&D industry has traditionally been characterised by a high degree of governmental control and intervention. In this context, it is important to differentiate between the commercial and the defence side of the aerospace sector. In particular, what is the exact status of the commercial aerospace industry? Is it part of the private sector in an open economy, or is it rather intricately linked to the public sector because of its Research and Development, Production (R&DP) overlaps with military aviation construction?

This thesis explores whether neo-realism or neo-liberalism offers a better explanation for the BMD and EADS mergers under review. In particular, it argues that the two case studies suggest that transatlantic rivalries over the political, military, economic, and technological power and prestige derived from the A&D industry exist even among close Western NATO allies. The thesis concludes that the BMD and EADS mergers can best be explained by the fact that realist arguments prevailed over liberal-institutionalist arguments among policymakers and business leaders in the countries involved, especially in Washington and Paris. With the A&D industry caught between two very

¹ Golich (1992) p. 910

different worlds – realism and national security vs. liberalism, cooperation, globalisation and open markets – political leaders and business executives in the United States and Europe put a premium on the former, thus reinforcing the notion that this strategic industry sector remains of tremendous importance for a nation’s military and “geo-economic”² security.

The United States was the first country to restructure and consolidate its A&D industry in response to the new post-Cold War environment (sharp cuts in national defence spending, skyrocketing R&DP, etc.). In doing so, Washington embraced what Keith Hayward has termed an “ethnocentric”³ consolidation approach; i.e., one that regards the retention of American control and ownership over key companies such as Boeing and McDonnell Douglas Corporation (MDC) as paramount to national security considerations. This ethnocentric approach to A&D industry consolidation is fully in line with the key tenets of realism, which would posit that sovereign, independent states will try to prevent strategic companies and entire industries of critical importance to their national security and survival from coming under full or even partial foreign control. In this context, one must not forget that during the 1990s, relations between Washington and many of its European allies were strained over a number of issues, ranging from the Kyoto Protocol to the International Criminal Court (ICC) as well as the EU’s attempt to establish a European Security and Defence Policy (ESDP) to act independently of the US and NATO if necessary. Given that America and Europe were no longer united by a common Soviet threat, but found themselves increasingly at odds over the fundamental principles governing the exercise of power in the international arena (unilateralism vs. multilateralism, etc.) – it is understandable that Washington was not eager to provide the Europeans and their A&D players with the substantial relative gains (in terms of access to US state-of-the-art technologies, etc.) that full-fledged transatlantic mergers (of equals) would have entailed. Furthermore, the Clinton administration’s neo-mercantilist agenda – defined as the attempt “to assure that the aeronautical capabilities (technological, industrial, and commercial) of the respective countries are nurtured and protected and given every advantage over their rivals”⁴ – also played a role in shaping US industrial and export promotion policies in the A&D sector.

In the case of the US, realism interprets the ethnocentric BMD merger as an attempt by the American hegemon to consolidate and defend its dominant military, economic, and technological

² “Geo-economics” – first developed in the 1980s / 1990s – is essentially “a concept based on a confrontational model of international economic activity [...] which posits a state of economic ‘warfare’ between leading countries. It is argued that the US, the EU, Japan (and increasingly China) are essentially adversaries though the weapons in countering threats to national security are economic policy measures rather than cruise missiles and stealth bombers.” Cable (1995) pp. 305; 307

³ Hayward (1999) pp. 3-14

status vis-à-vis *all* potential challengers, including NATO allies like France, Germany, and Spain – the EADS founding nations. Realists fear that transatlantic defence mergers could potentially create two major national security risks and vulnerabilities for the US. First, full-blown mergers between US and European A&D companies could make the United States overly dependent on foreign-based supply sources of critical military and commercial systems or components. Second, transatlantic defence consolidation and integration could also increase the likelihood of unauthorized technology transfers, not only from technologically more advanced US companies to their European partners but also, and more importantly, from European companies to third countries. For the American hegemon, the gradual diffusion of key technological capabilities to its European allies and, possibly, to hostile third countries or non-state actors is of great concern because it risks undermining one of the main elements of America’s dominance in the world today.⁵ As stated in a 2002 USAF-sponsored RAND report on the implications of the globalisation of the American A&D industry: “Globalisation’s most potent threat lies in its potential to equip hostile nations and groups with advanced weapons and technologies designed by the United States and paid for by the US government.”⁶ As one analyst put it, “the development and exploitation of technology tends to change power relations, whether these are social, economic, political or military”.⁷ For realists, national autonomy in defence R&DP is paramount as a basis for an independent foreign, security, and defence policy. Even if from a primarily economic and business perspective (i.e., the logic of a globalising world economy), a transatlantic merger between Boeing and a European partner had made more sense than the BMD merger, realists would nonetheless have predicted and advocated that Washington block such a move on national security grounds and embrace an ethnocentric consolidation approach instead.⁸

America’s European allies, in contrast, lagged behind the US and were in a largely reactive mode when it came to post-Cold War A&D industrial consolidation. In this context, the EADS merger involving three European “national champions” conformed to the model of a “regiocentric”

⁴ Thornton (1999) p. 72

⁵ “From a long-term strategic standpoint, globalisation’s most significant manifestation is the irresistible levelling effect it is having on the international military-technological environment in which DoD must compete. Over time, all states – not just the US and its allies – will share access to much of the same technology underpinning the modern military. [...] [W]ith the whole world working from essentially the same military-technological ‘cookbook’, the [US] will need to rely on its unique strengths as ‘chef’, that is, as the world’s most innovative integrator of militarily-useful – though not always US-developed – technology.” Defense Science Board (1999), pp. v ; 29

⁶ (Lorell et al., 2003) p. xvii. This quote reflects a decidedly American ethnocentric as well as state-centric defence industrial approach as it refers for example, to “advanced weapons and technologies designed by the [US] and paid for by the US government” but fails to make a reference to the relevant contributions by relevant (foreign or domestic) private sector companies.

⁷ Williams (1984) pp. 70-71

⁸ At the time of the BMD merger, national security hawks in Congress and at the State Department were the strongest opponents of transatlantic mergers at the prime contractor level. The Pentagon, in contrast, was very open to such an

company “blending strategic interests with regional integration / national sensitivity”.⁹ Hayward coined these concepts of ethnocentric vs. regiocentric A&D industrial integration during the crucial 1997-1998 period: after the BMD merger but before the creation of EADS. Like the creation of BMD in the United States, Europe’s transnational EADS merger can also be explained by a predominantly realist analytical framework. By pooling their major A&D assets into one company, France, Germany, and Spain were trying to foster the creation of an economically and technologically competitive European champion that would be able to survive the onslaught of the emerging American mega-primes.

For the French and German private sector A&D firms (Lagardère and DCX¹⁰) negotiating the EADS deal, the merger was primarily about improving their relative international competitiveness by gaining the critical mass necessary to realise economies of scale that could only be reached by going beyond the confines of the existing “national champions”. Neither French nor German business leaders involved had any interest in seeing the EADS merger foster a “Fortress America” vs. “Fortress Europe” trade confrontation. Escalating protectionist sentiment on both sides potentially risked severely hurting EADS’s bottom line. Furthermore, corporate A&D leaders in Germany, France, and the UK shared a strong desire to gain access to the lucrative American defence procurement market.

From the perspective of Europe’s political leaders, especially those in France and Germany, the rapid ethnocentric consolidation of the US A&D industry appeared to be part of America’s ambition to preserve its post-Cold War superpower status and prevent the rise of any potential peer competitors (including NATO allies). Several factors both external and internal to the EU (European Union) spurred the continent’s two leading powers – the Franco-German engine – to venture into a political, strategic, and military territory (i.e., the EADS merger) where neither one of them, nor any other countries in the world, had gone before. During the 1990s, with the Soviet threat gone and America emerging as the world’s sole superpower, one witnessed transatlantic tensions over a number of issues, ranging from the ICC and the Kyoto Protocol to the EU’s attempt to build its own security and defence capability outside of NATO. The ESDP effort, in particular, raised American suspicions that Europe was no longer merely a major economic competitor – something that had already triggered US concerns in the 1960s and 1970s – but was now also trying to position itself as a strategic competitor and possible counterweight to Washington.

idea (especially regarding a potential merger with BAe) as the military had a strong interest in fostering more competition for US defence bids in an effort to get “more bang for the buck”. Hamre (2007)

⁹ Hayward (1999) p. 9

¹⁰ DCX = DaimlerChrysler Corporation

The cooling in transatlantic relations made it relatively easy for France and Germany to come to think of the US as “the other” – a crucial element in any collective identity-building process. Therefore, transatlantic political differences with Washington, coupled with the preponderance of US power in the international system, called for selective European counterbalancing against the American hegemon. For sure, neither France nor Germany had the ambition or capacity to turn the EU into a strategic / military peer competitor to the United States. However, the unwillingness and inability of Paris and Berlin to transform the EU into a credible strategic rival to the US did not mean that the two countries were not able to get their act together when core national security and economic interests – i.e., the need to maintain technologically advanced and internationally competitive A&D companies (including the respective national champions as well as Airbus) – were threatened by US mega-primes. A fundamental change that occurred in connection with the end of the Cold War was that Washington (through the Pentagon) had lost the strategic incentive to support the European defence industrial base (including technology transfers, which had begun in the 1950s), since the Soviet threat had disappeared and Europe was no longer the most important strategic theatre for the US. The French response to the rise of the American mega-primes in the 1990s is reminiscent of General de Gaulle’s attempt to counter-balance the US in the 1960s, when he “pledged to restore French greatness through technology, not empire”¹¹. As a result, “the identity of Gaullist France [became] wedded to the prestige and power of technological dynamism more consciously even than Kennedy’s America”¹².

The competitive threat posed by the BMD merger was compounded by the fact that any weakening of Europe’s (relative) economic and technological position in the international A&D industry was likely to have a corresponding negative impact on Europe’s ability to act collectively as an independent security and defence player (i.e., outside of the American-dominated Atlantic Alliance if necessary). For example, the 1999 Kosovo War served as a dramatic reminder of Europe’s military and technological deficits vis-à-vis the US. Subsequently, the strengthening of European A&D industrial capabilities became an important priority for policymakers in Paris, Berlin, London, and beyond. In the wake of the Kosovo War, the EU’s major arms-producing countries (France, Germany, UK, Italy, Spain, Sweden) repeatedly emphasised the crucial role played by the A&D industry in providing the power-projection capabilities necessary to conduct EU-led security and defence operations abroad.

¹¹ McDougall (1985) pp. 179-180

¹² Ibid., p. 180

This thesis analyses the complex relationship between the A&D industry and national governments in Europe and the United States after the Cold War. The demise of the Warsaw Pact and the break-up of the Soviet Union were followed by a sharp decline in defence and weapons procurement expenditures (see Annex T table 4). As a result, both US and European A&D companies came under tremendous pressure to cut costs and consolidate their operations through M&As. However, the aerospace industries in America and Europe in conjunction with their respective national governments adopted different strategies to cope with similar problems and challenges. The Americans decided to go it alone and pursued the creation of “national champions” like BMD through the promotion of large-scale national M&As. France, Germany and Spain, in contrast, decided to move beyond the confines of “national champions” to create EADS, a “European champion”. The stark choice faced by the Europeans at the time was either to join forces and merge their national champions or risk becoming a junior-partner-type subcontractor to the Americans.¹³

Boeing’s US\$16.3 billion acquisition of MDC in 1997 is the biggest take-over in the US aerospace industry to date. Both in terms of its size and its political-military implications, the BMD merger is an important subject of academic scrutiny. In view of America’s global political, economic, and military preponderance, US aerospace companies saw no need to look for partners abroad to consolidate their operations, reap economies of scale, and improve their overall competitiveness. Boasting an unparalleled technological lead and the world’s largest A&D market, the American aerospace industry along with the US government decided that it was better to consolidate nationally than to cooperate internationally. From a realist perspective, cooperation always carries risks, notably in the form of cheating. Even if international cooperation works fine and produces absolute gains for all parties, hegemonic powers like the US remain concerned about the potential consequences of the weaker partners deriving relatively greater gains from cooperation, thus precipitating the hegemon’s eventual decline. Historically, the transfer and diffusion of technological innovations from the hegemonic core to the periphery has played a key role in the rise and fall of great powers.¹⁴ This point raises a further question: namely whether private-sector multinational corporations (MNCs) share the same kind of strategic, long-term thinking as their home governments or whether they are rather interested in short-term profit maximisation.^{15 16 17 18}

¹³ Key Western European countries and their A&D industrial companies had already faced this choice vis-à-vis America since the 1960s (“le défi américain”). That being said, this issue became much more pressing and the choice much more acute in a shrinking post-Cold War defence market.

¹⁴ Gilpin (1981)

¹⁵ “Because [MNCs] are the major force in international trade and are deeply enmeshed in local economies, they are influential in national politics and essential to industry. But because they span national borders, many [MNCs] are less concerned with advancing national goals than with pursuing objectives internal to the firm—principally growth, profits, proprietary technology, strategic alliances, return on investment, and market power.” OTA (1993) pp. 1-2

¹⁶ The aerospace industry’s dealings with China would suggest the latter. After all, Beijing has been able to secure favourable production sharing and final assembly deals from Airbus and Boeing as it played off the two Western

Even though America and its European allies were both part of NATO and had just prevailed over the Soviet Union during the Cold War, the US adopted an A&D industrial policy designed to preserve and advance the country's hegemony for years to come. In fact, it is conventional wisdom among conservative and neo-conservative thinkers that President Ronald Reagan's massive military build-up in the 1980s proved to be decisive in out-spending and out-researching the Soviet Union, thus ushering in the end of the Cold War. "The US will need to redouble its efforts at out-innovating, out-integrating, and out-investing its competitors."¹⁹ America's go-it-alone approach was driven by a concern that other major powers, including a resurgent Europe, could try to counterbalance US hegemony. Washington's unilateralism is evidence that its concerns were based on a realist assessment of potential absolute and relative gains. The fact that the US consolidated its aerospace industry at a purely national level is a stark reminder that uncertainty and distrust remain powerful shapers of international relations, even among close allies. Warnings by Congress and the Bush administration in 2004-2005, that Washington could sharply curtail transatlantic defence cooperation if the EU were to lift its China arms embargo, illustrate that the US and Europe no longer necessarily share the same strategic outlook.^{20 21 22 23} This is particularly true with respect to

aerospace giants in their race to meet the country's projected vast demand for commercial aircraft. Interestingly, similar dynamics were already at play earlier, when Boeing and MDC also competed for access to the Chinese market: "For weaker states, the industry's strategic value is an added centripetal force, impelling them to seek participation in the industry at any level. As a result of shifting power relationships, these relatively weak states may be able to coerce dominant states to pursue internationalised production strategies. For example, [...] China [...] has benefited from the competition between Boeing and [MDC], coercing each to establish joint venture projects that include various levels of production in the PRC." Golich (1992) p. 913

¹⁷ During the early stages of the Cold War, when the US was able to rely both on "structural hegemony" – "the concentration of economic resources (i.e., aid, credits, markets) in a single state" – and "ideological hegemony" – "the ability of the dominant state to convince other actors to accept its frame of reference as their own" – "to persuade [foreign / allied] host governments and home offices [of US-based MNCs] to cooperate in extending embargoes and export controls to its corporations abroad." However, since the 1970s, "hegemonic decline and the global spread of American business have placed an increasing proportion of US corporate decision making beyond the control of public officials. MNCs cannot be seen simply as instruments of foreign policy but as independent actors whose autonomy from state control can frustrate diplomatic preferences." Rodman (1995) pp. 107 ; 137. However, Rodman's observation only holds true for "normal" US non-defence MNCs. The fact that all major US A&D companies are highly dependent on the Pentagon's vast and lucrative procurement as well as R&D budgets gives the US government unparalleled leverage, and influence over this strategic industry sector.

¹⁸ "A number of studies have shown that since the 1970s, corporate managers have veered away from an ethnocentric identification with American [C]old [W]ar aims and toward a self-conscious ideology of 'business internationalism', which sought to isolate commercial and financial activity from political manipulations. Corporate spokesmen increasingly asserted their willingness to deal with any state regardless of ideology and contended that diplomatic hostility should not spill over into economic relations. Moreover, they characterised their operations in repressive or hostile states as neutral and apolitical – a necessity for survival in an ideologically diverse world. This change in corporate outlook, however, made it less likely that MNCs could be persuaded to act in ways that conformed to American diplomatic aims." Ibid., p. 112

¹⁹ Defense Science Board (1999) pp. 29-30

²⁰ (Fata & Gaspers, 2005)

²¹ It is important to point out that various US administrations as well as Congress have long used double standards with regard to third-party arms exports to China. On the one hand, Washington lashed out at Brussels and warned that the US would sharply reduce transatlantic defence industrial cooperation if the EU were to lift its weapons embargo on China imposed in 1989. On the other hand, however, Washington largely ignored and turned a blind eye on Israel's long-time track record of exporting advanced weapons systems including sensitive US technologies to China – often in clear violation of US re-export regulations.

Asia, where America has a strong military presence while the Europeans focus primarily on their economic and trade interests.

The 1999 EADS merger marked the first time that A&D companies from several sovereign countries decided to fully merge their operations into one company. The gradual expansion of political, military and economic cooperation through institutions like the EU, WEU²⁴, and NATO, as well as the Airbus consortium, created a new level of intra-European interdependencies that helped to overcome traditional security dilemmas. This is the explanation put forward by neo-liberal institutionalists belonging to the functionalist and interdependence school. From this perspective, the process of European integration, developed through political, economic, and also military institutions, played a key role in overcoming centuries of bloody conflicts and two devastating world wars. Based on decades of mutually beneficial cooperation within the context of European integration and Airbus, France and Germany concluded that their interests – defined through national as well as European identities – were better served by merging their key aerospace industrial assets into one “European champion” rather than pursuing the creation of different “national champions”. Confronted with the choice between maintaining a nationally independent, yet comparatively small and inefficient aerospace industrial base and creating a fully integrated “European” aerospace company, France, Germany, and Spain opted for the latter.

Turning to the realist perspective on the EADS merger, it is relevant to note that the EADS merger coincided with primarily French-led EU efforts to create an ESDP distinct from NATO. The development of ESDP and the corresponding creation of EADS in 1999 were also triggered by the BMD merger two years earlier. Faced with an America that could potentially dominate Europe both on the politico-military level (NATO) and economic level (Boeing vs. Airbus, etc.) France, Germany, and Spain decided to join forces to counterbalance American supremacy. Boeing’s

²² During the early stages of the Cold War, Washington “generally gained allied [...] compliance [with US-led sanctions regimes] despite significant differences over questions of both policy and law. In terms of policy the [US] sought to forge a multilateral consensus behind policies of economic warfare against the Soviet Union and other Communist states such as China and Cuba. In contrast, the allies generally preferred to limit embargoes to items of direct military significance while encouraging the expansion on non-strategic trade. In terms of law, the [US] and its allies disagreed as to whose legal system had the final authority over the foreign subsidiaries of US firms. The [US] asserted that the nationality of the home office gave it the right to extend its law to the foreign operations of American firms even if those operations have an adverse impact on important public interests (the effects doctrine) or national security (the protective principle). The Trading with the Enemy Act and the Export Control Act gave the executive branch the statutory authority to apply embargoes and export controls to foreign subsidiaries. Canada and Europe, however, believed that jurisdiction should be determined by the territory in which a foreign subsidiary is incorporated rather than the nationality of the home country. Consequently, they defined US claims of extraterritoriality as infringements of their national sovereignty.” Rodman (1995) pp. 107-108

²³ There is a long history of European suspicions that Washington used strategic embargoes like this to disadvantage European companies in competing with US companies, as an outcome of industrial lobbying and campaign funding for Members of Congress rather than the strategic / security reasons stated.

²⁴ WEU = Western European Union

acquisition of MDC – the smallest of the three remaining manufacturers of large passenger aircraft – effectively transformed the dogfight between Boeing and Airbus into a zero-sum game. If left unanswered, the Boeing-MDC merger threatened to permanently tip the balance in favour of the Americans, thus potentially forcing Airbus to gradually exit the market. From a realist perspective, this rather confrontational “us vs. them” process of identity creation has traditionally been one of the strongest and most effective drivers of international collaboration. The rationale behind EADS was thus a combination of both business objectives – rationalisation, increased economies of scale – and political objectives – fostering the process of European integration and providing the industrial basis for a European security and defence policy distinct from the US.

The globalisation of the A&D industries – which gained momentum after the fall of Communism in the 1990s – made both the US and its European allies increasingly dependent on “foreign technologies, foreign-sourced products, or domestic-sourced products purchased from the local subsidiaries of foreign corporations”.²⁵ As a result, policymakers and business leaders were forced to strike a difficult balance between the competing demands of maximising economic efficiency while at the same time minimising foreign control of their defence industrial base. From a purely neo-liberal economic and business perspective, the nationality of the owners, managers, or workers of a given A&D company do not matter that much. Defence procurement decisions should be primarily driven by the desire to find the cheapest, most effective weapons systems available on the market, irrespective of whether the company is foreign or domestic.²⁶ For economists, the leveraging of international comparative advantages through the expansion of cross-border trade and investment is the key to increasing a nation’s overall welfare. Costly experiments in industrial policy, i.e., the creation of “national champions”, are “nothing more than new instances of old attempts at protectionism and the preservation of inefficiency”²⁷.

For national security strategists, in contrast, it is of utmost importance where production takes place and who controls the process. The erosion of a country’s “capacity to build or replace critical force structures independently of economic and political decisions of other sovereign powers”²⁸ poses a serious potential national security threat. The creation of “national champions” in the A&D industry in Europe in the late 1980s was partly driven by a neo-mercantilist agenda that strives to achieve maximum national autonomy in key strategic industries. As one analyst argued, the worst fear of mercantilists is that “dependence on foreign corporations whose key operations take place outside

²⁵ Moran (1990) p. 57

²⁶ “Left to themselves, defence companies will go as international as they can in their operations so as to maximise their access to markets and minimise the price of their products.” Taylor (1990) p. 70

²⁷ Moran (1990) p. 58

national borders opens up a real threat of interference on the part of their home country governments.”²⁹ Mercantilism, the economic dimension of realism, also offers relevant insights into the EADS and BMD mergers. From the 16th to the 18th century, the period that coincides with the emergence of European nation states, mercantilism was the dominant school of economics. While mercantilism never developed into a unified theory of economics, its various proponents shared a common belief that the wealth, status, and power of a state are a function of its capital holdings. Mercantilists also agreed on the zero-sum nature of the international economic system, where the global volume of trade is “unchangeable” and where the gain of one country comes at the inevitable loss of another. According to mercantilists, the best strategy for a country’s government to grow and maximize its capital account surplus was to encourage exports and to discourage imports, primarily through the imposition of high tariffs. In essence, mercantilism calls for a highly interventionist economic and industrial policy, where the state creates national champions and shields them from foreign competition.

Despite frequent public pronouncements in support of international trade liberalisation, political leaders in key Western countries, especially in France and the US – have retained strong (neo-) mercantilist and protectionist instincts, especially with regard to strategic industries like the A&D sector. From a mercantilist perspective, the BMD and EADS mergers were designed to ensure that a) the aerospace giants could reap economies of scale to become more competitive internationally and to capture an ever bigger share of the world’s lucrative civil and military aerospace market; and b) to allow each of the national governments involved to benefit from additional tax revenues, a boost in employment, increased civil and military technological sophistication, as well as heightened international prestige as a result of the commercial success of “their” respective aerospace champion.

²⁸ Defense Science Board (1988) p. 2

²⁹ Moran (1990) p. 61

1.2 The economic and strategic importance of the aerospace industry

A comparative overview of the composition and value of both commercial and military US aircraft shipments during the 1971-2006 period compiled by the US Department of Commerce (DoC) illustrates the shifting relative economic weight of the two industry sectors as well as their increased technological sophistication over time:³⁰

Year	Military Aircraft		Commercial Aircraft		Total	
	Output	Value (billion)	Output	Value (billion)	Output	Value (billion)
1971	2,914	US\$8.4 (77 percent of total)	8,142	US\$3.0 (23 percent of total)	11,056	US\$11.4 (100 percent)
1988	1,210	US\$43.7 (78 percent of total)	1,800	US\$12.1 (22 percent of total)	3,010	US\$55.8 (100 percent)
1999	359	US\$35.8 (44 percent of total)	3,440	US\$45.2 (56 percent of total)	3,799	US\$81.0 (100 percent)

In 1971, America manufactured 11,056 aircraft with a combined value of US\$11.4 billion. That year, the commercial aircraft sector accounted for 8,142 units valued at US\$3.0 billion; in contrast, the US manufactured 2,914 military aircraft worth US\$8.4 billion. Hence, the ratio between the total value of military and commercial aircraft production in the United States stood at a stunning 77 vs. 23 percent in 1971. By 1988, at the height of President Reagan’s arms build-up, America manufactured 1,210 military aircraft worth US\$43.7 billion; in comparison, the commercial aircraft sector delivered 1,800 units at a combined value of US\$12.1 billion – thus putting the ratio between US defence and commercial sales even slightly higher at 78 vs. 22 percent. By 1999, however, the relative weight of the two sectors had shifted dramatically. Total aircraft deliveries reached 3,799 units, with a combined value of US\$81.0 billion. The commercial sector accounted for 3,440 units worth US\$45.2 billion; in contrast, military aircraft production had dropped to 359 planes, with a combined value of US\$35.8 billion. So, just ten years after the fall of the Berlin Wall, the relative dominance of military vs. civil aircraft production in the United States had been reversed (44 vs. 56 percent) – a development due to a combination of defence procurement cuts and a sharp increase in demand for commercial aircraft. Between 1996 and 1999 alone, the value of annual US commercial aircraft deliveries more than doubled from US\$22.2 billion to US\$45.2 billion.

Is the civil aviation industry part of the private sector in an open economy, or is it rather intricately linked to the public sector because of its R&DP overlaps with military aviation construction? In a 1992 article which “uses commercial class aircraft manufacturing to focus on the dynamic relationship between states and markets”, Vicki Golich writes:

³⁰ ITA (2006)

“In the case of commercial-class aircraft manufacturing, structural changes in the international system and industry dynamics act as centripetal forces impelling states and corporations toward collaboration, while the industry’s strategic value acts as a centrifugal force impelling protectionist policies designed to avoid perceived vulnerabilities associated with mutual dependency.”³¹

Several different, partly opposing forces have been shaping the commercial aerospace industry in recent years and decades. At the international systemic level, Golich identifies the following four centripetal forces:

“First, transnational interdependencies extend across an increasing number of political boundaries and link a growing number of issue areas. Few national leaders believe that it is possible to disengage from the network of economic interdependence. [...]

Second, power capabilities are more equally, if still asymmetrically, distributed among states. [...] The growth of aerospace manufacturing capabilities in Europe and the newly industrialising countries of Brazil, Indonesia, and Israel reflect this change. [...]

Third, the large foreign debt that emerged as a structural problem in the 1980s depresses purchasing power. [...]

Finally, market dimensions are no longer delineated by a series of distinct national markets linked by trade.”³²

Dramatically changing dynamics within the commercial aerospace industry itself have also acted as centripetal forces pushing the companies concerned towards closer (national and transnational) collaboration; i.e., FDI³³, co-production and licensing arrangements as well as collaborative undertakings to design, produce, and market aerospace products as well as systems:³⁴

“During the last fifty years the industry has been transformed into a sector characterised by an oligopolistic production structure, an extremely high survival risk, and intense competition for sales in a global market. [...] Technological advances have extended developmental lead time, increased launch costs, complicated marketing, and lengthened the time between initial research and revenue earning.”³⁵

³¹ Golich (1992) p. 902

³² Ibid., pp. 902-903

³³ FDI = Foreign Direct Investment

³⁴ Golich (1992) p. 924

³⁵ Ibid., p. 903

Virtually all of these industry dynamics are driven by the exponentially rising R&DP costs of building next-generation aircraft. For example, the average commercial aircraft manufacturing costs per seat increased from US\$65,000 in 1970 to US\$275,000 in 1991 – a more than four-fold increase in 21 years.³⁶ As a result, soaring R&DP expenditures “have increased the proportion of launching cost to equity from 42 percent (for the development of the Douglas DC6 in the 1940s) to 155 percent (for the development of the DC10 in the late 1960s and early 1970s)”.³⁷ Detailed shipment statistics by the US Department of Commerce cited earlier also illustrate the exploding average unit costs for both US commercial and military aircraft.³⁸ In 1971, the average US civil aircraft cost US\$367,000; the corresponding average figure for military aircraft stood at US\$2.9 million. By 1987, the average price of a US commercial aircraft had skyrocketed to US\$6.7 million; in comparison, US military aircraft cost an average US\$36.1 million. In 1999, US civil aircraft, on average, cost US\$13.1 million while the corresponding figure for military planes stood at US\$99.7 million.³⁹

Pentagon procurement programmes have long been hampered by major delays and cost overruns:⁴⁰

“Every service has to some extent mortgaged its future by failing to contain equipment costs, and by trading existing equipment and force elements to develop new systems that it may never be able to procure in the numbers planned. These failures in cost containment have been compounded by the failure to make realistic assessments of technology and production capabilities, and the failure to set reasonable performance specifications and then stop the grow of technological risk and even more demanding performance specifications over time.”⁴¹

“Almost every major aircraft development programme is in so much trouble that the replacements are stuck in a morass of procurement and development problems, cost explosions, and rifts within the [DoD]”⁴². Fifth-generation tactical aircraft are affected by significant delays and cost increases.”⁴³

³⁶ Ibid., p. 907

³⁷ Golich (1992) p. 906

³⁸ ITA (2006)

³⁹ In 1983, legendary US aerospace executive Norm Augustine pointed to the problems arising from the fact that unit costs of next-generation military aircraft rise exponentially while defence budgets only grow linearly. Coining what has become known as “Augustine’s Law”, he extrapolated this trend and took it to a tongue-in-cheek extreme: “In the year 2054, the entire defence budget will purchase just one aircraft. This aircraft will have to be shared by the Air Force and Navy 3½ days each per week except for leap year, when it will be made available to the Marines for the extra day.” See Law 16 in Augustine (1983).

⁴⁰ Art (1972) pp. 95-114

⁴¹ (Cordesman & Kaeser, 2008) p. 1

⁴² DoD = Department of Defense

⁴³ (Cordesman & Kaeser, 2008) p. ii

In civil aviation, Boeing's Dreamliner and the Airbus A380 serve as reminders of how the multi-billion dollar investments required for building next-generation aircraft as well as the extremely complex production processes – which often cause costly delays – are even exposing the world's leading aerospace companies to major financial and business risks. It is precisely this high-stakes tendency for aerospace companies to bet their future on the development of new aircraft that led John Newhouse to title his classic study about the industry sector and the Boeing vs. Airbus competition "The Sporty Game".⁴⁴ Rising R&DP expenditures explain the cutthroat competition between Boeing and Airbus as both are scrambling to boost profits by spreading their rising fixed costs over an ever-larger number of sold aircraft units. This intense sales competition also accounts for the fact that major acquisition decisions by airlines in Asia, the Middle East, etc. are often the subject of top-level political lobbying by US / European officials trying to secure a deal on behalf of "their" aerospace companies. "Successful aircraft sales depend on price, performance, politics, and timing."⁴⁵

"Perhaps ironically, the combination of dramatically increased risk and the need to sell aircraft to a global market characterised by greater parity and proliferating interdependencies among actors has impelled some state and corporate policymakers to pursue collaborative production structures as a survival strategy."⁴⁶

The highly integrated nature of the commercial and defence aerospace industrial base explains why national governments tend to maintain close political and even direct financial links (through shareholdings, etc.) with "their" respective aerospace companies.

"Despite the differing requirements for civil and military aircraft, the technology base, much of the supplier base, and the skills and processes used are essentially common. They become mutually supportive in attaining diverse civil and military objectives. The technological synergies are very constructive. Military developments stress performance, while commercial aircraft developments emphasise lowered production costs, vehicle operating efficiency, and high availability with low maintenance – attributes that are valuable to the military establishment."^{47 48}

⁴⁴ Newhouse (1982)

⁴⁵ Golich (1992) p. 906. In this context, key performance indicators include "capacity and frequency demands; payload; range; fuel efficiency; airport and environmental requirements; capital costs of acquiring the aircraft; training and maintenance costs; and fleet standardisation and commonality within a single airline or among those that pool equipment and ancillary services." Ibid., p. 908

⁴⁶ Ibid., pp. 909-910

⁴⁷ National Academy of Engineering (1985) p. 101

⁴⁸ "Currently, the fact that the two sectors share virtually the same production base supports the military-commercial connection. Commercial design and production teams can and have developed military hardware. A complex infrastructure of firms [...] supplies sophisticated components, materials, and equipment including electronics,

Aerospace companies also deliver significant economic benefits for their home countries (export earnings, jobs, technology clusters, etc.), thus providing additional mercantilist incentives for national governments to keep a particularly close eye on firms in this sector and to prevent them from simply falling into the hands of foreign competitors (see Annex Table 1, 2, and 3). In America, the sector has been the most important industrial contributor to US export revenues since the 1950s.⁴⁹ If the commercial aerospace business were a “normal” industry sector in a globalised economy, one would certainly expect to see large-scale cross-border M&As leading to the creation of fully-integrated multinational civil aerospace firms. However, with the exception of EADS, that has not (yet) happened. Things are made more complicated by the fact that virtually all of today’s major aerospace companies – with the exception of Lockheed Martin (LMC) have sizeable commercial *and* defence operations. Therefore, governments on both sides of the Atlantic do care how and what their aerospace companies are doing. To a certain degree, it is fair to say that the US government has generally adopted a more laissez-faire-dominated approach towards the aerospace industry than its counterparts in Europe. Unlike Paris, Washington holds no direct equity stake in any major A&D group. That being said, however, it is also quite clear that the US government does not view these companies as part of a “normal”, non-strategic industry sector which should simply be left to the competitive dynamics of the global markets place:

“US decision-makers remained convinced that mutual economic dependency created undesirable vulnerabilities and that the state should intervene in the private sector only to achieve national security-related goals.”⁵⁰

“US corporate behaviour has been affected by the prevailing American political ideology, which views cooperation suspiciously and has historically placed a higher priority on political-military security than on economic relations.”⁵¹

Nonetheless, American commercial aerospace companies did significantly expand their transnational collaborative production strategies during the 1980s and 1990s.⁵² This shift towards more internationalised production structures was partly driven by the rapidly increasing share of the aircrafts’ overall production value that was outsourced / offshored to subcontractors located in

communications equipment, and scientific instruments to both sectors. [...] Market requirements have triggered technological and product advances relevant to military needs and vice versa. Together, these factors reduce the cost of providing an essential military industrial base.” Golich (1992) p. 911

⁴⁹ Ibid., pp. 911-912

⁵⁰ Ibid., p. 918

⁵¹ Ibid., p. 921

⁵² These cross-border arrangements were primarily based on co-production agreements rather than joint R&D programmes, which are politically much more sensitive and potentially involve technology transfers harmful to US national security interests. Ibid., p. 927

Europe, Japan, China, etc.⁵³ ⁵⁴ So again, what is the exact status of the commercial aerospace industry? Is it part of the private sector in an open economy, or is it rather intricately linked to the public sector because of its R&DP overlaps with military aviation construction? On the one hand, all major US aerospace companies are fully privatised and even in Europe, traditionally more interventionist governments in France and Spain have agreed to at least a partial privatisation of their country's A&D base. At first glance, aerospace giants such as EADS and Boeing thus appear to be part of the private sector in an open economy. Both firms are listed on the stock market and their top management and supervisory boards are appointed by the shareholders. At the same time, however, the strategic, economic, and technological importance of integrated commercial A&D companies such as Boeing and EADS makes them subject to political interference by their respective home governments. Political decision-makers in Washington, Paris, Berlin, London, etc. do care about how and what "their" A&D players are doing.⁵⁵ ⁵⁶ At the same time, these corporate players also exert political influence in a two-way relationship: the "Military-Industrial Complex", the money Boeing and other major A&D companies spend lobbying on Capitol Hill, etc.: "[D]efence contractors lobby Congress constantly and aggressively; their skill in dealing with the government is in fact one of their core competencies."⁵⁷ In the US, the sharp reduction in the number of prime defence contractors after the end of the Cold War and the corresponding loss of competition over major procurement programs has led to even closer ties between industry and "the state":

"Competition barely exists in the defence industry and is growing weaker by the day. It was a different story just two decades ago. In the 1980s, 20 or more prime contractors competed for most defence contracts. Today, the Pentagon relies primarily on six main contractors to build our nation's aircraft, missiles, ships and other weapons systems. It is a system that largely forgoes competition on price, delivery and performance and replaces it with a kind of 'design bureau' competition, similar to what the Soviet Union used – hardly a recipe for success. [...]"

The United States is approaching an 'arsenal system' for developing and producing its weapons – that is, one in which the government manufactures its own weaponry. [...]"

⁵³ "[T]he proportion of subcontract work has risen from a typical level of 40 [percent] for the Lockheed Electra in the 1950s, to over 70 [percent] for the Boeing 747". Hayward (1986) p. 27

⁵⁴ Furthermore, "primary US incentives [to pursue transnational production processes] include financial support [from governments of programme participants], avoiding potential European tariff barriers, nullifying or diluting competition from European firms and avoiding antitrust restrictions." Golich (1992) p. 923

⁵⁵ "In each country, the [g]overnment "accepts or denies the setting up of armaments activities on its national territory, and therefore has a decisive influence on any restructuring process of its defence industry, regardless of the legal status of the companies". Van Eekelen (2005) p. 5

⁵⁶ London retains Golden Shares in BAE, Rolls-Royce, etc.

⁵⁷ (Gholz & Sapolsky, 1999/2000) p. 16

*Unless we act soon, we may find that the only solutions available will be to nationalize the military industrial base or to 'outsource' production of our weapons systems, with excessive portions of that work going overseas.*⁵⁸

Government intervention in the A&D industry is also very common in Europe. Paris in particular – which had historically relied on an arsenal system – put a premium on the creation and maintenance of an autonomous, technologically advanced A&D industrial base and ultimately viewed it as the best guarantee to defend France's power position and interests in the world. Against this backdrop, French and German governments have been fighting regularly over the exact distribution of EADS / Airbus top management positions along national lines. This state of affairs is even more surprising given the fact that Berlin has no equity stake in EADS. However, in order to push back against Paris and to prevent a potential sell-out of Germany's A&D base to the French, the German government has repeatedly felt it necessary to get directly involved in strategic decisions or crucial top-level personnel choices. While France has been “gradually moving away from the traditional model of protecting state interests through total government ownership and control and toward a private ownership-based model that allows foreign investment even in firms with sensitive capabilities”⁵⁹, there is simply “no evidence the French government intends at this time to fully divest its shareholdings in defence firms or [more importantly] eliminate its Golden Shares”.^{60 61}

“The boundaries between industrial corporations and the state are not easily drawn in aerospace. [...] those in high political office are wont to regard the aircraft industry and its products as symbols of national prowess. As a consequence, industrial competition is all too often transmuted into deeper conflicts between states over what they deem their rightful political and economic territories. [...]

While aircraft industries retain strong national affiliations, international collaboration has nevertheless become normal practice in airframe and aero-engine research and development and production. [...] Intense competition is, paradoxically, giving rise to increasingly extensive and intricate patterns of collaboration, with firms that are working together in one area frequently competing in others.

[...] Hayward has understandably chosen in the face of such complexity to concentrate on the civil industry. Yet military production is a more extensive activity for most of the firms in this industry, and it is ultimately the factor that ensures its special status. We must now hope that he will turn his attention to the military sector, and help us overcome our present

⁵⁸ (Zakheim & Kadish, 2008)

⁵⁹ Bialos (2009) vol. II, p. 345

⁶⁰ Ibid., p. 347

⁶¹ French government interference also extends to non-strategic firms like Renault. (Hall & Tait, 2010)

*ignorance of the relationship between civil and military activities in this important industry.”*⁶²

Due to the aerospace industry’s strategic importance, the basic principles of the West’s post-WWII international economic order – based on the free flow of goods, services, and money across borders – never fully applied to that industry sector. For instance, governments have generally imposed unique accounting and security restrictions on both private and state-owned aerospace companies. Furthermore, governments tightly regulate arms exports, technology transfers, and foreign direct investment in this strategic industry sector.⁶³ Even within the EU, the aerospace industry has been shielded from the competitive dynamics of the Common Market.⁶⁴ Until the end of the 20th century, this national security logic also extended to the airline industry, where the protection of state-controlled national carriers through the distribution of exclusive landing rights has long been commonplace. Apart from access restrictions, many countries have stringent rules limiting foreign ownership of their national airlines. Washington, for instance, has limited foreign non-voting equity stakes in US airlines to a total of 49 percent while the total voting rights of foreigners must not exceed 25 percent. In the US, these ownership restrictions are justified in terms of national security as most US commercial airlines are part of the DoD-controlled Civil Reserve Air Fleet (CRAF).⁶⁵

In the military domain, national governments are usually the main customer of their respective national aerospace companies. This monopsonic market power has given governments extraordinary leverage over “their” aerospace companies, including a key role in defining the requirements for military products. Furthermore, given the capital intensity of advanced weapons technologies, national governments usually support the research and development of new military systems. As a result of these barriers, the aerospace industry has typically been insulated from the commercial pressures and disciplines of “normal” businesses. In Europe in particular, governments at times even seized direct control of parts of their national A&D industrial base. In this context, governments can leverage monopsonic market powers to determine the structure, conduct and performance of their A&D industry. The government’s overall objective – especially during high-threat / high-risk periods like the Cold War – is clear: to retain a certain degree of national autarky and autonomy in arms development and production to safeguard the country’s vital security interests and to protect their technological innovation. In the US, in particular, the close,

⁶² Walker (1987)

⁶³ Hayward (2000) pp. 115-132

⁶⁴ “[A]ny Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production or of the trade in arms, munitions and war material [...]” Art. 296 (ex Art. 223), EC Treaty.

⁶⁵ CRS (2006)

interdependent relationship between the government (Congress, the Pentagon, etc.) and the A&D industry also fostered the emergence of what President Eisenhower dubbed the “Military-Industrial Complex” (MIC):⁶⁶ politically powerful lobbies that mix corporate and state interests by leveraging the flow of multi-billion dollar procurement contracts for their own, narrow commercial and political gain. In particular, Eisenhower warned his fellow countrymen that they should “guard against the acquisition of undue influence, whether sought or unsought, by the military-industrial complex”, something which could potentially put it beyond the reach of effective democratic political control.

Historically, the rise of the aerospace industry is inextricably intertwined with WWI and WWII. The two wars – especially WWII – provided a major boost to the aerospace industry as governments on both sides of the conflict rushed to build up and strengthen their respective aerospace industrial base. In WWI, planes were used primarily for reconnaissance purposes as their offensive capabilities were still rather limited. In WWII, in contrast, aircraft performed a wide range of tactical and strategic operations, including as bombers, fighters, close air support / ground-attack aircraft, transport and reconnaissance planes, etc. In addition, WWII also saw the introduction of revolutionary technologies like missiles and nuclear weapons – virtually all of which were developed in government-sponsored research establishments which employed tens of thousands of scientist to work on weapons that might provide crucial military advantages over the enemy. Policymakers were quick to draw the lessons from the two world wars and recognised the crucial importance of maintaining technological superiority in military and civilian affairs in ensuring one’s own national security and survival. Nuclear warheads and missiles would subsequently become the basis for Cold War strategic deterrence. For a long time – that is, from the industry’s inception during WWI until the 1970s / 1980s – the defence sector served as the aerospace industry’s technology driver and delivered important spin-off benefits for commercial aircraft applications as well as other industry sectors:⁶⁷

“Historically, civil aeronautics development was triggered by military advancements, which the civil industry could refine or improve to gain the efficiency or technical objectives

⁶⁶ Eisenhower (1961)

⁶⁷ The aerospace industry in general has long been regarded as a technology leader that generates valuable spin-offs for other industries. For example, innovative composite materials from aerospace manufacturing – initially designed to save weight and thus fuel costs – have found their way into the automotive industry, rapid transit vehicles, boats, and even sporting equipment. In the aerospace business, the introduction of innovative light-weight composite materials promises significant benefits for defence and commercial products alike as “The design of stronger, lighter, and more fuel-efficient aircraft is a common goal of both sectors.” ITC (2001) ch. 7-6

required in civilian application – for example the swept-wing, fly-by-wire controls, and retractable landing gear.”⁶⁸

*“During the Cold War period, the drive to achieve numerical and tactical superiority in aircraft and missile technology prompted governments to spend lavishly on R&D for military aircraft that resulted in spill-over benefits for civil aircraft [...].”*⁶⁹

However, as the centre of technology leadership in important areas like computers, communications, composite materials, etc. began to shift from government-sponsored entities to the private sector, the flow of net benefits from the military sector to the civil sector “diminished and possibly reversed in recent years”^{70 71}.

*“In more recent years, a reverse situation has become common, with the results of civil research or component design subsequently being used for military purposes, e.g., improved fuel efficiency, maintainability and reliability of jet engines, super-aluminium alloys, flight management systems and flight structures.”*⁷²

“There has been a major shift towards military use of technology driven by civilian research and development [R&D], particularly in electronics. Also, the success of civilian technology production has fostered the move away from a particular military culture of technology generation.”^{73 74}

In the late 1980s / 1990s, the growing evidence of “gold-plating” in the defence sector as well as the discovery that commercial-grade Japanese semiconductors were far cheaper and had almost the same performance characteristics as US military semiconductors played an important role in transforming outdated traditional perceptions regarding the flow of innovation between the military and civilian sectors. “The Decision to broaden commercially – and thus internationally – DoD’s supporting industrial base, made in earnest during the 1990s, was both conscious and necessary.”⁷⁵

⁶⁸ National Academy of Engineering (1985) p. 101

⁶⁹ ITC (2001) ch. 7-6

⁷⁰ Ibid., ch. 7-5

⁷¹ “Commercial R&D began outpacing defence R&D in the 1970s. Some studies have concluded that the private sector’s sophistication and rates of progress have exceeded the government and defence industry, and that commercial R&D is making militarily useful technology available to allies and adversaries, thereby narrowing the equipment advantages long enjoyed by the US military. Moreover, many believe that the costs of developing new technologies within the defence industrial base have grown over the years at a much more rapid pace than the government’s or companies’ investment rates. Consequently, even in the face of continued spending on R&D, both the US government and its defence industry have had to reduce the number of new projects in which they invest. The net impact is that the scope of the government’s pursuit of, and leadership in, technology has declined.” Watts (2008) pp. 55-56

⁷² National Academy of Engineering (1985) p. 101

⁷³ Brzoska (2007) p. 1

⁷⁴ “There also has been something of a shift toward reliance, where possible, on commercial standards, solutions, and components – although the shift is by no means consistent and varies from one product market to another.” Bialos (2009) vol. I, p. 44

⁷⁵ Defense Science Board (1999) p. 8

The increasing importance of technologies originating in the commercial sector is also illustrated by stepped-up efforts to control the export / proliferation of dual-use goods which have both civilian and military applications.⁷⁶ Foreign collection efforts targeted at the US cleared defence industry have increased sharply in recent years, primarily “because our organisations research, develop, and manufacture advanced dual-use (commercial and military) technologies and products”⁷⁷. Information systems are by far the most targeted technology. Experts estimate that world-wide expenditures on military R&D totalled US\$85 billion in 2004; 60 percent of which was spent by the US government alone.⁷⁸ In contrast, total global spending on defence *and* civilian R&D amounted to about US\$850 billion that same year – putting the ratio between military and commercial R&D at 1 to 10. In the US, the share of military R&D is significantly higher and amounts to about 17 percent.⁷⁹ During 1996-2004, total US military R&D spending increased from US\$44.7 billion to US\$54.1 billion annually while the combined figure for the UK, France, and Germany dropped from US\$10.4 billion to US\$7.9 billion. However, there is no consensus that the commercial sector has become the (aerospace) industry’s ultimate technology driver:

“Proponents of the viewpoint that the net flow of R&D benefits continues to be from the military to the civil sector argue that the military sector has always been and will continue to be more innovative and willing to take risks on new technologies. This innovative drive is fuelled by the desire to maintain technological superiority over other countries. This group also points out that the greater demands on military aircraft in terms of speed, manoeuvrability, and survivability will ensure that technological breakthroughs will first be achieved by the military sector.”⁸⁰

The US A&D industry constitutes the backbone of the country’s impressive global military dominance. Boasting virtually unrivalled technological superiority, a vast fleet of American fighter planes and bombers, aircraft carriers, helicopters, missiles, spacecraft and satellites enable the US to project its military power around the world and gather unprecedented amounts of intelligence on foes and friends alike. The A&D industry is also a key element of the Pentagon’s transformation⁸¹

⁷⁶ “Over the past half century, knowledge of advanced weapon technologies has proliferated around the globe and become more widely accessible to small states and even non-state groups. No longer are the nations of the developed West and the former Soviet Union in a position to dominate R&D or maintain effective control over the more important military technologies and capabilities.” Watts (2008) p. 64

⁷⁷ US Defence Security Service Counterintelligence Office (2006) p. 1

⁷⁸ Watts (2008) p. 4

⁷⁹ The figures for the UK, France, and Germany are 10, 9, and 2 percent, respectively. *Ibid.*, p. 5

⁸⁰ ITC (2001) ch. 7-6

⁸¹ DoD (2003)

⁸² designed to move from “an industrial age to an information age military” with fundamentally joint, network-centric, distributed forces capable of rapid decision superiority and massed effects across the battle-space.⁸³ Industrial-age warfare in WWI and WWII was characterised by large-scale battles. Achieving quantitative superiority by out-producing the enemy in terms of tanks, ships, planes, bombers, etc. was key to victory. In contrast, victory in information-age wars is dependent on the combination of superior intelligence / reconnaissance information and the timely projection of accurate, massive firepower.⁸⁴ Information-age warfare leverages aerospace technology to first gather intelligence (through satellites, etc.) and then strike from a “safe” distance.⁸⁵

Kosovo may well be the first war won through air power only.⁸⁶ In Afghanistan, America maximised the accuracy of its air strikes by inserting special forces with Afghan militias to allow for the targeted, laser-guided destruction of enemy forces. In Iraq, the Pentagon launched massive aerial bombardments followed by armoured Blitzkrieg operations. However, while airpower played a crucial role in the overthrow of Saddam Hussein and the Taliban, subsequent counterinsurgency operations in Iraq and Afghanistan demonstrate the importance of having “boots on the ground” to stabilize a country after the high tech / high-intensity fighting is over. The future role of airpower in (US) military strategy continues to be the subject of heated debate.⁸⁷ Proponents of air power will also need to show how it can effectively contribute to the fight against terrorists and WMD⁸⁸ proliferation.

⁸² RMA (Revolution in Military Affairs) is “a paradigm shift in the nature and conduct of military operations which either renders obsolete or irrelevant one or more core competencies in a dominant player, or creates one or more new core competencies in some dimension of warfare, or both”. Hundley (1999) p. xiii

⁸³ DoD (2003) pp. 9-11

⁸⁴ “Arguably the most important single proposition influencing contemporary American strategic thought in both official and unofficial circles is the identification of information as the key factor in military operations”. Freedman (2006) pp. 16-17

⁸⁵ The political vulnerability of Western leaders to troop casualties coupled with clear Western air superiority have created the “temptation of air power” as a “virtually risk-free military option”. Freedman (2006) pp. 61-65

⁸⁶ During the 1991 Gulf War only 10 percent of the bombs used in the US-led coalition air campaign were precision-guided weapons; during the 1999 Kosovo War 90 percent of the bombs were guided by laser or GPS satellites. See (Byman & Waxman, 2000) for a more cautious and nuanced assessment of airpower’s role during the Kosovo War.

⁸⁷ “The US would not be the first apparently unbeatable military power to find itself undone by an inability to take seriously or even to comprehend enemies that rely on their ability to emerge out of the shadows of civil society, preferring minor skirmish to major battle, accepting no possibility for decisive victory but instead aiming to unsettle, harass, demoralise, humiliate and eventually to wear down their opponents”. Freedman (2006) pp. 5-6

⁸⁸ WMD = Weapons of Mass Destruction

1.3 The consolidation of the US and European aerospace industries after the end of the Cold War

The end of the Cold War posed particular challenges for the A&D industry, especially since “the long duration and special requirements of the Cold War [had] created a large group of highly specialised private and public establishments with limited exposure to non-defence markets.”⁸⁹ With the Soviet threat gone, Western governments cashed in the “peace dividend” and embarked on an extended “procurement holiday” (see Annex Table 4).⁹⁰ At the same time, the emerging RMA led to a dramatic increase in military R&D costs for new weapons systems. Skyrocketing R&D expenses, combined with a sharp reduction in the number of produced weapons systems, caused a massive increase in the unit cost of advanced military aircraft – further accelerating a trend that had begun decades earlier.⁹¹ As a result, US and European A&D companies faced tremendous pressure to consolidate and reap economies of scale. Streamlining, rationalisation, and consolidation were the buzzwords. To put it simply, governments were aiming to get “more bang for the buck” while defence companies were looking for economies of scale and scope as well as increased operational efficiency.

While the Bush administration (1989-1993) rejected government intervention to foster industry consolidation, the Clinton administration decided to reverse this policy and allowed A&D companies to include the M&A restructuring costs (plant modifications, equipment relocation, severance pay, retraining, etc.) in the reimbursable part of their cost-plus contracts – provided that the consolidation process resulted in long-term net procurement savings for the Pentagon.⁹² Between 1990 and 2002, the number of major contractors in the US A&D industry came down from about 18 to four prime contractors, the so-called mega-primes: Boeing, LMC, Raytheon, and Northrop Grumman Corporation (NGC). Due to the sheer size of the US defence market, by far the largest in the world, and serious concerns about potential leaks and illegal technology transfers to foreign companies⁹³, the rationalisation and consolidation in the American defence sector involved virtually no partners from abroad. According to Dr. Hamre, protectionist security hawks in Congress and at DoS⁹⁴ would certainly have blocked such a move on national security grounds and did push for ethnocentric consolidation instead.⁹⁵

⁸⁹ Oden (1999) pp. 74-105

⁹⁰ Annual US defence procurement spending fell from US\$150 billion in the mid-1980s to US\$50 billion in 2001.

⁹¹ Since 1945, the real unit costs of combat aircraft built for the RAF increased at a compound annual growth rate of 11.5 percent. Kirkpatrick (1995)

⁹² Korb (1996); (Gholz & Sapolsky, 1999/2000)

⁹³ The diffusion of military technology from the hegemonic core to the periphery, combined with the pitfalls of “military overstretch”, has played a key role in bringing about the decline of empires throughout history.

⁹⁴ DoS = Department of State

⁹⁵ Hamre (2007)

However, the massive consolidation of the US A&D industry through “pure play” mergers – leading to the formation of a few giant, defence-heavy companies – also caused major concerns; especially among those in charge of the Pentagon’s procurement budget. In 1997, the Clinton administration abandoned its initial pro-merger policy in an effort to maintain a certain degree of competition and to prevent the creation of harmful monopolies. The potential shift of market power from buyers (governments) to sellers (A&D companies) is a major public policy risk associated with large-scale industry consolidation leading to the creation of duo- or monopolies. There is a danger that “the West could end up with a small set of very large, very powerful, and not very competitive defence firms, favouring the maintenance of Cold War thinking and technologies.”⁹⁶ The key issue is how the gains from industry consolidation are divided between taxpayers (in terms of cheaper, more capable weapons systems) and shareholders (in terms of corporate profits).

In Europe, defence budgets shrank even more dramatically after the end of the Cold War than in the US. National governments and their respective A&D companies were reluctantly sacrificing national autonomy in favour of increased European integration and interdependence in arms R&DP. A major breakthrough came in October 1999 with the creation of EADS as the largest aerospace firm in Europe. All three EADS founders (AM⁹⁷, DASA⁹⁸, CASA⁹⁹) were part of Airbus and had thus gained valuable experience in collaborating successfully across different languages, business cultures, and regulatory frameworks.^{100 101} Prior to the EADS merger, the acquisition of GEC-Marconi by BAe¹⁰² – both privately owned, UK-based companies – in 1999 had led to the creation of BAE Systems (BAE).¹⁰³ Due to the US-UK “special relationship”, BAE is the only European firm with significant exposure and access to the lucrative American defence market.^{104 105} In essence, the “special relationship” refers to the fact that “The [UK] and the [US] are each other’s closest ally and security partner”.^{106 107 108 109}

⁹⁶ (Markusen & Costigan, 1999) p. 29

⁹⁷ AM = Aérospatiale-Matra

⁹⁸ DASA = Daimler-Benz Aerospace AG / DaimlerChrysler Aerospace AG

⁹⁹ CASA = Construcciones Aeronáuticas SA

¹⁰⁰ Airbus was initially organised as a GIE – a construct under French law that allowed all four partner companies to retain their full legal, financial, and managerial independence. The profits from Airbus were allocated to each participating company according to its stake in the consortium. In July 2001, the GIE was transformed into Airbus Integrated Company.

¹⁰¹ Following the decision by BAe to sell its 20-percent stake in Airbus in October 2006, EADS now owns 100 percent of Airbus, which accounts for more than two-thirds of the company’s revenues and an even higher share of its profits.

¹⁰² BAe = British Aerospace

¹⁰³ BAe derives three-quarters of its turnover from defence and counts the US as the most important market.

¹⁰⁴ BAe is the biggest non-US subcontractor for LMC’s JSF.

¹⁰⁵ In 2007, BAe ranked as the sixth-largest Pentagon contractor.

¹⁰⁶ “The US-UK special relationship today has a political and ideological superstructure and an embedded military and intelligence substructure. [...] Defence cooperation was at the heart of the special relationship from the outset, and remains central to it.” (Wallace & Phillips, 2009) pp. 263 ; 267

¹⁰⁷ (Chao & Niblett, 2006) p. 4

“A cursory look across four facets of this [US-UK] relationship shows that in three dimensions, at least – commitment to the Atlantic political-military alliance, nuclear cooperation¹¹⁰, and intelligence sharing – a strong case can be made for the emergence of a distinct and privileged bilateral partnership over the past forty years. The fourth area – defence industrial cooperation – reflects a more ambiguous situation [...].”¹¹¹

Chapter 7 discusses in more detail why – the long-standing US-UK “special relationship” and BAE’s privileged access to the American defence market notwithstanding – Washington continues to maintain political and institutional barriers preventing even closer US-UK defence industrial cooperation; chief among them cumbersome US export licensing procedures imposing restrictions on the transfer of sensitive technologies and / or on the sharing of relevant R&D results across the Atlantic. In sum, however, it is nonetheless correct to point out that UK A&D companies like BAE generally enjoy a much higher degree of trust and confidence among Washington’s key political players than their competitors from other European countries. US political and military leaders widely regard the UK as a loyal and trustworthy ally with whom they share not only a common language and values but also a long history of wars fought side-by-side (including, most recently, the controversial 2003 Iraq War).

In contrast, France has generally been viewed with much more scepticism by Washington and is suspected of wanting to undermine America’s dominant leadership position – both within NATO and on the global stage in general.¹¹² France’s long-standing aspiration to be a great power in a multi-polar world order built on strong multilateral institutions (notably the UNSC, where Paris wields a veto) has been particularly troubling for US policymakers.¹¹³ During the Cold War, France

¹⁰⁸ “After Suez, the British resolved never to get out of step with US foreign policy again. This was the point at which British governments began to be obsessed with the idea of a special relationship. It was apparent that the UK could not expect to play a major role in the world either independently of or in opposition to the [US]. Its future strategy would be to trade loyalty for privileged access to Washington’s foreign-policy making.” Freedman (June 2006) p. 61

¹⁰⁹ The 1956 Suez conflict marked the last time that London and Washington adopted openly antagonistic positions during a major international security crisis (Britain’s refusal to commit combat troops to Vietnam is different in the sense that London did not *actively* work *against* US interests; it simply failed to support the US). Drawing the painful “Lessons of Suez”, the UK accepted its fall from great power status and decided to closely align its security and defence policy with Washington.

¹¹⁰ “The UK’s nuclear deterrent has been developed and maintained in close cooperation with the [US] through the creation of a trusted community of American and British scientists, engineers, officials, company executives, and firms”. (Chao & Niblett, 2006) p. 12

¹¹¹ *Ibid.*, p. 11

¹¹² France and Germany are the two major European countries that opposed the Bush administration over Iraq. In April 2003, France, Germany, Belgium, and Luxembourg called for the creation of a separate command headquarters for EU-led military operations. However, this “praline summit” initiative was quickly blocked by the UK and other Atlanticist EU members for fear that it would undermine NATO.

¹¹³ “1. France considers itself a pivotal great power. 2. France can only play this pivotal role in a multi-polar world. 3. France considers a multipolar world the best guarantee of international relations that are based on a multilateral approach. France favours a strong role for international fora, especially for the Security Council of the UN, of which it

charted its own foreign and security policy, engaged in the 1956 Suez adventure, established its independent “force de frappe” nuclear deterrent (ironically with US technological support) and pulled out of NATO’s Integrated Military Structure (IMS) in 1966.¹¹⁴ In the post-Cold War era, French President Chirac became not only the chief proponent of the EU’s autonomous ESDP; he also seized on the controversial 2003 Iraq War to forge a Paris-Berlin-Moscow-Beijing coalition in an effort to counter the perceived unilateral exercise of American military power and Washington’s blatant disregard for international law, including the primacy of the UNSC.¹¹⁵ Apart from geopolitical rivalries between Paris and Washington, Franco-American / transatlantic A&D industrial collaboration has also been hampered by different approaches to export controls, raising US concerns that American state-of-the-art defence / dual-use technologies shared with France or other mainlined European countries could ultimately find their way to US adversaries around the world.¹¹⁶ Ultimately, mutual trust and a perceived congruence of foreign and security policy objectives as well as the strategies to achieve them are they key reasons why America’s defence industrial collaboration with the UK is so much closer than with any other European country.

Before the creation of EADS and BAE Systems, DASA and BAe had been in advanced negotiations about a potential merger. For DASA, the option to join forces with BAe – also privately owned – was much more attractive than to merge with AM, a company controlled and partly owned by the French state. It is important to emphasise France’s state-centred A&D industrial structure and management strategy. A 1992 report commissioned by the US Congress put it bluntly:

“Nearly four-fifths of the French defence industry is owned directly or indirectly by the state, either in the form of government-owned and operated arsenals, nationalised companies [...] or firms in which the government owns a large share of the stock [...].”¹¹⁷

The DGA (Délégation Générale pour l’Armement) has long served as the French government’s main vehicle to shape and structure the country’s defence industrial base.¹¹⁸ As a centralised

is a permanent member. Such a role will not only strengthen international law, but also confirm France’s great power status.” van Herpen (2003)

¹¹⁴ “In France there exists a certain nostalgia for the Cold War era. In this period the world was not ideal, because not multi-polar, but its bipolarity offered (Gaullist) France a relative independence vis-à-vis both superpowers.” Ibid.

¹¹⁵ The 2007 election of President Sarkozy dramatically improved French-American relations as exemplified by France’s reintegration into NATO’s IMS in 2009.

¹¹⁶ For example, during the Iran-Iraq War (1980-1988), France alone accounted for about 20 percent of Saddam Hussein’s major weapon systems imports. While these strategically-motivated arms exports were authorised by the highest political authorities in Paris, they subsequently came back to haunt France (and its Western allies such as the US) in the 1991 Gulf War over Kuwait. During “Operation Desert Storm”, France’s Mirage fighter jets had to stay out of combat because of concerns that they might be confused with Iraq’s French-built Mirage fighters. OTA (1992)

¹¹⁷ Ibid.

procurement agency within the Ministry of Defence (MoD), “The DGA is the linchpin of the French arms-procurement system, mediating among the political authorities, the defence industry, and the military operators”. As one analyst put it, the DGA’s primary mission is “the preservation and promotion of an ever-modernising arms industry within an internationally competitive French industrial system”.¹¹⁹ “While DGA officials do not intervene in day-to-day company operations, they must concur in major strategic decisions such as large investments, new ventures, or international collaborative programs.” The DGA director “has greater control over research, engineering, and industrial matters than any other European or American defence officials”.¹²⁰ Other European governments, especially in the UK and Germany, were much more hesitant and reluctant to adopt such an interventionist approach towards their A&D industry players. DASA managers thus feared that the French government would use its considerable political leverage to unduly influence the corporate strategy of the new, merged Franco-German company – making the hoped-for rationalisation and consolidation of production sites as well as related potential job cuts very difficult to implement. As subsequent Franco-German clashes among the top EADS leadership have demonstrated, these fears were not unfounded. Furthermore, DASA reasoned that a merger with BAe would make it easier to enter the lucrative US defence market.

It is important to note that EADS and BAE were created after most of the consolidation in the US A&D industry – notably the BMD merger – had already taken place. Faced with increasing competition from American mega-primes, European A&D companies had virtually no choice but to co-operate more closely to reap economies of scale. This dramatic post-Cold War shift towards more European transnational A&D industrial collaboration – notably in the form of the EADS merger – was particularly hard to stomach for the French government, which had long put a premium on largely state controlled defence companies achieving national autonomy across the full range of armaments. For sure, Paris had decided to pursue collaborative defence industrial programs with its European neighbours from the 1960s to the 1980s¹²¹; but virtually all of these programmes were bilateral in nature because they offered “greater control and lower transaction costs”¹²² compared to bigger, multi-national consortia.

¹¹⁸ “De Gaulle’s political goal of achieving national autonomy in the full range of armaments – particularly nuclear weapons – in the face of tight budgetary constraints required the careful husbanding and allocation of resources. To this end, in 1961 de Gaulle replaced the weapons directorates reporting to the individual services with a centralised procurement agency known as [DGA].” Ibid., p. 11. This report provides also an excellent overview of the DGA’s structure and functioning.

¹¹⁹ Kolodziej (1987) p. 258

¹²⁰ OTA (1989) p. 11

¹²¹ Franco-British arms programs included both helicopters (Puma, Gazelle, Lynx) and attack aircraft (Jaguar); Franco-German defence projects included the Transall and the Alpha Jet. OTA (1992) p. 27

¹²² Ibid., p. 27

“But Gaullist imperatives caused France to collaborate mainly on systems of secondary military importance, such as helicopters, trainers, and transport aircraft, while preserving national autonomy in “strategic” areas such as nuclear weapons, nuclear-capable delivery systems, and high-performance combat aircraft.”¹²³

In sum, the EADS merger was significant for the French in several respects. First, it weakened the government’s control over the A&D industry; second, the EADS merger was multilateral in nature; and third, the EADS merger also covered strategic areas such as high-performance combat aircraft.^{124 125 126}

¹²³ Ibid., pp. 27-28

¹²⁴ The EADS merger excluded France’s military nuclear activities.

¹²⁵ “The DGA has concluded that France no longer has the financial means to maintain an independent capability across the full spectrum of weapon systems and must increasingly rationalise defence production on a European scale, while concentrating on its competitive strengths.” Ibid., p. 20

¹²⁶ “DGA officials have promoted international collaborative programs as a strategy for countering the monopolistic practices of national-champion firms.” Ibid., p. 15

1.4 International collaboration and governmental intervention in the aerospace industry

In principle, international collaboration in armaments production is only a second-best solution.¹²⁷ “As a policy instrument, collaboration seeks to resolve the underlying tension between nationalistic conceptions of security and the globalisation of advanced industries.”¹²⁸ For national security reasons, states would generally prefer complete national autonomy in armaments research, development, and production. In an “ideal” world this would be the “best” solution. However, due to limited financial and technological resources, many states decide to collaborate, notably to cope with skyrocketing R&DP costs for advanced weapons systems. States have basically four options to acquire weapons and advanced aerospace systems.¹²⁹ First, states with sufficient financial and technological resources will generally opt for “autonomous armament production”. Second, states that are technologically advanced but lack the financial resources to develop weapons systems on their own opt for “co-development”; an arrangement where two or more states share in all aspects of the development and production of a weapons project. Third, states that have sufficient financial assets but lack the necessary technological know-how will opt for “co-production”, where they assemble foreign weapons under licensing agreements. Finally, the least desirable political option is the “import” of weapons systems from abroad. While this last strategy is often the “cheapest”, in purely financial terms, states that import weapons could become dependent on suppliers abroad for their national security. All things being equal, the (military) acquisition preferences of states can therefore be ranked as follows: autonomy > co-development > co-production > import.

Historically, there exist important differences in the developmental trajectories of the European and American aircraft industries. In Europe, small, captive markets and the associated high degrees of national fragmentation made it quite difficult to reap economies of scale across different companies and national boundaries. European aircraft makers forged close links with their respective national home governments early on, especially after the outbreak of WWI. Some aircraft makers were even either partially or fully nationalised to better support their countries’ respective war efforts.¹³⁰ In the US, in contrast, all aircraft companies have remained in private hands since the industry’s inception more than a hundred years ago.¹³¹ ¹³² That being said, Washington played an important role in

¹²⁷ Kapstein (1991-1992) pp. 657-675

¹²⁸ Ibid., p. 658

¹²⁹ Ibid., pp. 658-661

¹³⁰ Despite the fragmentation of Europe’s aeronautics industry, “transnational production strategies were not uncommon before the war” and “The ‘Golden Age of Aviation’ (1927-1932) was marked by widespread use of licensed production of foreign aircraft”. Golich (1992) p. 910

¹³¹ Washington has repeatedly given loan guarantees and favourable anti-trust review treatment to military aerospace manufacturers threatened by bankruptcy (i.e., Douglas Aircraft and its subsequent “shotgun wedding” to McDonnell in the mid-1960s and the rescue of Lockheed in 1971). (Moran & Mowery, 1991) p. 137

¹³² While the US defence sector is, in principle, fully privatized, it is important to point out that there exist a number of so-called GOCOs (government-owned and contractor-operated facilities) and even GOGOs (government-owned and

promoting the development of the US civil aviation industry, for example through the creation of a transcontinental airmail service supported by a network of rotating beacons (“lighted airways”) designed for night flight navigation in 1924 and by establishing the Civil Aviation Authority in 1938, with responsibility for “direct subsidies to promote passenger travel, economic regulation of airlines, air traffic control, and safety”¹³³. In sum, a crucial factor in explaining the global dominance of the US aviation industry after WWII has been “a productive, decades-long relationship among the government, the major airlines, and the aircraft manufacturers in the context of a free-market economy” dating back as early as WWI.^{134 135}

In the wake of WWII, much of Europe’s once impressive aerospace industrial base was left severely weakened. US aerospace companies, in contrast, suffered no devastation as a result of WWII and were thus able to increase both the production and technological sophistication of their airplanes during the post-war period.^{136 137} After the Berlin crisis of 1947-1948, as the Cold War consolidated into a long-term confrontation, the US government provided its Western European allies with defence and aerospace equipment in an effort to help build a credible conventional deterrent vis-à-vis the growing Soviet military threat. Initially, most of the US *matériel* was given to Europe for free. In contrast, American military assistance programmes launched in the early 1950s were part of the “Cold War” rearmament effort and thus generally tied to the sale (and later extensive co-production) of US military aircraft such as the F-104 to European countries such as Germany. In the 1950s and 1960s, America also sold civil aviation aircraft at steep discounts to airlines in friendly countries. While this strategy contributed to the emergence of a burgeoning airline industry in many parts of the world, it also made these foreign airlines “path dependent” on

government-operated factories) for the production of military products. The GOCO structure is primarily used for the manufacturing of sophisticated ammunitions in an effort to protect private contractors from potential lawsuits and liability claims related to the adverse environmental impact of their operations. Current GOCO examples include the Holston Army Ammunition Plant located in Kingsport Tennessee, which remains the primary source of military explosives in the United States. Since 1999, BAE Systems (through its Royal Ordnance subsidiary) has been the private contractor operating this particular GOCO.

¹³³ National Academy of Engineering (1985) p. 27

¹³⁴ *Ibid.*, p. 26

¹³⁵ 1934 also saw “the separation of airlines from manufacturers by government fiat to increase competition and industry development”. *Ibid.*, p. 27

¹³⁶ “In 1943, the [UK] had agreed with the [US] that the former would concentrate on developing and manufacturing fighter aircraft while the latter would specialise in heavy bombers and military transports. The resulting division of labour placed Britain at a commercial disadvantage after the war, for the American wartime experience was more relevant to peacetime industrial requirements than that of the British.” Grieco (1979) p. 519

¹³⁷ After WWII, the Allies moved quickly to snatch Germany’s top aerospace talents like Werner von Braun and make them work on their own national defence programs, thus leading to a significant German / European “brain drain”. The US Office of Strategic Services, the predecessor to the CIA, brought hundreds of German military scientists to America as part of clandestine “Operation Paperclip”. These scientists would subsequently make crucial contributions to US space missions, including the Saturn rockets and the Apollo programmes.

US aerospace companies.¹³⁸ As a result of this US export promotion policy and the related path dependency of many airlines, American aerospace companies held around 80 percent of the world market for civil aircraft by 1970.^{139 140}

To counter America's dominance of the civil aircraft market, three European aerospace companies from Germany, France and the UK – politically and financially supported by their national governments – launched the Airbus consortium on 20 July 1967. “Airbus must be seen as an international collaboration that arises out of the failure of European states to develop successful strategies to compete with the [US].”^{141 142} The Airbus project thus reflected Europe's determination “to resist and match American technological ‘imperialism’”.¹⁴³ For Airbus, the only feasible way to enter the rapidly growing commercial aviation market and break the existing US monopoly was to develop a new type of large passenger aircraft. Previous British and French efforts to market their own jet airliners (Comet, Caravelle) had failed. However, the driving forces behind Airbus were not only economic or technological considerations. Airbus was also a European political project designed to support Europe's historic integration process towards “an ever closer union”.^{144 145}

Drawing costly lessons from their previous failures, European governments gave the Airbus partners considerable leeway to independently develop and execute their commercial two-pronged strategy. First, Airbus set itself the goal to capture a significant part – at least 30 percent – of the global market for large passenger aircraft above 100 seats. Second, to achieve this ambitious goal, Airbus decided to build an entire “family” of similar aircraft to respond flexibly to the changing needs of aerospace markets around the world. However, the first Airbus – christened A-300 since it had room for 300 passengers – had difficulties taking off commercially after its maiden flight in October 1972. On the economic front, the oil shock in 1973 pushed many Western economies into recession and drove up the price of kerosene – the most important variable cost factor of any

¹³⁸ It is expensive for airlines to switch from one aircraft manufacturer to another since pilots, crews, and technical personnel have to be retrained, new maintenance equipment needs to be bought, etc.

¹³⁹ McGuire (1999) p. 2

¹⁴⁰ America remains the world's most important civilian and military aerospace market. In the 1960s, US commercial aircraft companies earned 90 percent of their revenues from the domestic market.

¹⁴¹ McGuire (1999) p. 26

¹⁴² “The aircraft industry is the clearest example of foreign targeting that adversely affect US firms. The [US] has traditionally dominated the production of large commercial aircraft but has now been challenged by Airbus [...]. The key to the Airbus challenge is government financial support.” Krugman (1984) p. 116

¹⁴³ Nau (1974) p. 12

¹⁴⁴ McGuire (1999) p. 37

¹⁴⁵ France's decision to build the Rafale fighter aircraft, the nuclear-powered Charles de Gaulle aircraft carrier and the Triomphant-class nuclear submarine underline the French governments' clear commitment of political capital and economic resources for the country's national military industrial independence and *grandeur*. Kapstein (2002) p. 143

airline.¹⁴⁶ Despite the clear business focus of Airbus and the considerable operational independence enjoyed by its partners, the consortium's administrative structures revealed the close links between European governments and their Airbus aerospace companies. For the definition of its political orientations, for instance, Airbus reported to the so-called Intergovernmental Committee (IGC), composed of representatives from the different ministries responsible for the Airbus project. The IGC also provided the institutional link between the founding nations of Airbus and the European Commission (EC), which plays a key role in transatlantic disputes over trade and industrial policy. "Essentially Airbus represented a bargain struck between aerospace firms and governments. Governments would back the consortium with money and political support. Airbus, for its part, undertook to develop a commercially credible product."¹⁴⁷ Airbus was founded as a public-private partnership designed to preserve the independence and autonomy of the European aerospace industry vis-à-vis the crushing dominance of the American competitors.

Between 1972 and 1977, US aerospace manufacturers continued to dominate the global commercial aircraft market. In 1977, however, Airbus had a major strategic breakthrough and sold 23 A-300 to its first American customer, Eastern Air Lines. On the political front, Congress and the Carter administration exerted pressure to discourage American carriers from buying Airbus or any other non-US aircraft for that matter.¹⁴⁸ ¹⁴⁹ Washington's political leaders argued that US airlines should "Buy American" in order to save jobs in the US aerospace industry. At one point, the Carter administration even threatened to impose countervailing duties on all Airbus imported into the US in an effort "to protect domestic manufacturers from foreign competition backed by government finance".¹⁵⁰ It is clear, though, that during the 1970s, both Boeing and MDC wanted to avoid a transatlantic trade war and did not call on the US administration / Congress to impose import restrictions or other trade remedies vis-à-vis Airbus.¹⁵¹ ¹⁵² As the 1970s progressed, however, Airbus increasingly began to put its US rivals on the defensive. By 1979, the European consortium

¹⁴⁶ "Airbus was also lucky in that fuel price increases of the mid-1970s made a large twin-engined airliner more attractive when the A-300 was the only one available." Hayward (1987-1988) p. 20

¹⁴⁷ McGuire (1999) p. 39

¹⁴⁸ Eastern Air Lines's A-300 order and Pan Am's purchase of the UK-manufactured TriStar 500/RB.211 triggered a House hearing, and there was "little doubt in Washington that a major Congressional investigation would have resulted if United Airlines had decided to buy \$1,000 million-worth of Airbus A-300-10s instead of Boeing 767s" in 1978. *Flight International* (1978)

¹⁴⁹ In 1961, Mohawk Airlines purchased four British-made BAC 1-11 aircraft, and American Airlines ordered 15 such aircraft in 1963, triggering a storm of protest from US aircraft makers and Congress.

¹⁵⁰ *Flight International* (1978)

¹⁵¹ "The Carter administration was concerned about creeping subsidies in civil aviation, but no countervailing duties or other retaliatory measures were imposed. Instead we negotiated an agreement, in the context of the OECD [Organisation for Economic Co-operation and Development] Gentleman's accord on export credits that brought some discipline to aircraft financing. In the 1970s and 1980s, Boeing didn't want to trigger a trade war, for lots of good commercial reasons." Hufbauer (2009).

¹⁵² "Since Boeing and [MDC] were profitable and export-dependent and had extensive overseas connections, both could be expected to oppose any closure of the American market." (Milner & Yoffie, 1989) p. 256

had managed to replace MDC as the world's second-largest commercial aircraft manufacturer behind Boeing.^{153 154 155}

In response to Airbus' meteoric rise, Boeing and MDC started lobbying the US Congress and the Carter administration to push for negotiations on a GATT¹⁵⁶ accord that would, *inter alia*, abolish all R&D subsidies for commercial aircraft, the preferred mode of support in Europe.^{157 158} In April 1979, after quite long and laborious negotiations, the US and European governments signed the "GATT Aircraft Agreement" in Geneva. This accord contained three key provisions.¹⁵⁹ First, all import tariffs on aerospace products would be completely abolished by 1 January 1980; second, all participating governments agreed not to exert "unreasonable pressure" to influence the acquisition policy of the airline companies; and third, the aerospace companies would have to sell their aircraft at a price that takes into account all relevant R&D and production costs; in other words, this anti-dumping clause made it illegal to sell aircraft at an artificially low price in an effort to squeeze out competitors. However, the GATT Agreement did not ban direct financial support / "launch aid" packages provided to Airbus by European governments. As a result, US-European tensions over the aerospace industry continued to mount throughout the 1980s.¹⁶⁰

Today, as throughout the Cold War, America has still the most stringent military and dual-use export controls in place. These constraints are due to the fact that the US government has a long tradition of imposing rather complex and cumbersome unilateral technology export controls that go beyond the limitations set by the respective multilateral regimes.

"[US] export control rules written during the Cold War have been extended, reflecting unchanging and even growing concern within the policy bureaucracies about the risk of the

¹⁵³ Airbus managed to boost its share of the world's commercial aircraft market from 3 percent in the early 1970s to 30 percent in 1979. Ibid., p. 257

¹⁵⁴ Lockheed pulled out of the commercial aircraft market in 1981 due to poor sales of its L-1011 TriStar planes amid growing competition from Airbus. Martel (2000) p. 35

¹⁵⁵ MDC did not only cross-subsidise the loss-making commercial aircraft unit through its profitable fighter business but also benefited from Pentagon contracts for military transport planes (spin-off effects, etc.).

¹⁵⁶ GATT = General Agreement on Tariffs and Trade

¹⁵⁷ "By the 1980s, Boeing, in particular, made stronger and more complicated demands. [...] The charges against Airbus included its willingness to undersell at all costs and its use of political pressure to buy from Airbus." (Milner & Yoffie, 1989) p. 260

¹⁵⁸ In America, in contrast, the aerospace manufacturers received huge R&D grants from the Pentagon to develop military aircraft that also generated important positive spin-off effects for Boeing and MDC's commercial aircraft business. Boeing's 707 commercial aircraft benefited tremendously from military spin-off effects: "A large share of the technology developed for the engines and airframes of the long-range military bombers and tankers of the 1950s had important commercial applications, helping to lay the foundation for the 707." (Moran & Mowery, 1991) p. 136

¹⁵⁹ McGuire (1999) pp. 68-90

¹⁶⁰ In 1987, "Boeing threatened to file a Section 301 petition as well as anti-dumping and countervailing duties suits against Airbus, noting that 'under any of these laws, the US government could negotiate with Airbus to limit the

loss of technological superiority and the proliferation of capabilities that could be used, one day, against the [US]. This concern is mirrored in the US Congress where issues relating to defence technology exports and direct foreign investment by European firms in the US defence industrial economy have been hotly debated.”¹⁶¹

It has been argued that as a result, US high-tech companies have often been at a competitive disadvantage compared to their foreign rivals from other Western and non-Western countries.¹⁶² ¹⁶³ Matters are made worse by the extraterritorial reach of American export control provisions, which extend to foreign subsidiaries of US companies, foreign companies using American technology, etc.¹⁶⁴ However, the weight of US government support for American defence companies as well as the vast size of the Pentagon’s (highly protected) military procurement market gives US companies a major competitive advantage vis-à-vis foreign firms, thus counterbalancing any negative economic impact due to strict defence export regulations.¹⁶⁵ Sales of US weapons systems are buoyed by their technological sophistication and competitive pricing (due to superior economies of scale) as well as Washington’s status as the world’s last remaining superpower, which provides unique political and military levers to convince foreign governments to opt in favour of US-made weapons.¹⁶⁶ Despite stringent export controls, America remains by far the world’s biggest arms exporter. Therefore, demands from Washington that other countries exercise restraint and adhere to stricter export controls are often viewed as protectionism bordering on hypocrisy:

quantity of exports, eliminate subsidies, impose taxes, or reach some other solutions’.” (Milner & Yoffie, 1989) p. 260. Inserted quotations from Congressional testimony by a senior Boeing executive in June 1987.

¹⁶¹ CSIS (2003) p. 27

¹⁶² “[T]o the extent that [export] controls are interpreted / implemented unevenly, firms from countries with more liberal policies enjoy a bonus of greater sales revenues and world market share, lower compliance costs, higher resources for R&D, and hence continuing competitive advantages over their handicapped [US] rivals.” Parkhe (1992) p. 50

¹⁶³ “Evidence shows that states routinely curtail capitalists’ global activities if these interfere with states’ other projects or interests, despite capitalists’ complaints that government constraints cost them lucrative markets or stigmatise them as unreliable trading partners. The US, for example, restricts Boeing’s missile sales to China, to comply with international arms control treaties, protect Taiwan, and preserve the US traditional ‘hard’ geopolitical hegemony.” Gritsch (2005) p. 14

¹⁶⁴ US export control regulations apply “to US foreign subsidiaries and independent foreign companies selling US-origin end products, US-origin parts and components incorporated in foreign equipment and even foreign products manufactured with US-origin technology”. Parkhe (1992) p. 54

¹⁶⁵ US defence export control regimes also have major holes, for example with regard to Israel, which has continued to benefit from extensive transfer of advanced US military technologies despite a rather long history of violating US re-export regulations vis-a-vis South Africa, China, and India.

¹⁶⁶ The 1991 Gulf War highlighted the superiority of US military technology and demonstrated Washington’s role as a guarantor of international security. “The superior performance of American weapons in the Gulf War positioned US companies to win major new business from that and other regions. [...] As the industrialised Western powers reduced their procurement budgets, foreign business became a critical profit centre, even determining the survival of many companies. The White House helped whenever it could. The Bush administration actively promoted and negotiated the lion’s share of the [US]\$83.1 billion in arms export agreements in the four years following 1990 (up from [US]\$34.5 billion during the previous years). (Keller & Nolan, 1997-1998) pp. 116-117

“It is both morally and politically indefensible to tell other nations – such as China, France, and Russia – to reduce arms sales when US officials and arms companies are conducting a full-court press to dominate international markets.”¹⁶⁷

The US Arms Export Control Act (AECA) gives the President the statutory authority “to control the export and import of defence articles and defence services.”¹⁶⁸ In practice, however, AECA delegates the authority for the US export control system to the Secretary of State, who is responsible for the “continuous supervision and general direction of sales, leases, financing, cooperation projects and exports” of defence articles and services.¹⁶⁹ The DoS compiles a list of military goods and services covered by the AECA, the so-called US Munitions List. The Commerce Department, in turn, maintains the Commerce Control List covering dual-use items. In general, the DoS, which runs the ITAR licensing procedure, has taken a conservative view of military export licenses. The State Department has been particularly careful to guard against potentially risky export of military items and related technology transfers to other countries. Any US company intending to export a defence-related product or technology, or that wants to negotiate with a foreign partner over an export deal, joint venture, merger or acquisition has to obtain a license from the Office of Defence Trade Controls (ODTC). These strict, complex and lengthy export licensing procedures have made it extremely difficult for aerospace companies in Europe and the US to cooperate on major, state-of-the-art defence projects.¹⁷⁰

During the second Clinton administration, the Pentagon lobbied the DoS to ease US export controls to facilitate international co-operation on the development and production of defence systems. In February 2000, the Pentagon signed Declarations of Principles (DOPs) with the UK and Australia to begin a dialogue on the potential harmonisation of the countries’ respective defence trade rules and procedures. While the DoS initially resisted the Pentagon’s reform efforts, it launched the Defence Trade Security Initiatives (DTSI) in May 2000.¹⁷¹ The most important element of the proposed reform process was to exempt those countries from the lengthy ITAR¹⁷² process “that

¹⁶⁷ Ibid., p. 124

¹⁶⁸ AECA section 38

¹⁶⁹ The DoD covers military technology exports, the DoS reviews arms shipments, the DoC is in charge of dual-use exports, the DoE (Department of Energy) controls nuclear material exports, and the NSA (National Security Agency) controls the export of encryption technologies. Parkhe (2003) p. 52

¹⁷⁰ “[A] fundamental overlap of export license jurisdiction between the DoC [...] and the DoS [...] has resulted in unclear and conflicting policies, long delays in reaching closure, and uncertain lines of authority.” Ibid., pp. 50-51

¹⁷¹ “The [DTSI] comprises 17 reforms [...] designed to streamline the processing of munitions export licenses. The initiatives include, amongst other things, granting [ITAR] exemptions for unclassified exports to certain foreign governments and companies, and a range of flexible, new licensing vehicles for NATO member countries, Japan, and Australia.” Pentagon: http://www.dsca.osd.mil/dtsi/DTSI_links.htm

¹⁷² ITAR = International Traffic in Arms Regulation

share with the [US] congruent and reciprocal policies in export controls, industrial security, intelligence, law enforcement, and reciprocity in market access.”¹⁷³

Due to wide-spread US doubts about the effectiveness of Europe’s defence export and technology transfer regimes, any attempt by European companies to make direct investments in the vast and highly lucrative American defence market is generally viewed with a mix of suspicion and hostility. The Committee on Foreign Investment in the United States (CFIUS) is the key institution to evaluate the potential impact of any FDI on America’s national security posture.¹⁷⁴ In the aerospace sector, the Pentagon normally takes the lead in investigating whether FDI / M&As involving an American company could potentially undermine the country’s military-technological position by creating new vulnerabilities and dependencies. CFIUS reviews involve an analysis of how the planned transactions would affect the American aerospace industry’s ability to independently meet the country’s national defence requirements. CFIUS can either be notified by any of the parties involved in the planned transaction, or it may itself decide to review the FDI / M&A. Once CFIUS has been notified, at least three Committee members must decide within 30 days that a formal review of the case is warranted. If the answer is ‘yes’, CFIUS has another 45 days to review the transaction and make a recommendation to the President on whether the operation should be cleared or blocked. Finally, it is up to the President to decide within 15 days whether the transaction can go ahead or not. While the vast majority of CFIUS decisions across the different industry sectors are made rather quickly, large-scale (aerospace) M&As consume significant time and resources and tend to attract unwanted political attention from members of the US Congress prone to lobbying by interested third parties.

Finally, European aerospace companies generally face tough obstacles to selling their products on the lucrative US defence market. The Pentagon’s acquisition policy favours American over European / foreign companies, whose management, technology base, production facilities and supply chains are at an elevated risk of potential political and economic pressure / interference by foreign governments and companies. This ‘Fortress America’ approach is partly mirrored by a ‘Fortress Europe’ defence acquisition policy. However, European defence markets are generally much more open to US companies than vice versa – not least because American A&D companies can often deliver proven high technology products at more competitive prices and delivery dates than their rivals from Europe and elsewhere. In addition, advanced arms sales do always have an

¹⁷³ AECA section 38

¹⁷⁴ CFIUS, formed in 1975, is chaired by the Treasury Secretary and includes the Secretaries of Defense, State and Commerce, the Attorney General, the OMB Director, the USTR, the Chairman of the Council of Economic Advisers, and several other government representatives.

important political dimension. Today, US defence experts fully recognise that America's defence export and technology controls are a double-edged sword, posing potentially fundamental challenges to the long-term viability of the American defence industrial base.¹⁷⁵

¹⁷⁵ “On the one hand, the US government would like to restrict the flow of militarily useful technologies and systems from the [US] while, at the same time, limiting the dependence of the US military on overseas suppliers. On the other hand, selling American systems and weapons overseas lowers their cost to the US taxpayer and spurs innovation, but tends to create overseas competitors to US defence firms. Foreign sales can also be a subtle tool of US defence strategy to increase the dependence of other nations' forces and industries on America. But the [ITAR] regulations have also hampered the flow of non-critical items and technologies overseas, thereby hindering US companies from competing in foreign markets. [...] This hobbling of US aerospace firms in non-military overseas markets is likely to continue without some overhaul of ITAR and thus encourage the development of increasingly advanced indigenous military capabilities in Europe, China, and other countries.” Watts (2008) pp. 56-57

Chapter 2: The Intellectual Battlefield: Competing Theoretical Frameworks

2.1 Bound to compete: realism and the BMD / EADS mergers

This chapter analyses the BMD / EADS mergers from the perspective of two major IR theories: realism and neo-liberal institutionalism (or “neo-liberalism”), whose proponents are locked in a long-standing fight over intellectual battlefield dominance in IR theory:

“[T]he debate between these two approaches has dominated much of international relations theory for the last decade. It is now commonplace for an article about some aspect of international relations theory to begin by locating itself in terms of this debate”¹⁷⁶.

Historically, realism has long been the pre-eminent school of IR theory. Political and military leaders in particular, have come to value realism for its theoretical simplicity, its high explanatory and predictive capacity, as well as its direct applicability to the practice of international relations. Especially on hard-core defence and national security issues, realism is arguably still the only 800-pound gorilla in the jungle of IR theories. A PhD student analysing the consolidation of the US and European aeronautics and defence industry is therefore well advised to take a close look at realism and the analytical framework that this IR theory provides.

Realism is based on the following key assumptions:¹⁷⁷ First, states are the primary actors in international relations. In other words, despite the rise of international organisations (UN¹⁷⁸, WTO¹⁷⁹, etc.) and transnational actors (MNCs, NGOs, etc.), sovereign, independent states remain the dominant players in the international system today. Sovereign states form governments, raise taxes, control borders, maintain armies, and are the ultimate source of political control and authority on their respective national territories.

“Second, the international environment severely penalises states if they fail to protect their vital interests or if they pursue objectives beyond their means; hence, states are ‘sensitive to costs’ and behave as unitary-rational agents. Third, international anarchy is the principal force shaping the motives and actions of states.”¹⁸⁰

¹⁷⁶ Powell (1994) p. 313

¹⁷⁷ Grieco (1988)

¹⁷⁷ Ibid., p. 488

¹⁷⁸ UN = United Nations

¹⁷⁹ WTO = World Trade Organisation

¹⁸⁰ Ibid., p. 488

International anarchy means that there is no world government with a (legitimate) monopoly of force to enforce treaties and rules between sovereign countries.¹⁸¹ “Fourth, states in anarchy are preoccupied with power and security, are predisposed towards conflict and competition, and often fail to cooperate even in the face of common interests.”¹⁸² Realists argue that states live in a self-help system and cannot base their (military) security on the false promises of multilateral institutions. A state is “the guardian of its own security and independence”.¹⁸³ States must always fear for their physical survival and are therefore constantly striving to maximise their relative political, military, and economic power position in the international system. Realists also assume that there exists a certain hierarchy of issues in world politics, with the so-called “high politics” of military and security matters dominating the “low politics” of economic and social issues. Hard-line realists also believe that states are inherently aggressive (“offensive realism”) and that their insatiable appetite for territorial expansion is only constrained by countervailing (military) force exercised by other states. “For the political Realist, rivalry and some form of strife among nation-states are the rule and not a mere accident of backwardness in the past.”¹⁸⁴

“Finally, international institutions affect the prospects for cooperation only marginally.”¹⁸⁵ Realists identify two major obstacles to cooperation: a state’s concerns about cheating and its concerns about relative gains. Neo-liberal institutionalists believe that institutions can overcome state concerns about cheating by providing objective, independent verification mechanisms to ensure that all partners involved really live up to their commitments. Realists, however, argue that, in the end, states are more concerned about relative rather than absolute gains from cooperation. For example, even if two states cooperate successfully, one of the partners may still decide to terminate cooperation if it believes that the other state derives a relatively greater benefit from cooperation. “According to realists, states worry that today’s friend may be tomorrow’s enemy in war, and fear that achievements of joint gains that advantage a friend in the present might produce a more dangerous *potential* foe in the future.”¹⁸⁶ Neo-liberal institutionalism, realists would argue, does only address a state’s concerns about cheating, but not the dilemma posed by concerns about relative vs. absolute gains from cooperation.

Classical realism can be traced to Greek antiquity (Thucydides “Peloponnesian War”; 431 BC) and was subsequently shaped by important thinkers and politicians such as Niccolò Machiavelli (“The

¹⁸¹ Neo-liberal institutionalism does not claim that there is a world government. However, it does claim that cooperation among sovereign states is a positive-sum game and that institutions can promote cooperation among them.

¹⁸² Grieco (1988) p. 488

¹⁸³ Spanier (1978) p. 11

¹⁸⁴ Thompson (1952) p. 446

¹⁸⁵ Grieco (1988) p. 488

Prince”; 1532), Thomas Hobbes (“Leviathan”; 1651), Cardinal de Richelieu (who formulated the concept of “raison d’état”), Carl von Clausewitz (“On War”; 1832). Classical realism is based on a gloomy view of human nature. The rise of (modern) realism in the 20th century was above all a response to the disillusionment with utopian / liberal ideas following the failure of the League of Nations, the devastation of WWII, and the beginning of the Cold War superpower confrontation. The term “realism” itself derives from the German word “*Realpolitik*”. It was originally coined in the 19th century by Otto von Bismarck, who combined the Spanish adjective *real* (royal) and the German noun *Politik* (politics) and proved to be a master in balance-of-power politics – a key concept of realism.

The period following the end of WWI, supposedly the “war to end all wars, was characterised by enormous optimism and a belief in the possibilities of peaceful cooperation – expressed both in the theory and practice of international relations. President Wilson framed his Fourteen Points as a basis for permanent international peace. By banning secret treaties, reducing (offensive) weapons arsenals, applying the principle of self-determination and, most importantly, founding the League of Nations, Wilson hoped, states would be finally able to overcome the scourge of war. And “idealist” IR theorists at the time saw it as academia’s responsibility to be another nail in the coffin of armed conflict.

In “The Twenty Years Crisis, 1919-1939: An Introduction to the Study of International Relations”¹⁸⁷, Edward Carr provides a critical analysis of the “idealist” twenty-year period between WWI and II. Carr, who published his book shortly after the outbreak of WWII, exposes the wishful thinking and naïve belief in the power of international law that was so widespread at the time. He is particularly critical of the League of Nations, an institution that President Wilson proposed but could not get approved by the US Senate due to the strong isolationist sentiment in America at the time. In Carr’s view, international law is the law of an “undeveloped and not fully integrated community” and “lacks three institutions which are essential parts of any developed system of [...] law: a judicature, an executive and a legislature.”

After the enormous material and moral devastations of WWII, realism became the dominant school of IR theory in America. Hans Morgenthau and his seminal 1948 book “Politics Among Nations: The Struggle for Power and Peace”¹⁸⁸ had arguably the biggest impact on (realist) IR theory,

¹⁸⁶ Ibid., p. 487

¹⁸⁷ Carr (1964)

¹⁸⁸ Morgenthau (1973)

turning it into a US-dominated academic discipline. In the first chapter, Morgenthau laid out the “Six Principles of Realism”:

1. Politics is governed by objective laws.
2. A state’s interests are defined in terms of power.
3. National interest is identified with national survival.
4. States are not subject to universal moral principles.
5. Morals have no place in foreign policy.
6. The political sphere is autonomous.

While Morgenthau’s contribution to realism is heavily influenced by his pessimistic image of mankind, the neo-realist theory of IR focuses much more on the structural forces shaping the action of states in the international system. In “Man, the State, and War”, Kenneth Waltz laid the intellectual foundations for neo-realism by identifying three relevant “images” or levels of analysis for the study of IR. First-image explanations are concerned with how the actions of individual human beings (for example as statesmen, generals, scientist, etc.) are shaping international politics. Second-image explanations, in contrast, are concerned with how the internal structure and characteristics of states – i.e., whether a country is a democracy or dictatorship, rich or poor, capitalist or communist, stable or unstable, ethnically homogenous or diverse, etc. – affect the interactions among them (i.e., cooperation vs. conflict, etc.). Finally, the third image focuses on how the overall distribution of power in the international system (i.e., uni-, bi-, and multipolar structures) affects the foreign and domestic policy choices of individual states.

In “Theory of International Politics”, Kenneth Waltz further refined neo-realism based on systemic third-image analysis.¹⁸⁹ He defines structure as a “set of constraining conditions”.¹⁹⁰ Waltz refers to first- and second-image approaches as “reductive explanations”, implying that they are insufficient in explaining and predicting international politics. Juxtaposing realism’s reductive and systemic explanations, one author put it succinctly:

“Fixing [structural] constraints and varying units’ attributes comprise the essential conceptual experiment underlying reductive explanations. [...] Fixing the units’ attributes and varying the constraints facing the units comprise the fundamental conceptual experiment underlying systemic explanations.”¹⁹¹

¹⁸⁹ Waltz (1979)

¹⁹⁰ Ibid., p. 73

¹⁹¹ Powell (1994) p. 316

Both realists and neo-realists agree that international relations are in a state of anarchy, i.e., there is no authority / institution above the independent, sovereign states with an effective monopoly of force and the legitimacy to enforce international law and agreements between states; both are state-centric and regard the nation state as the most important unit of analysis for the theory and practice of IR; both view international politics as inherently competitive; both emphasize material factors, rather than nonmaterial factors, such as ideas and institutions; and both assume states are egoistic actors that pursue self-help strategies.

Neo-realists differ from realists in that they believe that qualitative differences in the structure of the international system have a direct, generally predictable, impact on the interactions among the states composing the system. According to Waltz, “the idea that international politics can be thought of as a system with a precisely defined structure is neo-realism’s fundamental departure from traditional realism.” Furthermore, neo-realists put much more emphasis on the economic dimensions of power (as opposed to classical realists who focus almost exclusively on a country’s military might); neo-realists recognize that policymakers face important, difficult choices when it comes to trade-offs between the pursuit of military might and economic welfare (“guns vs. butter” dichotomy). Realists, in contrast, believe that a state’s long-term pursuit of military power and security always and automatically takes precedence over any near-term economic and trade interests.

Multipolarity, bipolarity, and unipolarity are the most important structural configurations of the distribution of power in the international system. For neo-realists, the international system’s structure affects the foreign policy decisions of states first and foremost through balancing of power dynamics. On the one hand, each state desires, in principle, to become the international system’s most powerful actor, or hegemon. At the same time, all other states – while each pursuing hegemonic ambitions – share a common interest in making sure that no such dominant hegemon emerges in order to safeguard their own national sovereignty and autonomy. According to balance of power theory, a rising state will therefore be countered or balanced against by a coalition of other states in the international system. The risk of war is particularly high during those times when a rising state is challenging the established distribution of power in the international system or, alternatively, when a hegemon in decline is trying to fend off potential challengers to its dominant status.

Unipolarity can be a very stable¹⁹² structure for the international system, especially if the hegemon is dominant in “all the underlying components of power: economic, military, technological, and geopolitical”¹⁹³. In its most extreme form, unipolarity would describe a situation where one state enjoys a monopoly of force in the international arena. As a result, such a world government (“Leviathan”) would bring inter-state war and armed conflict to an end, since no other state would have the means to challenge the authority of the system’s hegemon. In reality, however, such a complete and total unipolarity has rarely if ever existed. While bipolarity is less stable than unipolarity, it is more stable than multipolarity. In a bipolar system, states can more easily balance and / or deter each other. Once the adversary can be clearly defined, there is less chance of miscalculation than in a multipolar system.¹⁹⁴ Historically speaking, the Cold War is the most prominent example of a bipolar international system.¹⁹⁵

In “The Origins of Alliances”¹⁹⁶, Stephen Walt further refined balance-of-threat theory as an important element of neo-realist thinking. Walt differs from classic neo-realists like Waltz in that he believes that states balance above all against threats, not purely against power. The (perceived) intentions and ambitions of the states involved play a crucial role in foreign-policy making, in addition to the assessments of their aggregate and offensive power as well as their geographic proximity.¹⁹⁷ According to Walt, states can adopt two different approaches to respond to a perceived external threat, i.e., the rise of a (potentially hostile) state. First, they could decide to directly confront the threat by balancing and / or joining coalitions against the aspiring hegemon. Alternatively, they could decide to bandwagon and join the coalition of the hegemon in the hope of maintaining a certain degree of political / military autonomy while at the same time sharing in the hegemon’s expected future spoils of conquest. In general, Walt expects strong states to balance against threats; weak states, in contrast, are more likely to bandwagon. Walt also coined and then disproved the so-called “birds of a feather” theory, according to which states with similar ideologies will cooperate with rather than fight each other (i.e., Democratic Peace Theory). According to Walt, however, this theory does not really square with the harsh reality of international politics, where the balancing against threats is a much more common foreign policy strategy.

¹⁹² The characteristics of a “stable” international system are peacefulness and durability. Wohlforth (1999) p. 8

¹⁹³ Ibid., p. 7. Wohlforth acknowledges that this ‘unipolarity-breeds-stability thesis’ is contested by many neo-realists, who argue “that any great concentration of power threatens other states and causes them to take action to restore the balance” Ibid., p. 5

¹⁹⁴ WWI demonstrates how strategic miscalculations mixed with alliance politics pushed a multipolar system down the abyss. The argument that bipolarity is more stable than multipolarity is informed by the relative stability of the Cold War, during which nuclear deterrence played a crucial role in limiting / containing the outbreak of direct hostilities between the superpowers. For the opposite argument, see (Deutsch & Singer, 1964).

¹⁹⁵ Sparta vs. Athens and Carthage vs. Rome are other historical manifestations of (regional) bipolarity.

¹⁹⁶ Walt (1987)

Other important members of the (neo)realist school include John Mearsheimer, Robert Jervis, and Robert Gilpin. In “Back to the Future: Instability in Europe After the Cold War”¹⁹⁸, Mearsheimer predicted Europe’s return to an antagonistic 19th-century-style multipolar system – including a resurgent, nuclear-armed, reunified Germany – following the end of the Cold War and the retreat of US forces from the Old Continent. His prediction turned out to be wrong; but Mearsheimer’s characterisation of foreign policy as an aggressive power struggle is still accurate in many parts of the world, most notably in the Middle East and, albeit to a lesser degree, in Asia.¹⁹⁹ “[I]n the anarchic world of international politics, it is better to be Godzilla than Bambi.”²⁰⁰

Robert Jervis also made important contributions to IR theory, notably by further refining the concept of “security dilemma”. Originally developed by John Herz in the 1950s, the “security dilemma” refers to the fact that an increase in one state’s security decreases the security of the other states in the system. As state A tries to improve its own security posture, i.e., by building up its military base, it inadvertently leads states B, C, etc. to do the same as they are now feeling more threatened by A’s initial military build-up. Ironically, state A may therefore feel more insecure *after* the military build-up than before it. In international relations, this cycle of mutual distrust and insecurity – the “security dilemma” – leads to an escalation of (military) threat perceptions that, in turn, makes war between all states involved much more likely. From a realist perspective, there is possibly no way to resolve the security dilemma as the world remains, in essence, a self-help system where each state has to provide for its own security and cannot realistically rely on international institutions like the UN to defend its political autonomy and territorial integrity.

In “War and Change in World Politics”,²⁰¹ Robert Gilpin develops a theoretical framework for understanding international political change. In particular, Gilpin attempts to explain the rise and fall of hegemons (“hegemonic transitions”). Two factors explain why hegemons are ultimately bound to decline and to be replaced by a rising challenger. First, as a hegemon expands and (militarily) dominates other countries in the system, it has to devote an ever-increasing share of its GDP²⁰² to military and security-related expenditures; this leaves the hegemon with less and less money to invest into its infrastructure and economic base. Over time, the hegemon’s

¹⁹⁷ “States feel threatened when they face powers that combine superior capabilities with geostrategic proximity, offensive military power, and offensive ideology.” Risse-Kappen (1996) p. 360

¹⁹⁸ Mearsheimer (1990)

¹⁹⁹ Nuclear weapons, coupled with credible second-strike capacities, have reduced the potential for military aggression (India vs. China or India vs. Pakistan).

²⁰⁰ (Brzezinski & Mearsheimer, 2005) pp. 46-50

²⁰¹ Gilpin (1981)

²⁰² GDP = Gross Domestic Product

competitiveness declines and it will no longer have the necessary economic resources to sustain its hegemonic military posture abroad. The second factor precipitating a hegemon's decline is the gradual diffusion of technological expertise from the hegemonic core to its periphery. In the long run, this transfer of (military) technological expertise will reduce the hegemon's technological superiority and thus undermine one of the key pillars of its political, economic, and military preponderance.

This chapter can only provide an overview of (neo-)realist IR theory. By tracing realism back to its ancient origins, one can show that the theory of IR has often been heavily influenced by the practice of IR. As a general rule, realist thinking has always thrived at times when the world was particularly bleak, characterized by war and human suffering. Realism is a pessimistic IR theory based on a pessimistic image of mankind. Having discussed realism's key assumptions and main authors, it is now time to examine the propositions and hypotheses that realism would make about the BMD / EADS mergers. By applying realism to these two mergers, it is possible to test the theory's explanatory and predictive capacity and to contribute to the advancement of the study of IR. The key question that this thesis answers is why – following the sharp drop in defence expenditures after the end of the Cold War – did the US A&D industry consolidate at a national level whereas France, Germany, and Spain consolidated their major A&D assets at a transnational level and merged them into one fully integrated European company, EADS?

From a realist perspective, the BMD merger makes perfect sense. In a competitive, anarchic international system, the American hegemon must be naturally concerned about defending its dominant military, economic, and technological status vis-à-vis *all* potential challengers (“no peer competitor”), including NATO allies like France, Germany, and Spain.²⁰³ For realists, national autonomy in defence production is of paramount importance and provides the basis for an independent foreign, security, and defence policy. Even if from a purely economic / business perspective, a transatlantic merger between Boeing and a major European partner had made more sense than the BMD merger, realists would still predict that the US government would have blocked such a move on national security grounds and pushed for ethnocentric consolidation instead. In the realist world, long-term national security considerations always prevail over near-term economic considerations. The primacy of “realist” national security considerations in the strategic A&D industry is not to suggest that America still considers the possibility of future war

²⁰³ The US has shared sensitive nuclear technology with the UK for more than six decades and also helped France acquire nuclear weapons. Both moves run counter to traditional notions of realism, which would assume that Washington would have kept its nuclear cards close in an effort to maximise its own power and national security position in the international system.

with Europe (or vice versa for that matter). The advent of nuclear weapons fundamentally changed the nature of war between major powers by adding the elements of mutual deterrence and restraint that led to the emergence of “a [Cold War] nuclear order”.²⁰⁴ The outbreak of military hostilities or full-scale war across the Atlantic – be it at the conventional level alone or at the WMD level – remains unthinkable. However, what the primacy of “realist” national security considerations does mean is that even among close political, economic, and military allies there will never be a perfect congruence of political interests and perceptions on all matters at all times and that, as a result, there will never be full transparency and mutual trust among the countries concerned.²⁰⁵ Therefore, governments on both sides of the Atlantic will continue having serious differences over matters deemed important or even vital to at least one of the parties involved (e.g., 2003 Iraq War).

From a realist perspective, cooperation always carries risks, notably in the form of cheating. But even if international cooperation works and produces positive, absolute gains for all parties involved, hegemonic powers – like the US – are concerned about the potential consequences of their (currently weaker) partners deriving relatively greater gains from cooperation, thus precipitating the hegemon’s eventual decline. According to realism, states evaluate opportunities for international cooperation in terms of relative rather than absolute gains. They prefer short-term relative gains through non-cooperation over potential long-term absolute gains through cooperation. A transatlantic A&D merger deal would have risked potential US technology transfers that could undermine America’s technological leadership in this strategic industry sector. Apart from (defence) technology transfers from to European NATO members, which would take place between close political, economic, and military allies, a transatlantic merger would also have raised the spectre of technology transfers to third countries, including US adversaries and competitors like China.²⁰⁶ For realists, there is little, if any, room for mutual (permanent) trust between states in the harsh world of international politics – not even among transatlantic allies. Based on a realist assessment, America and its defence companies also feared that a transatlantic merger would provide foreign governments with direct influence over the merged company’s corporate decisions in strategically important areas such as weapons development and production, relocation of production sites, and potential future mergers with third companies.

²⁰⁴ Walker (2000) p. 704

²⁰⁵ One indicator of the continued prevalence of mistrust and competition in the international arena is the fact that states direct conventional political-strategic as well as economic espionage at other countries, including close political and military allies.

²⁰⁶ US aerospace companies like Boeing have themselves transferred critical technologies to Japan and China by outsourcing production in recent years.

It is striking to note that successive US administrations have authorised the transfer of cutting-edge US technologies to Israel, despite the fact that the Jewish state appears to have repeatedly violated American re-export controls governing the transfer of such US technologies to third countries like South Africa, China, and India.²⁰⁷ ²⁰⁸ Unauthorised Israeli re-exports of US military hardware and technology to Beijing were particularly sensitive as they risked upsetting the regional balance-of-power, especially across the Taiwan Straits where US forces might have to repel a massive conventional attack by China on Taiwan.²⁰⁹ Despite occasional (largely behind-the-scenes) American criticism of these Israeli arms exports, US military and technology transfers to Israel continued unimpeded. This lenient and accommodating US technology transfer policy – which runs counter to what realism would normally expect – can be explained by a strong pro-Israel lobby in Washington, DC (especially in Congress), a common ideological orientation between America and Israel (i.e., Israel as the only free and democratic state in the Middle East), and a “framing” of the definition of strategic threats in the Middle East in ways that favours Israel.²¹⁰ ²¹¹ ²¹²

²⁰⁷ “Evidence shows that Israel has systematically circumvented US restrictions on the re-export of US defence products, components and technical data. [...] Israel’s unauthorized retransfer of US defence products is part of a larger pattern of illicit behaviour that includes diversions of US military aid, industrial espionage, and improper end use of US military equipment. Israel often retransfers US defence products to states that are potentially hostile to the [US] or are blatant violators of human rights. These retransfers have threatened American commercial interests, compromised intelligence, upset regional stability, strained diplomatic relations, and confirmed the US national security bureaucracy’s long-standing distrust of Israeli technology transfer practices. [...] Israel engages in unauthorized defence re-exports largely to nourish its economy’s large defence sector and because it is confident, for good reason, that Washington will not or cannot enforce the law.” Clarke (1995) pp. 89-90; 109

²⁰⁸ A 1992 report by the DoS Inspector General declared that alleged Israeli violations of US laws and regulations “cited and supported by reliable intelligence information show a systematic and growing pattern of unauthorized transfers [...] dating back to about 1983”. DoS (1992)

²⁰⁹ For China, Israel was an extremely attractive arms supplier: “No other country had accumulated as much experience in fighting Soviet weapons, or in upgrading and integrating them into its own arsenal. In addition, Israel had acquired some of the most advanced Western weapons systems and also skilfully developed its own. [...] Even indirect access to these systems could enable the Chinese to circumvent the restrictions on transferring military technology to [C]ommunist countries. Following the 1989 Tiananmen Square massacre, the Israeli connection was vindicated for Beijing. Israel reacted mildly to the incident and did not impose military sanctions, unlike most Western governments. Unconfirmed reports suggest that Israel exploited the opportunity to fill the vacuum created by the withdrawal of Western arms suppliers. Shichor (1998) p. 74

²¹⁰ “[T]he thrust of US policy in the region derives almost entirely from domestic politics, and especially the activities of the ‘Israel Lobby’. Other special-interest groups have managed to skew foreign policy, but no lobby has managed to divert it as far from what the national interest would suggest, while simultaneously convincing Americans that US interests and those of the other country – in this case, Israel – are essentially identical. [...] The Lobby pursues two broad strategies. First, it wields its significant influence in Washington, pressuring both Congress and the executive branch. Whatever an individual lawmaker or policymaker’s own views may be, the Lobby tries to make supporting Israel the ‘smart’ choice. Second, it strives to ensure that public discourse portrays Israel in a positive light, by repeating myths about its founding and by promoting its point of view in policy debates. The goal is to prevent critical comments from getting a fair hearing in the political arena. Controlling the debate is essential to guaranteeing US support, because a candid discussion of US-Israeli relations might lead Americans to favour a different policy. A key pillar of the Lobby’s effectiveness is its influence in Congress, where Israel is virtually immune from criticism.” (Mearsheimer & Walt, 2003) *London Review of Books*. See also (Mearsheimer & Walt, 2003) KSG Faculty Research Working Paper. For a rebuke of Mearsheimer & Walt, see Cohen (2006).

²¹¹ “State and DoD officials say that it is not politically possible to submit to Congress, as an administration proposal, a lower FMS [Foreign Military Sales] figure for Israel than that for the previous year.” Furthermore, the draft GAO report stated that “Information relative to any threat assessment, Israel’s defence posture and the needs of Israeli armed forces were accepted from responsible US and Israeli officials without verification.” Leaked excerpts from the classified 1983 GAO report “US Assistance to the State of Israel”, quoted in (Stork & Wenger, 1983) p. 28

According to an authoritative study of trade and investment ties across the Atlantic, the “economic relationship between the [US] and Europe is by a wide margin the deepest and broadest between any two continents in history – and those ties are accelerating”.²¹³

*“[T]he transatlantic economy generates roughly US\$2.5 trillion in total commercial sales a year and employs over 12 million workers in mutually ‘insourced’ on both sides of the Atlantic who enjoy high wages, high labour and environmental standards, and open, largely non-discriminatory access to each other’s markets.”*²¹⁴

While transatlantic trade flows totalled US\$600 billion in 2005²¹⁵, the report states that they are a “misleading benchmark of transatlantic economic integration. Foreign investment, not trade, drives transatlantic commerce [...]”.²¹⁶ As a result, “foreign-affiliate sales, not trade, are the backbone of the transatlantic economy”.²¹⁷

Despite these close transatlantic economic ties, serious barriers to trade and investment in the A&D sector continue to be imposed on national security grounds. “Like the [US], European countries tend to purchase major defence equipment from their domestic companies when such options exist.”²¹⁸ In America, these barriers to defence trade “result from a complex set of rules and practices aiming at imposing ‘domestic source restrictions’ on US defence acquisition”²¹⁹. These restrictions are designed “to preserve the domestic mobilisation basis and the overall preparedness posture of the [US]”²²⁰ by avoiding dependency on defence suppliers based abroad. Key elements of this protectionist “Fortress America” policy decried by the Europeans include 1) Pentagon requirements that any major defence procurement items be manufactured on American soil (often forcing EU and other companies to sell manufacturing licenses to US companies), 2) tight restrictions on the transfer of technical data by foreign nationals working in America to their parent companies abroad; and 3) lack of access to tender conferences as well as related security clearances

²¹² “For over a decade now, Israeli military sales have been the source of much confusion and mythology. Criticism of Israeli military-technology transfers to China is largely unfounded. The sales actually enjoyed tacit American support when they started in the 1970s (to Taiwan) and 1980s (to China). Washington’s recent accusations of illegal transfers of US technologies reflect changed political considerations more than actual facts. Military sales to China have helped mitigate the economic crisis facing Israel’s defence-industrial complex, have promoted political and strategic relations between Israel and China, and have had only a limited impact on the Asian balance of power. Israel’s arms-export control mechanisms, moreover, have been tightened considerably in recent years, while military transfers to China and Taiwan have drastically declined.” Shichor (1998) p. 68

²¹³ (Hamilton & Quinlan, 2004)

²¹⁴ Ibid., p. xi

²¹⁵ EC (2006) p. 8

²¹⁶ (Hamilton & Quinlan, 2004) p. xi

²¹⁷ Ibid., p. xi

²¹⁸ GAO (1997), p. 3

²¹⁹ EC (2006) p. 43

²²⁰ Ibid., p. 42

for pre-contract award procedures relevant for winning a defence contract from the Pentagon.²²¹ American defence company officials, in contrast, decry a “Fortress Europe” situation and “say they cannot export major defence items to Europe without involving European defence companies in the production of those items”.²²² Such transatlantic industrial partnerships, which often provide offset²²³ benefits to European companies, include subcontracting arrangements, international consortia, and teaming arrangements.²²⁴

Despite protectionist national security barriers to defence trade on both sides of the Atlantic, it is evident that America has continued to export overwhelmingly more defence articles and services than it imports. Commercial US defence exports (American companies selling directly to foreign entities under an official US export license) averaged US\$11.5 billion / year during 2000-2004, while average annual defence imports amounted only to US\$1.8 billion. During the same period, US military exports as part of the Pentagon’s Foreign Military Sales (FMS) programme – essentially government-to-government arms sales or grants – averaged US\$12.6 billion per year, while the corresponding annual imports amounted to only US\$1.5 billion.²²⁵ Interesting to note is that “during the same [2000-2004] period, DoD purchases of defence articles and services from foreign companies decreased from 2.4 percent to 1.7 percent of all DoD purchases”.²²⁶ While these figures exclude DoD purchases from US subsidiaries of foreign-owned companies, it is obvious that the (transatlantic) defence trade and procurement business is frequently subject to significant restrictions justified on national security grounds.

During 1992-1996, Washington’s FMS transactions with Europe amounted to US\$20 billion.²²⁷ At the time, the most important US customers were Turkey, Finland, Greece, Switzerland, the Netherlands, and the UK. Neither the three future EADS partner countries nor Italy ranked among the top US clients. Military aircraft, aircraft spares, and aircraft modifications alone accounted for US\$15 billion (75 percent) of America’s FMS transactions with Europe during 1992-1996.²²⁸

“Buy National” procurement policies are common on both sides of the Atlantic. France has traditionally had the strongest “Buy National” or, alternatively, “Buy European” procurement

²²¹ Ibid., pp. 43-44.

²²² GAO (1997) p. 3

²²³ Offsets can be defined “as the entire range of industrial and commercial compensation benefits provided to foreign governments and firms as inducements or conditions for the purchase of military goods and services. They include co-production technology transfer, training, investment, marketing assistance, and commodity trading” GAO (1996), p. 1

²²⁴ Ibid., p. 21

²²⁵ GAO (2006) p. 3

²²⁶ Ibid., p. 3

²²⁷ Excluding commercial sales based on US export licenses.

²²⁸ GAO (1997) p. 14

policies of any European NATO ally, reflecting “France’s goal to retain a [national] defence industrial base and maintain autonomy in national security matters”²²⁹. In essence, “France has [only] purchased major US defence weapons systems when no French or European option is available”²³⁰. According to French MoD officials, “imports represented only two percent of France’s total defence procurement over the past five years” [1992-1996]²³¹. In contrast, the UK and the Netherlands have traditionally embraced “open competition policies that seek the best equipment for the best value” and have regularly awarded major defence contracts to American bidders.²³² US defence companies have been most successful in exporting their goods and services to European countries when they 1) provided unique, advanced technologies, 2) offered attractive offset arrangements to local firms, and 3) faced no competition from domestic European companies.²³³ In this context, the third factor is particularly important. While the UK “aims to competitively award about three-quarters of its defence contracts, [...] UK companies [have been] winning at least 90 percent of the contracts over the past several years”²³⁴. Finally, Germany and Italy – which made drastic procurement cutbacks in the 1990s – fall somewhere in between France and the UK. “Both countries [...] have an open competition defence procurement policy and buy a mixture of US and European products.”²³⁵ While the biggest share of the two countries’ defence imports has traditionally been supplied by the US, Germany and Italy decided in the 1990s to purchase major American defence items only in reduced quantities “to reserve a portion of their procurement funding for European cooperative solutions”²³⁶.

To bolster the realists’ case, this thesis would have to provide evidence suggesting that the US government favoured national consolidation over international / transatlantic consolidation for reasons of national security; possibly despite the fact that an objective and rational cost-benefit assessment purely based on business and economic factors would have called for international / transatlantic defence industry consolidation. Such evidence would support realist explanations, which are based on the assumption that states, when having to choose between economic welfare (defined in terms of liberal economics rather than mercantilism) and autonomy in arms production, will virtually always chose the latter. If Washington were conscious of the fact that US industry consolidation within purely national confines would make it impossible to reach the same levels of

²²⁹ Ibid., p. 18.

²³⁰ Ibid., p. 17. A good example is France’s 1995 purchase of Boeing KC-135 tanker aircraft (the Airbus alternative was not yet available).

²³¹ Ibid., p. 14

²³² Ibid., pp. 15-17

²³³ Ibid., p.15

²³⁴ Ibid., pp. 13-14

²³⁵ Ibid., p. 18

²³⁶ Ibid., p. 18

increased economic scale and efficiency, it would demonstrate that the US government is literally willing to pay the price to ensure that they retain autonomous national arms production capabilities. Furthermore, if it can be shown that the Boeing and / or MDC management teams had unsuccessfully lobbied the US government for international / transatlantic consolidation, it would further bolster the realists' case. Realists view states as the primary actors in international relations. Especially in the vital military and national security domain, realists would predict that national governments always prevail over the A&D companies on territory under their jurisdiction and that, in this key sector, liberal economics does not apply.

To turn to the EADS merger, at first glance, it seems to be completely at odds with the realist IR theory. States after all, are expected to try to maximise their national autonomy in armaments production and, by extension, their national security posture. The EADS merger, which involves three sovereign countries merging their key A&D assets into one single company, poses therefore significant challenges to the explanatory and predictive capacities of realist IR theory. Realists view the world through the prism of international competition rather than cooperation. Realist IR theory, however, can be leveraged to explain the EADS merger. Balance of threat theory, a key element of realist thinking, is of critical importance in this context. As was discussed earlier, states have in essence two possible responses when confronted with a potential threat, i.e., a potential or actual hegemon; they can either balance against or bandwagon with the hegemon. According to Walt, strong states tend to pursue balancing strategies whereas weak states prefer to bandwagon.

From a realist perspective, the EADS merger can therefore be interpreted as an attempt by France, Germany, and Spain to balance against the American hegemon in order to preserve the autonomy and independence of the European A&D industry. In particular, the EADS merger can be interpreted as a pan-European mobilisation in the transatlantic dogfight between Airbus and Boeing for supremacy on the world market for large commercial aircraft. When Airbus was launched in the late 1960s, the consortium could already be viewed as a European attempt to counterbalance the US to break the American dominance of the (civilian) aircraft market in the non-Communist world.²³⁷ The creation of Airbus can also be viewed as part of a Gaullist French strategy to avoid or at least minimise US dependence.

²³⁷ The Concorde was Europe's first cooperative civilian airliner project. The UK and French governments saw supersonic transport as a way to leapfrog US jet aircraft development and to break America's dominance of the world commercial aircraft market. Ultimately, the Concorde was both a technological masterpiece and a terrible market failure.

After the end of the Cold War, America emerged as the world's only superpower. The demise of the Soviet Union left Europe far less dependent on US security guarantees – making it thus easier for Europe to attempt to selectively balance against the American hegemon, including in the A&D industry through the EADS merger. Realists would argue that the three EADS founding countries – France, Germany, and (albeit to a lesser extent) Spain – were strong and proud enough to balance against rather than bandwagon with the American hegemon. It does not matter that DASA would have preferred to merge with BAe rather than with France's state-controlled AM. All Airbus partners were scrambling to merge with other aerospace companies to quickly gain the critical mass necessary to survive the impending onslaught of the American mega-primers. In military aircraft, too, Americans and Europeans anticipated major competitive struggles:

“[A]ccording to US defence company officials, sales of military aircraft to Europe are expected to be important in future competitions, particularly in the emerging defence markets in central Europe. Competition between major US and European defence companies for aircraft sales in these markets is expected to be intense.”²³⁸

If it can be demonstrated that the decision to form EADS was primarily driven by geostrategic as well as economic factors rooted in Europe's desire to balance against America – both in the military as well as in the civilian / economic domains – realism would be proven right. “The neo-realist analysis argues that states will start competing and balancing over economic issues after the Cold War as much as they competed and balanced over security issues during the Cold War.”²³⁹ Realists would predict that European governments put a premium on pan-European cooperation and consolidation in the A&D industry – including a full-blown EADS style merger – if that is perceived to be the only feasible option to at least attempt to form a credible counterweight to America. Such a prediction, however, assumes that in the case of EADS, France, Germany, and (albeit to a lesser extent) Spain concluded that they had more to gain from cooperating among themselves rather than bandwagoning with America. Given Spain's significant financial and economic dependence on EU funding, it should not come as a surprise that Madrid decided to throw its weight behind the Franco-German EADS merger, which was supported by the two most powerful and influential EU member countries. If key European countries had decided to bandwagon with rather than balance against the US hegemon, it would have put the European allies into a position of inferiority vis-à-vis America. While gaining more access to the US defence market, the Europeans would have lost much of their political, economic, and technological

²³⁸ GAO (2007) p. 14

²³⁹ Powell (1994) p. 334

autonomy as a result of unequal transatlantic mergers with the much bigger American mega-primes like Boeing or LMC.

While realists would expect governments to value national autonomy over potential economic gains from international collaboration in the A&D industry (especially if it implied a loss of political / economic sovereignty), it is far more difficult to say what realism would predict about the preferences of the private sector actors. Realism does assume that sovereign states are the dominant IR players, leaving little – if any – room for independent corporate policies by private sector companies. In the case of the BMD / EADS mergers, however, it is necessary to analyse the actions of both the public sector and the private sector. It should be noted that bandwagoning with America has been – and in fact remains to this day – a potentially very attractive option for European A&D companies, especially if it concerns “mergers between equals”. Strictly speaking, however, such transatlantic mergers would probably not qualify as “bandwagoning”, which involves a weak actor supporting a hegemon in order to preserve a minimum of autonomy and to share in the spoils of (future) conquest. Bandwagoning with the American hegemon promises privileged access to the lucrative US defence market, by far the largest in the world. Bandwagoning with Washington also raises the spectre of increased transatlantic (defence) technology transfers, especially if the American government and US aerospace / defence companies have sufficient trust in their European partners to believe that they would not transfer sensitive know-how to third countries. For realists, however – who live in a world where mutual trust is a scarce commodity – that is a very big “if”.

Private shareholders are primarily interested in maximising their return on investment. If transatlantic A&D mergers – even between un-equals (i.e., smaller European players with American mega-primes) – are expected to deliver superior company profits / shareholder value, then private shareholders should have no concerns about the associated loss of political sovereignty of either their home country and / or the loss of business autonomy of their company. They would be shareholders of the combined American / European A&D company after the completion of such an (unequal) transatlantic merger. In contrast, the top management of European A&D companies can be expected to be much more concerned about the potential loss of power and influence as a result of an unequal merger with an American mega-prime. The top management of an acquired company (especially if it is a “hostile takeover”) is often forced to resign or moved to secondary management positions. Generally speaking, private shareholders care more about *how* a company is run (i.e., how profitable it is) than *who* is running the company (i.e., whether it’s a Frenchman, German or American).

A key analytical question concerns whether the major US and European A&D companies should be considered as part of their respective home states or not. As a general rule, the stronger the involvement of governments in this industry sector, the stronger the case for a realist approach to explain the BMD / EADS mergers as one can then assume that the strategic choices and preferences of the companies involved were closely aligned with the interests of their home governments (usually defined in terms of maximising national security and military-technological leadership).

The relationship of A&D companies with their home governments in Europe and America can be analysed from two different perspectives. First, to what extent, if any, have governments retained direct equity stakes in their countries' A&D industrial base, particularly at the prime contractor level? If key elements of a country's A&D industry are in fact nationalised and under the financial / managerial control of the government, then one can argue that, by definition, these companies are part of "the state". By this standard, the American A&D industry is separate from the government since Washington does not hold equity stakes in any of the major contractors. In Europe, in contrast, countries such as France and Spain have retained direct or indirect (minority) stakes in companies like EADS. That being said, the UK and West Germany had also been direct A&D industrial shareholders before pursuing privatisation strategies in the 1980s.

The second benchmark concerns the extent to which senior executives in the A&D sector are influenced by the stated or anticipated preferences of elected politicians and government officials when making their own corporate (strategic) decisions. For example, even if a transatlantic A&D prime contractor merger is a theoretical possibility under US law, corporate leaders on both sides of the Atlantic (especially in America) are likely to refrain from making any moves in that direction if (1) they know that the political climate is not conducive to such a step and (2) if they fear that it could hurt their relationship with key government officials moving forward. The anticipated negative political fall-out becomes even more important if corporate leaders have reasons to believe that their attempt to engineer a transatlantic merger could make Washington's political establishment (especially powerful defence appropriators on Capitol Hill) upset and thus harm the companies' chances of securing future Pentagon contracts.²⁴⁰ During the late 1990s, both factors appeared to weigh heavily on the minds of A&D industry executives – repeated administration statements about the desirability of closer transatlantic defence industrial cooperation

²⁴⁰ The fact that US A&D companies are highly dependent on the Pentagon's procurement and R&D budgets gives Washington unparalleled leverage over this industry sector. The higher a company's economic dependence / market exposure to the government and / or the country in general, the higher the leverage that political leaders enjoy to ensure that the respective corporate leaders are not engaged in business practices deemed harmful to the national interest.

notwithstanding. The third benchmark concerns the degree of influence the companies wield, directly or indirectly, over the respective governments as well as the closeness of the links between company leaders and political leaders. This last aspect is particularly relevant with regard to the influence of the MIC and the massive procurement lobbying campaigns by defence contractors vis-à-vis Congress.

It is also necessary to look at the overall impact of the A&D industry's rapid consolidation on the relationship between this sector and the government. To the extent that previous rounds of consolidation significantly reduced the competitive dynamics at the prime contractor level, one should expect this process to cause a corresponding shift in the balance of power in favour of the private sector. The government's decreased ability to find suitable bidders for major defence procurement contracts should generally translate into increased pricing power for those remaining companies still able and willing to participate in these tenders. This is what one would expect in a "normal", non-strategic industry sector. The sharp reduction in competition as a result of successive rounds of consolidation has led former top Pentagon officials to warn that the "The [US] is approaching an 'arsenal system' for developing and producing its weapons – that is, one in which the government manufactures its own weaponry."²⁴¹ In an arsenal-type system, the A&D industry is fully controlled by the government and part of "the state". The sharp reduction in the number of US prime contractors coupled with the post-Cold War decrease in the Pentagon procurement budget – which, at least until 9/11, meant fewer dollars and fewer programmes to compete for – therefore led to increased interdependence between the A&D industry and the state. Ultimately, however, the state is the dominant player as it provides major R&D support and is often the industry's sole customer. And even if potential export markets can provide for an expanded customer base, it is the US administration and ultimately Congress that decide what kind of (dual-use) technologies and military hardware the A&D companies get to export and what not. In that sense, the strategically important American A&D industry is closely linked with and dependent on the state, even though it remains formally independent and generally privately-owned.

Mercantilism, the economic dimension of realism, also offers relevant insights into the EADS and BMD mergers. From the 16th to the 18th century, the period that coincides with the emergence of European nation states, mercantilism was the dominant school of economics. While mercantilism never developed into a unified theory of economics, its chief proponents like Jean-Baptiste Colbert (1619-1683), King Louis XIV's finance minister, shared a common belief that the wealth, status, and power of a state are a function of its holdings of capital. "It is simply, and solely, the abundance

²⁴¹ (Zakheim & Kadish, 2008)

of money within a state [which] makes the difference in its grandeur and power”, as Colbert put it succinctly. Furthermore, mercantilists also agreed on the zero-sum nature of the international economic system, where the global volume of trade is “unchangeable” and where the gain of one country comes at the direct, inevitable loss of another. To maximize their power, states therefore had to strive to maximize their (state-controlled) hard currency holdings (precious metals such as gold or silver at the time).²⁴² According to mercantilists, the best strategy for a country’s government to grow and maximize its capital account surplus was to encourage exports and to discourage imports, primarily through the imposition of high tariffs. Essentially, mercantilism calls for a highly interventionist economic / industrial policy where the state creates national champions and shields them from foreign competition.

In 1663, Colbert provided state financial and technological support to “Les Gobelins”, the Royal Manufacture of Tapestries, to create the first-ever French “national champion” which would subsequently be able to out-perform its foreign competitors and to increase the country’s export revenues. Colbert was thus the first European to champion state intervention in a particular industry with positive results. Mercantilism also proved to be quite influential in America, where Alexander Hamilton, the first US Treasury Secretary, “believed that the state, not the free market, was the true source of economic prosperity”. In his “Report on Manufactures” written in 1792, he urged Congress to embrace mercantilist, protectionist policies to boost the American economy. In particular, Hamilton advocated high tariffs to (1) protect key American infant industries, (2) increase government revenues, (3) encourage an entrepreneurial spirit, and (4) transform the newly independent US into a technologically advanced manufacturing power.

In “The Wealth of Nations”, Adam Smith strongly rejected mercantilism and protectionism and made the case for free trade based on the principle of both absolute and, more importantly, relative competitive advantages among the different countries of the world. Smith thus laid the foundations for what is known today as classical or *laissez-faire* economics. While mercantilism remained influential until the end of WWII – witness the competitive, export-promoting rounds of currency devaluations in Europe in the 1930s – Smith’s free-trade agenda provided the intellectual basis for the US-built post-WWII international economic system as well as the successive GATT / WTO trade liberalisation rounds designed to promote free trade through the continuing reduction and eventual elimination of tariffs and non-tariff trade barriers.

²⁴² “Because military prowess underpins states’ ability to acquire territory, dominate their collectivities, and achieve hegemony, states have depended upon capitalists and capital accumulation to furnish military resources crucial to geo-

Despite public pronouncements in support of trade liberalisation, Western political leaders, especially in France and the US – have retained strong mercantilist or rather protectionist instincts, especially with regard to strategic industry sectors. The French tradition, from Colbert, and the American tradition, from Hamilton, have deep roots in the A&D industry. Past and present government interventions in the A&D industrial base have drawn heavily on mercantilist ideas, coupled with national security considerations linked to the sector’s strategic importance. Civil and military aircraft sales are big-ticket items that have an important impact on a country’s balance of payment figures. To this day, Boeing remains America’s biggest corporate exporter at a time when the US trade deficit seems to be growing ever bigger, especially vis-à-vis China. US merchandise trade statistics demonstrate that the American A&D industry has consistently ranked as the nation’s top exporting sector for more than two decades. In 2008, that leading export earner had a positive trade balance of US\$62 billion, the only bright spot in an otherwise gloomy trade statistic indicating that America had a total trade deficit of US\$816 billion – driven by imports of energy (-US\$415 billion), electric machinery / consumer electronics (-US\$99 billion), and cars / trucks (-US\$83 billion).²⁴³ Georgetown’s Theodore Moran laid out the three key elements of “An Economics Agenda for Neorealists”²⁴⁴ designed “for those who wish to pursue relative gains at the expense of mutual gains, or political power at the expense of economic welfare”^{245,246} (1) restoring equilibrium in trade and capital accounts; (2) enhancing the competitiveness of American firms and workers; and (3) avoiding dependence on foreigners:

“An economics agenda for neorealists should address three principal dangers to America’s position in the international political system that emerge directly from US economic policy: a persistent imbalance in trade and capital accounts, which mortgages the assets of future generations or turns over the assets of the current generation to foreigners; a lagging competitiveness of firms and workers, which undermines the growth rate and skill level of a nation’s industrial base (and other sectors) in comparison to rival states; and a growing dependence on outsiders for critical products or technologies, which leaves the nation vulnerable to denial or manipulation by external suppliers.”²⁴⁷

political endeavours and internal pacification.” Gritsch (2005) p. 5

²⁴³ For US merchandise trade statistics covering 1989-2008: <http://tse.export.gov/NTDChartDisplay.aspx?UniqueURL=0pbpvr55wbczqmixsmsg455-2009-10-31-10-16-1>

²⁴⁴ Moran (1993) pp. 211-215

²⁴⁵ Ibid., p. 211

²⁴⁶ “[I]n the context of geo-economics, relativities trigger concern because they are seen as affecting the capacities of countries to defend themselves.” Cable (1995) p. 312

²⁴⁷ Moran (1993) p. 211

Old-school mercantilists focused on promoting exports and curbing imports through tariffs and subsidies. Modern mercantilists have a more sophisticated understanding of the economic dynamics at play:

*“As long as a country consumes more than it produces, it will experience a trade deficit and a corresponding reliance on foreigners to finance it. Trade protection and investment restrictions, strategic or otherwise, cannot alter this; neither can vigorous efforts to open external markets for products or capital.”*²⁴⁸

Protectionist sentiment in Europe is particularly strong in France, where political leaders euphemistically talk about *“patriotisme économique”*²⁴⁹ and *“intelligence économique”*²⁵⁰. The first term is code for protectionist state interventionism and includes the creation of national champions in strategic industries as well as the protection of national (often state-owned) French companies against (hostile) foreign takeovers. This protectionist behaviour was illustrated by France’s blocking of an attempted takeover of French utility company Suez by Italy’s energy giant Enel in early 2006. Critics of these narrowly-defined national protectionist policies see them as completely outdated and instead call for *“une solidarité économique européenne”*, hailing EADS as *“une véritable avancée pour l’Europe!”*²⁵¹.

“Intelligence économique” describes more broadly how the (French) government should strive to promote – in conjunction with the private sector, academia, civil society, etc. – the country’s (economic) interests in an effort to boost overall national competitiveness and preserve the nation’s social and economic system in the context of an increasingly globalised economy. A June 2003 report commissioned by the French Prime Minister defined the ultimate goal of *“intelligence économique”* to contribute to “a France that is wealthier, better protected and more respected” [...], which shares her progress with her commercial allies, notably in Europe”. The report also argues that *“intelligence économique”* can help France achieve

“the protection of her scientific and industrial heritage, gains in competitiveness and market shares, and a renewed influence in the world, especially among all those who do not want to depend on one exclusive supplier and, furthermore, all those who, within international organisations, do not want to accept the twisting and the rejection of the rules

²⁴⁸ Ibid., p. 212

²⁴⁹ French Prime Minister de Villepin referred to “patriotisme économique” in July 2005 on the occasion of a hostile US takeover launched against France’s dairy company Danone.

²⁵⁰ Carayon (2003)

²⁵¹ Allègre (2006)

*of international law: yesterday those of Kyoto, today those of the UN, and tomorrow, perhaps more than yesterday, those of the WTO”.*²⁵²

From a mercantilist perspective, the BMD and EADS mergers were supported by the US on the one hand, and France and Germany on the other hand, to ensure that a) each of the two aerospace giants could reap economies of scale allowing them to become more competitive and to capture an ever-bigger share of the world’s civil and military aerospace market; and b) to allow each of the national governments involved to benefit from additional tax revenues, increased civil and military technological sophistication as well as heightened international prestige as a result of the commercial success of “their” respective aerospace champions.

²⁵² Carayon (2003) p. 11

2.2 Bound to cooperate: neo-liberal institutionalism and the BMD / EADS mergers

The other IR theory that this thesis applies to the BMD / EADS mergers is neo-liberal institutionalism, which forms part of liberalism. In IR theory, liberalism comprises four distinct schools of thought: 1) classical / utopian liberalism; 2) economic interdependence liberalism; 3) democratic peace liberalism; and 4) neo-liberal institutionalism.

Classical / utopian liberalism is rooted in the belief in human progress and perfectibility. It assumes that men – based on education and rational deliberation – can become better, more rational human beings and are thus able to overcome their own egoistic, aggressive, and violent impulses. Classical / utopian liberalism expects that men will cease to fight wars once they have realised that warfare is irrational and destructive. The economic interdependence school of liberalism is based on the assumption that increased international economic interdependence (more trade and FDI, etc.) will decrease the risk of war between all countries involved. As a result of economic interdependence, so the argument goes, states have an economic interest in the economic well-being and political stability of their neighbours and commercial partners. Therefore, the launch of military attacks against one's trade partners or, alternatively, the failure to prevent the outbreak of hostilities among one's trade partners, can cause massive economic disruptions, including the (partial) destruction of a country's FDI in the war-torn countries or the cut-off from vital supplies like oil; gas, and other (raw) materials, goods, and services imported from abroad. The democratic peace theory is based on the assumption that liberal democracies never fight wars against one another. Liberal democracies, so the argument goes, share the same fundamental values of individual freedom, political participation, private property, and equality of opportunity and are therefore not likely to attack like-minded countries. The road to international peace therefore lies in the promotion of liberal democracies around the globe.

Neo-liberal institutionalists (or "neo-liberals") share the realist beliefs that the international system is anarchic and that states are self-interested actors who want to maximise their political, economic, and military well-being. Since cooperation among countries is expected to produce superior results for all parties involved, states have, in principle, an interest in pursuing cooperative rather than confrontational policies. Such cooperation, however, does not come automatically as a result of (economic) interdependence. Rather, international cooperation will only happen if there are proper institutions that shape the behaviour of states and change the expected future costs and benefits associated with certain types of either cooperative or confrontational behaviour. All four schools of liberalism believe that – given the right framework and circumstances – states' common interest in cooperation (exemplified through superior cooperative policy outcomes) can overcome their

deeply-entrenched reliance on (confrontational) self-help strategies in pursuit of national autonomy and security. For liberals, it is possible to bridge the divide between national self-interest and common interest as states can / should give up confrontational self-help strategies and national autonomy in favour of increased international cooperation.

Liberalism and realism have important differences. First, realism is driven by the competitive dynamics among unitary state actors struggling to achieve primacy in security and defence matters (or, at a minimum, to ensure their national survival). Liberals describe the world from an economic perspective and therefore reject the realist notion that military security trumps everything else. Liberals believe that private-sector companies can be IR actors in and of themselves, generating the mutual gains derived from international cooperation (through trade and FDI ties), and thus challenging the realists' belief that states are unitary actors focused exclusively on maximising their (relative) national security gains rather than maximising their (absolute) economic gains. Second, realism is much more static than liberalism. Realists believe that in order to know the future, it is simply necessary to study the past because the fundamental characteristics and behaviour patterns of states and human beings are not going to change over time. Liberalism believes that the future can be fundamentally different from the past and that states and human beings can break out of the ancient cycles of warfare, distrust, and violence. While proponents of classical / utopian liberalism believed in the perfectibility of men, today's neo-liberal institutionalists believe that the right institutions will promote better relations among states.

Seventeenth-century British philosopher John Locke was the first to draw together the main tenets of liberalism, many of which had previously been developed by the Dutch legal scholar Hugo Grotius. Philosopher Immanuel Kant was the first to develop a blueprint for how to achieve permanent peace and reconciliation among states in the international system. In "Perpetual Peace" (1795), Kant argues that war could be banished if every state was organised as a republic, based on the consent of those governed. Kant laid the intellectual foundations for the Democratic Peace Theory that emerged in the 1980s. In his 1913 bestseller "The Great Illusion"²⁵³, Norman Angell claimed that "military and political power give a nation no commercial advantage, that it is an economic impossibility for one nation to seize or destroy the wealth of another, or for one nation to enrich itself by subjugating another". Following the destructions of WWI, President Woodrow Wilson's League of Nations was an ambitious, yet ultimately ineffective attempt to finally overcome the scourge of war.²⁵⁴ The outbreak of WWII was the last nail in the coffin of the League

²⁵³ See Angell (2006)

²⁵⁴ The Republican-controlled Senate rejected Wilson's "League of Nations" and Treaty of Versailles in 1919 and 1930.

of Nations and its concept of collective security where one state could supposedly trust that its security and territorial integrity would be defended against outside aggression by the collective solidarity of the international community.

The beginning of the European integration process after WWII led to a renewed focus on the potential for international cooperation. The functionalist / neo-functionalist theory of international relations – developed in the 1940s, 1950s, and 1960s – is an important part of the intellectual antecedents of neo-liberal institutionalism. Heavily influenced by the nascent European integration process, neo/functionalist argued that existing barriers to closer cooperation among sovereign states in the “high politics” realm of foreign policy, security, and defence matters (i.e., competition, anarchy, the security dilemma, etc.) could best be overcome through gradual international integration in the “low politics” of economic and social affairs.²⁵⁵ Over time, so the neo-functionalist line of reasoning, the trust and mutual (economic) benefits derived from successful economic integration and their corresponding new international institutions will create powerful “spill-over effects” that lead to increased international cooperation in the “high-politics” of security and defence matters. Ernst Haas defined political integration as “the process whereby political actors in several distinct national settings are persuaded to shift their loyalties, expectations, and political activities toward a new centre, whose institutions possess or demand jurisdiction over the pre-existing national states”.²⁵⁶

In his influential 1983 article “Kant, Liberal Legacies, and Foreign Affairs”²⁵⁷, Michael Doyle lays out the so-called Democratic Peace Theory. Inspired by Kant, Doyle identifies several reasons for why liberal democracies do not go to war with each other. First, citizens in democracies are very cautious to support going to war, as they would have to pay higher taxes for increased defence expenditures, suffer potential material destruction, and risk being wounded or killed as a result of military action. Second, liberal democracies have an inherent respect for one another as a result of their shared fundamental values of individual freedom, political participation, private property, equality of opportunity, etc. Third, liberal democracies, based on mutual trade and FDI, are dependent on each other for their economic welfare and prosperity. This economic interdependence makes war between liberal democracies extremely costly for all parties involved. Finally, Doyle argues that increased international interactions as a result of opening societies, expanding trade, and new (communications) technologies will contribute to an increased understanding and appreciation of other countries and cultures.

²⁵⁵ Haas (1958); Haas (1964); Mitrany (1966)

²⁵⁶ Haas (1958) p. 16

Let's turn to neo-liberal institutionalism, the most potent challenger to the dominance of neo-realism in modern IR theory. In "Power and Interdependence", Robert Keohane and Joe Nye challenge several key realist assumptions and develop neo-liberal institutionalism as a major IR theory. First, in disputing the primacy of states, Keohane and Nye point to the rise of international organisations, MNCs, NGOs, etc. in world politics. They also challenge the realist notion that states are coherent, unitary actors, arguing that different branches of government as well as different ministries / parts of a state's bureaucracy can pursue different, even contradictory policies.²⁵⁸ Second, talking about the declining importance of military force in modern politics, Keohane and Nye maintain that "particularly among industrialised, pluralist countries, the perceived margin of safety has widened: fears of attack in general have declined, and fears of attack *by one another* are virtually non-existent."²⁵⁹ Finally, Keohane and Nye challenge realism's primacy of "high politics" over low politics". While conceding that "military power remains important in some critical domains of international relations", they also point out that "information technology has some effects on the use of force that benefit the small and some that favour the already powerful. [...] The key, however, will not be the possession of fancy hardware or advanced systems, but the ability to integrate a system of systems."²⁶⁰ Keohane and Nye also coined the term "complex interdependence" to describe their perspective on world politics: first, states and their societies are connected through a complex web of multiple actors and institutions, including national governments, international organisations, MNCs, individuals travelling as tourists, etc.; second, there is no hierarchy among military, economic or social issues; and finally, military force is not used between states linked through complex interdependence.

In "After Hegemony"²⁶¹, Keohane further develops neo-liberal institutionalism by arguing that international institutions can foster cooperation even under (neo-)realist conditions of an anarchic system where all states are self-interested actors trying to maximise their political, economic, and military power. The main impediment to international cooperation is the fear of states that the other countries in the system will cheat or defect (prisoner's dilemma). Keohane argues that states are interested in maximising their long-term absolute gains, a goal that can normally only be realised through international cooperation. Since cheating / defecting is the main obstacle, so the neo-liberalist argument, international institutions play a crucial role in promoting international

²⁵⁷ Doyle (1983)

²⁵⁸ The tensions between the hawkish DoD and the dovish DoS prior to the 2003 Iraq War illustrate how different parts of the same bureaucracy can pursue very different political agendas.

²⁵⁹ Betts (2002) p. 123

²⁶⁰ (Keohane & Nye, 1977) p. 27

²⁶¹ Keohane (1984)

cooperation by providing independent and objective verification mechanisms to ensure that all states live up to their declared commitments. Keohane's main criticism of neo-realism, in essence, is that it over-emphasises inter-state conflict / confrontation while at the same time underestimating the potential role of international institutions in fostering inter-state cooperation.²⁶²

There are two defences against Keohane's neo-liberal critique of neo-realism.²⁶³ First, at a theoretical level, neo-realists could argue that Keohane's choice of the repeated prisoner's dilemma as the appropriate game theoretical model is in fact incompatible with the neo-realist assumptions about the international system. Joseph Grieco criticises Keohane for using the repeated prisoner's dilemma and thus implicitly assuming that states are more concerned about maximising absolute gains rather than relative gains.²⁶⁴ "Neo-liberalism's claims about cooperation are based on its belief that states are atomistic actors. It argues that states seek to maximise their individual *absolute* gains and are indifferent to the gains achieved by others."²⁶⁵ Consequently, Grieco argues, Keohane's claim that states confronted with the repeated prisoner's dilemma will eventually – as a result of the shadow of the future – reach a cooperative equilibrium where they do no longer defect for short-term gain, does nothing to disprove neo-realism. Second, at an empirical level, neo-realists could counter that they never claimed that neo-realism was incompatible with instances of international cooperation. Therefore, Keohane's (correct) observation that states do in fact cooperate under certain conditions is not to say that neo-realists got it wrong:

*"The real question is how much international cooperation exists and whether neo-realism or neo-liberalism does a better job of accounting for the observed patterns of international cooperation. This response would then go on to compare the relative explanatory power of these two approaches."*²⁶⁶

The objective of this thesis is precisely to compare the relative explanatory power of neo-realism and neo-liberal institutionalism with regard to the lack as well as the existence of international cooperation during the post-Cold War consolidation of the US and European A&D industry –

²⁶² Insights from game theory also supported neo-liberal institutionalism. Repeated games indicated that players could "learn" to cooperate in positive-sum games. "The essence of the neo-liberal institutional analysis of the problem of cooperation is that the shadow of the future may lead the egoistic states hypothesised in structural realism to cooperate. Repeated interaction gives each actor the ability to punish uncooperative behaviour today with future sanctions. If the shadow of the future looms sufficiently large, then the future costs to uncooperative behaviour will outweigh the immediate gains; and, weighing costs against benefits, even egoistic states will cooperate. This logic is, in turn, formalised in the neo-liberal institutional analysis with a repeated prisoner's dilemma in which mutual cooperation can be sustained as an equilibrium outcome with a strategy of punishing defection should it occur." Powell (1991) p. 1306

²⁶³ Keohane (1984) pp. 326-329

²⁶⁴ Grieco (1988)

²⁶⁵ Ibid., p. 487

²⁶⁶ Powell (1994) p. 328

exemplified by the BMD / EADS mergers. Which theory – neo-realism or neo-liberalism – explains better why states opted for or against international cooperation when deciding on the future structure of their national A&D industry? The first part of this chapter has already laid out the different predictions and hypotheses that (neo-) realism would make about the two mergers. The ethnocentric BMD merger was an attempt by the American hegemon to preserve its military-technological dominance vis-à-vis the rest of the international system, including close Western European allies. The regiocentric EADS merger, in contrast, was an attempt by key European countries like France and Germany to balance against the American hegemon by forming a potent industrial counterweight to the crushing dominance of US mega-primes like Boeing.

There are three major fault lines separating neo-realism and neo-liberalism²⁶⁷: 1) the meaning and implications of anarchy; 2) the problem of absolute vs. relative gains; and 3) the tension between coordination and distribution. First, realism defines anarchy as the absence of a central authority with the legitimacy / capacity to enforce order, treaties, and rules among states in the international system. This broad notion of anarchy refers to the overall structure of the international system and can easily be transposed to other (anarchic) systems, notably in the economic / business domain. The other notion of anarchy argues that the sovereign states constituting the system can and will eventually resort to military force to preserve their independence. Neo-liberals, however, believe that this second notion of anarchy is no longer applicable today, neither in terms of relations among Western allies nor in terms of relations among the world's major states. Today, military conflict among the world's major powers – especially between Europe and the US – over international primacy is virtually unthinkable. Even Samuel Huntington – who has argued in favour of continued US primacy in the world based on a neo-realist theoretical framework – concedes that “military conflict between major states is unlikely”²⁶⁸. Neo-liberals therefore believe that states – living under the conditions of a type of anarchy that is no longer shaped by the potential use of military force but simply characterised by the absence of a central authority – will feel less of an incentive to balance against a current or potential hegemon. Hence, the neo-realist explanation of the EADS merger as a European attempt to balance against American hegemony does not make much sense from the neo-liberal perspective.

Neo-realists, however, counter that “states [have started] competing and balancing over economic issues after the Cold War as much as they competed and balanced over security issues during the

²⁶⁷ Ibid., pp. 329-343

²⁶⁸ Huntington (1993) p. 93

Cold War”²⁶⁹. Given that the BMD / EADS mergers involved both high military (security) and civilian (economic) stakes, neo-realists would contend that the European decision to balance against the US was fully justified and understandable because of serious concerns and concrete threat perceptions in Europe in the realm of security *and* economic affairs.

Second, neo-realists and neo-liberals argue over whether states are more concerned with relative or absolute gains. As Waltz put it, “states that feel insecure must ask how the gain will be divided. They are compelled to ask not ‘Will both of us gain?’ but ‘Who will gain more?’”²⁷⁰ Neo-liberals, in contrast, believe that states are primarily focused on maximising their absolute gains from (potential) international cooperation. According to Keohane, states’ preferences “are based on their assessments of their own welfare, not that of others”²⁷¹. If neo-realists got it right, cooperation among states is much more fragile and difficult to establish than neo-liberals assume. For the latter, any type of cooperative international arrangement that works fine and produces positive, absolute gains is likely to continue as long as none of the states defect. However, if countries are primarily interested in maximising their relative gains – that is, if they want to make sure that their cooperation with other states does not benefit these countries disproportionately, thus leading to a negative shift in their own relative international power position – then states will constantly assess their on-going benefits from cooperation and compare them to the kind of perceived / assumed benefits that their partners derive from these cooperative arrangements. The neo-realists focus on maximising relative gains adds an important element of uncertainty since the continuation of international cooperation is always subject to a state’s potentially changing (subjective) assessments about its relative benefits from working together with other countries. Neo-liberals, in contrast, are primarily concerned with making sure that all states involved do not cheat so as to maximise the positive, absolute gains derived from international cooperative arrangements.

International organisations and regimes play an important role in reducing uncertainty by providing independent, objective verification mechanisms to ensure that all states live up to their declared commitments. International institutions also reduce transaction costs by establishing permanent channels of communication among all participating partners. Finally, international institutions also extend the “shadow of the future” and raise the (expected) costs of potential defection for states considering whether or not to engage in international cooperation. Interestingly, there is a debate among neo-realists about the extent to which a state’s concern about maximising its relative gains is conditioned by the overall strategic setting it is confronted with. States that find themselves in high-

²⁶⁹ Powell (1994) p. 334

²⁷⁰ Waltz (1979) p. 105

risk, high-stakes environments are more likely to focus on maximising relative gains as they are more sensitive to potential negative shifts in their relative overall security posture as a result of (imbalanced) international cooperation.²⁷²

Finally, neo-realists and neo-liberals differ over the tension between coordination and distribution – that is, the extent to which the existing relative power positions of states shape the potential collaborative and institutional arrangements among them. By definition, there are different ways to distribute the potential joint gains from international cooperation. “These multiple ways of achieving the joint gains from cooperation can create conflicts over how those gains will be distributed.”²⁷³ Neo-realists assume that, ultimately, the relative distribution of gains from international cooperation will directly reflect – or, at a minimum, closely resemble – the relative power position of all states. Furthermore, as states’ relative power positions change over time, existing international institutions and arrangements for the distribution of joint gains are potentially subject to renegotiation if the system’s increasingly powerful players believe that they deserve a bigger piece of the collective joint-gains pie. Neo-realists regard international institutions as dynamic arrangements that reflect the interests of the system’s most powerful actor(s) and also track changes in the concerned states’ relative power position over time.

Neo-liberals believe that institutional rules and frameworks can alter state behaviour and lead to policy outcomes different from what a hard-nosed look at the relative power position of the respective countries involved would otherwise suggest. States, so the argument goes, agree to set up international institutions primarily to overcome existing obstacles to international cooperation – arising from the conditions of international anarchy – in order to collectively realise positive, absolute gains that are beyond each state’s individual reach. Neo-liberals argue that cooperation can better promote the interests of competing actors under well-established regimes. They do not believe the neo-realists’ claim that states will virtually always attempt to impose the least favourable distribution of joint gains from international cooperation on their weaker partners. “The cost of changing or constructing new regimes [...] gives existing regimes some resilience to shifts in the distribution of power.”²⁷⁴

What are the predictions and hypotheses that neo-liberal institutionalism would make about the BMD / EADS mergers? For neo-liberals, the key factor behind the EADS link-up was the process

²⁷¹ Keohane (1984) p. 66

²⁷² For a summary of the neo-realist / neo-liberal debate over the importance of relative vs. absolute gains, see Powell (1991) pp. 334-338 and Powell (1994) pp. 1303-1320.

²⁷³ Powell (1991) p. 338

of European integration and the fact that a strong track-record of successfully functioning institutions – EU, Airbus, WEU, and even NATO – allowed France, Germany, and Spain to overcome any potential security dilemmas or distrust among them. At the same time, since Europe and America are extremely unlikely to go to war with each other over primacy in the international system, key players such as France and Germany have no incentive or motivation to balance against the US by establishing EADS as a military / defence-industrial counterweight to America's Boeing. However, there might be good reasons in favour of the creation of EADS in terms of economic competitiveness and industrial policy – not least because the governments concerned care about safeguarding jobs, export earnings, and technology leadership.

When applying neo-liberalism to the BMD merger, the predictions and hypotheses are somewhat different. First, the BMD merger – in contrast to EADS – did not involve any international collaboration between sovereign, independent states. The US decision in favour of ethnocentric A&D industrial consolidation is therefore seen by neo-realists as proof of serious American concerns about potentially costly / risky relative losses in connection with transatlantic defence collaboration – i.e., the gradual diffusion of America's military-technological edge as a result of inadvertent, accidental, or straightforward illegal technology transfers to potential European partners like France and Germany as well as third countries.

On the one hand, neo-liberals may claim that the EADS merger constitutes a perfect example of how the process of European political and economic integration facilitated an unprecedented depth of military-industrial integration in the A&D sectors of France, Germany, and Spain. On the other hand, however, neo-liberals would have to respond to potential neo-realist charges that even a major institution like NATO – despite its existence since 1949 – did not manage to allay persisting security dilemmas / distrust between America and Europe in connection with potential transatlantic A&D mergers. In order to bolster the neo-liberals' cause and to prove neo-realism wrong, this thesis would have to provide relevant evidence suggesting that the BMD merger was promoted by the US government based on a primarily economic cost / benefit analysis of potential synergies derived from the two companies' product portfolio, business situation, etc. If this thesis therefore supported the notion that the BMD merger was driven primarily by economic / business factors – more than by US geostrategic interests rooted in a neo-realist vision of the world – it would suggest that neo-realists are wrong and neo-liberals are right.

²⁷⁴ Ibid., p. 342

It is obvious that liberal institutionalism has been much more “realist” in describing the rapid growth of transatlantic trade and investment ties in recent decades than realism. By illustrating the intensification of FDI, integrated production, R&D, marketing and sales between America and Europe, the Hamilton/Quinlan study²⁷⁵ cited earlier provides ample intellectual ammunition to back up the liberal institutionalist notion that states (1) share a strong interest in cooperating economically and that (2) the private sector has become an important shaper of international relations in its own right. Against this backdrop, a key question at the heart of this thesis why the A&D sector, to this day, has remained the major exception to the wider rule of ever-closer transatlantic economic cooperation across virtually all other sectors and industries. Also, the objective of this thesis is to compare the relative explanatory power of neo-realism and neo-liberal institutionalism with regard to the lack as well as the existence of international cooperation during the post-Cold War consolidation of the US and European A&D industry – exemplified by the BMD / EADS mergers. This thesis thus contributes to a better understanding of the potential opportunities for and constraints on international collaboration among sovereign and independent states, especially with regard to the strategically important A&D industry.

²⁷⁵ (Hamilton & Quinlan, 2004)

2.3 *Highlighting actors' beliefs and identities: the role of constructivist theory*

“Although our analytical coordinates for gauging global politics have proven to be inadequate for a world in rapid change, there has been remarkably little rethinking of our categories of analysis. Instead, in the first half of the 1990s North American scholarship on the theory of international relations was preoccupied with the issue of whether variants of realism or liberalism offered a superior way for explaining the world. Considering the dramatic international developments occurring during these years, many of the academic debates look arcane to the interested bystander. For it is hard to deny that existing theories of international relations have woefully fallen short in explaining an important revolution in world politics.”²⁷⁶

The primary theoretical basis of this thesis is an exploration of neo-realism vs. neo-liberalism to explain the BMD and EADS mergers. To this day, these two approaches remain the dominant schools of thought in IR theory. Since the early 1990s, however, one could also witness the prominent rise of constructivist theory as a new, “sociological perspective on the politics of national security”.²⁷⁷ Spurred by Alexander Wendt’s seminal 1992 article “Anarchy Is what States Make of It: The Social Construction of Power Politics”²⁷⁸, constructivist theorists began to “[focus] on the effects that culture and identity have on national security”. In particular, they argued that “security interests are defined by actors who respond to cultural factors”.²⁷⁹

“[Constructivists concentrate] on two underattended determinants of national security policy: the cultural-institutional context of policy on the one hand and the constructed identity of states, governments, and other political actors. We explore these determinants from the theoretical perspective of sociological institutionalism, with its focus on the character of the state’s environment and on the contested nature of political identities.”²⁸⁰

The post-Cold War rise of constructivism was due, in large part, to the perceived failures and shortcomings of both neo-realism and neo-liberalism in explaining (let alone predicting) the end of the Cold War, the demise of the Soviet Union, the appearance of new security challenges related to ethnic conflicts, nationalism, intensifying economic competition, environmental degradation, as well as the “perceived increases in the relevance of issues of cultural identity in international

²⁷⁶ Katzenstein (1996) p. xi

²⁷⁷ Ibid., p. 2

²⁷⁸ Wendt (1992)

²⁷⁹ Katzenstein (1996) p. 2

²⁸⁰ Ibid., 4

politics, including human rights and religion”.²⁸¹ ²⁸² Some of the empirical material analysed in this thesis relates to actors’ beliefs, identities, and their subjective understandings of the external political, military, and economic environments they were confronted with leading up to the BMD / EADS mergers. Furthermore, the thesis deals with a particular post-Cold War phenomenon – namely the lack or occurrence of cross-border integration involving U.S. and / or European A&D mega-primes. On both counts, the inclusion of constructivism (which rose to prominence in the very post-Cold War period that is being investigated) in this theoretical discussion is therefore justifiable, even though the evaluation of neo-realist vs. neo-liberalist explanations certainly remains the fundamental basis of this thesis.

As was already explained above, there are three major fault lines separating neo-realism and neo-liberalism: 1) the meaning and implications of anarchy; 2) the problem of absolute vs. relative gains; and 3) the tension between coordination and distribution. However, as constructivists are eager to emphasise, the two dominant IR theories also “share a similar, underlying analytical framework, susceptible to the same weakness”.²⁸³ For example, neo-realism and neo-liberalism “agree on the central importance of international anarchy for the analysis of international politics”.²⁸⁴ While neo-realists assume that states are locked into a constant battle for survival in an anarchic, international self-help system (zero-sum game), neo-liberalists believe that international institutions can help states overcome anarchy by clearly defining their common interests and by coordinating their conflicting policies (thus creating a positive-sum game). According to both theoretical approaches, the system’s anarchic structure – be it defined as competitive self-help anarchy or as anarchy mitigated by international institutions – shapes, drives, and ultimately determines state actions. “In this view states operate in environments that create constraints and opportunities.”²⁸⁵

Furthermore, neo-realists and neo-liberalists assume that states’ interests and their perceptions of each other / of their respective external environments are “unproblematic” (in other words, they are “unvarying and acontextual”²⁸⁶). These interests and perceptions as well as the corresponding political choices (e.g., counterbalancing, bandwagoning, cooperation, etc.) are taken for granted because states are essentially viewed as rational, utilitarian actors that merely react and adapt to

²⁸¹ Ibid., p. 7

²⁸² “The narrow definition of security tends to focus on material capabilities and the use and control of military force by states. This contrasts with the distinctions among military, political, economic, social, and environmental security threats that affect not only states but also groups and individuals, as well as other nonstate actors.” Ibid., p 9

²⁸³ Katzenstein (1996) p. 13

²⁸⁴ Ibid., p. 11

²⁸⁵ Ibid., p. 23

²⁸⁶ (Jepperson, Wendt, & Katzenstein, 1996) p. 43

external stimuli / changes in the international structure.²⁸⁷ Both IR theories also share a common belief that states are unitary and functionally undifferentiated actors. In other words, each country speaks and acts with just one voice; there is no analytical room for potential bureaucratic infighting or internal political differences that may limit the state's ability to pursue a rational, utilitarian defence of its national interests. To sum things up, "the assumption of unified state actors and a focus on an anarchic, systemic context of states are common to both [neo-realism and neo-liberalism]"²⁸⁸.

Constructivists, in contrast, believe "that security interests are defined by actors who respond to cultural factors"²⁸⁹. In particular, national interests are "constructed" through a process of social interaction, both at the domestic and at the international level. "[Constructivism] thus departs from materialist notions and the rationalist view of identities as exogenously given [put forward by neo-realist and / or neo-liberal theories]"²⁹⁰

*"The international and domestic societies in which states are embedded shape their identities in powerful ways. The state is a social actor. It is embedded in social rules and conventions that constitute its identity and the reasons for the interests that motivate actors."*²⁹¹

Constructivists view the concept of "identity" "as a crucial link between environmental structures and interests"²⁹². At its most fundamental level, the term identity describes the "basic character" of states.²⁹³ ²⁹⁴ According to constructivism, "Variation in state identity, or changes in state identity, affect the national security interests or policies of states."²⁹⁵

"Identities both generate and shape interests. Some interests, such as mere survival and minimal physical well-being, exist outside of specific social identities; they are relatively

²⁸⁷ It is telling that Peter Katzenstein – on the first page of the first chapter of the first-ever book that brought together a broad range of constructivist authors focusing on national security issues – writes the following: "Put briefly, this book makes problematic the state interests that pre-dominant explanations of national security [that is, neo-realism and neo-liberalism] often take for granted." Ibid., p. 1

²⁸⁸ Ibid., p. 12

²⁸⁹ Ibid., p. 2

²⁹⁰ Ibid., p. 26

²⁹¹ Ibid., p. 23

²⁹² (Jepperson, Wendt, & Katzenstein, 1996) p. 59

²⁹³ Ibid., p. 33

²⁹⁴ Constructivists originally borrowed the term "identity" from social psychology, where it "refers to the images of individuality and distinctiveness ('selfhood') held and projected by an actor and formed (and modified over time) through relations with significant 'others'". Ibid., p. 59

²⁹⁵ Ibid., p. 60

generic. But many national security interests depend on a particular construction of self-identity in relation to the conceived identity of others.”²⁹⁶

For example, states such as Nazi Germany, Imperial Japan, and Communist Russia in the 1930 / 1940s as well as the current regime in Iran can be defined as “revisionist powers” that are openly challenging and defying the existing international order. Alternatively, states can also embrace a “trading power” identity, putting a premium on the expansion of their international economic relationships while generally eschewing the pursuit of “hard” military power. In the wake of WWII, both West Germany and Japan adopted this particular identity and strategy very successfully. In addition, states can also embrace a wide variety of other identities, ranging from the Jewish state (Israel) to the world’s leader in the global war on terror (the United States in response to 9/11 during the first term of President George W. Bush, who decided to invade both Afghanistan and Iraq) to the champion of a “multipolar world order” (France under General de Gaulle or President Chirac). Other state identities might include leader of the non-aligned movement (India) or of Communist world revolution (USSR). In each of these cases, distinct state identities resulted in distinct foreign / national security policy interests and choices, thus rendering both analytical categories “problematic” (that is, varying and contextual).²⁹⁷ Hence, as Peter Katzenstein put it succinctly, “‘Defining’, not ‘defending’, the national interest is what [constructivism] seeks to understand.”²⁹⁸

Domestically, a vast variety of actors – ranging from political leaders / parties, government bureaucracies, and interest groups such as labour union or business associations, to the media, religious organisations, companies, etc. – are often fiercely competing to promote their definition of what constitutes “the national interest” and, by extension, the country’s “identity”.

*“Conceiving of the state in relational terms and investigating the domestic sources of foreign policy focuses attention on the degree to which the identities of actors are constructed by state-society relations.”*²⁹⁹

*“[Constructivists] [...] refer to identity as a shorthand label for varying constructions of nation- and statehood. The process of construction typically is explicitly political and pits conflicting actors against each other.”*³⁰⁰

²⁹⁶ Ibid., p. 60

²⁹⁷ “The historical evidence compels us to relinquish the notion of states with unproblematic identities.” Katzenstein (1996) p. 23

²⁹⁸ Ibid., p. 2

²⁹⁹ (Jepperson, Wendt, & Katzenstein, 1996) p. 51

³⁰⁰ Katzenstein (1996) p. 6

Especially in open, liberal democracies, this rather complex and multi-faceted process to define the national interest is frequently messy, cumbersome, irrational, and sometimes also inconclusive. In practice, states are therefore rarely, if ever, the kind of purely rational and utilitarian actors that neo-realists and neo-liberalists assume they are.³⁰¹ Furthermore, states' interests and perceptions are also shaped by interactions with the international environment. For example, a state may feel isolated and humiliated at the hands of other countries (i.e., Germany after the Versailles Treaty) and therefore embrace a revisionist identity that provides a compelling political narrative and justification to challenge the existing international order, if necessary even by military force. In this particular example, both Germany's national identity and its national interests were clearly shaped by perceptions of and interactions with the external environment. However, that being said, the German domestic political environment also played an important role in framing the country's national identity. For example, Germany's pervasive economic malaise (which, in turn, was caused by the 1929 international "crash" as well as an extremely harsh Versailles sanctions regime), coupled with growing domestic political polarization, certainly fostered the rise of Adolf Hitler and his Nazi regime. The rest is history. As can be seen from this example, both domestic and international environments can and usually do have a crucially important impact on state interests and identities. Therefore, constructivists analyse "the impact of actors on their environment and the impact of environments on actors".³⁰²

*"The analysis of transnational relations and of world systems offers analytical perspectives that elucidate the relations between states and their social environments. Often the social environments that affect state identities link international and domestic environments in a way that defies the reification of distinct domestic and international spheres of politics."*³⁰³

When talking about international "systems" comprising a number of states in distinct social environments, constructivists also introduce the important analytical categories of "culture", "norms", and "values". These terms are indispensable for a precise understanding of "The Culture of National Security" – the title of the first-ever book that brought together a broad range of constructivist authors working on national security:³⁰⁴

"[Constructivists] [...] invoke the term 'culture' as a broad label that denotes collective models of nation-state authority or identity, carried by custom or law. Culture refers both to a set of evaluative standards (such as norms and values) and a set of cognitive standards

³⁰¹ Even in totalitarian regimes there are often different centers of gravity within the ruling elite competing for power, influence, and money.

³⁰² (Jepperson, Wendt, & Katzenstein, 1996) p. 40

³⁰³ Katzenstein (1996) pp. 24-25

(such as rules and models) that define what social actors exist in a system, how they operate, and how they relate to one another.”³⁰⁵

*“Norms are collective expectations about proper behaviour for a given identity. [...] Norms either define (‘constitute’) identities in the first place [...] or prescribe or proscribe (‘regulate’) behaviours for already constituted identities [...]. Taken together, then, norms establish expectations about who the actors will be in a particular environment and about how these particular actors will behave.”*³⁰⁶

Constructivists argue that military and political alliances such as NATO or the EU have fostered the emergence of a distinct “culture” among their respective members. Drawing on the “security community” concept initially developed by Karl Deutsch³⁰⁷ – who defined it as a group of states for whom the use of military force against each other is virtually unthinkable – constructivist authors like Emanuel Adler and Michael Barnett have further refined this notion by highlighting the importance of shared identities, norms, values, and cultures for the emergence and effective functioning of “security communities”.³⁰⁸ This aspect of constructivism is of course particularly relevant for the theoretical discussion underpinning this thesis, which analyses post-Cold War political, economic, and military relations – characterised by both cooperation and rivalry – among close Western NATO / EU allies through the prism of the strategically important A&D industry.

Looking specifically at the EU context, it is interesting to note that constructivists consider neo-functionalism and regional integration theories – which emerged in the 1950s with the launch of the European Coal and Steel Community (ECSC) and “developed sophisticated approaches to investigating the effects of integration processes on actor properties”³⁰⁹ – “as precursors of current theoretical alternatives to neo-realism and neo-liberalism”.³¹⁰ Despite their differences in other areas, constructivists and neo-functionalists basically do agree that the external structural environment specific to a particular state system (for example, the EEC / EU area) can have a direct and lasting impact on the perceptions, expectations, political orientations, and identities of the countries involved. Having formed a system of like-minded states that share common values and norms – and that derive tangible economic, political, or even military benefits from their cooperation – the members of this (EEC / EU) “security community” thus essentially managed to create a new “culture of national security”: one that overcomes traditional (neo-realist) notions of

³⁰⁴ Ibid.

³⁰⁵ Ibid., p. 6

³⁰⁶ (Jepperson, Wendt, & Katzenstein, 1996) p. 54

³⁰⁷ Deutsch (1957)

³⁰⁸ See (Adler & Barnett, 1998)

³⁰⁹ (Jepperson, Wendt, & Katzenstein, 1996) p. 44

³¹⁰ Ibid., p. 44

inter-state rivalry by substituting trust for distrust and by focusing actors' interests / concerns away from zero-sum competition and towards positive-sum cooperation.

That being said, the emergence of different systems of states – each characterised by distinct (security) cultures, identities, and interests – does also raise the spectre of rather conflictual “us vs. them” scenarios. For example, at the military level, the launch of the NATO security community was motivated by a desire to contain the aggressive and expansionist policies of the Soviet Union and its Communist proxies. At the economic level, the process of European integration – while initially viewed as a mechanism to overcome centuries of bloody Franco-German conflict – has in recent decades acquired a new dimension: namely to make sure that the EU punches at its weight in international fora (especially trade negotiations, etc.) – something that is most effectively achieved by channelling collective EU member interests and representing them with one voice. Looking at EU-US relations and specifically at the strategic A&D sector, these confrontational “us vs. them” notions have been featured most prominently in the fierce Airbus vs. Boeing dogfight. It is telling to note that at various points in the 1990s, both the United States and Europe had the perception that their aerospace industries were under serious competitive attack from the other side, threatening to cause a decline over the long-term. As Peter Katzenstein put it, “Definitions of identity that distinguish between self and other imply definitions of threat and interest that have strong effects on national security policies”.^{311 312}

With regard to this thesis, constructivist theory is helpful to the extent that it draws our attention to the importance of states' identities and perceptions when defining or re-defining their national interests. For example, the end of the Cold War and the demise of the Soviet Union caused many Western European nations to redefine their perception of and hence their relationship with the United States. While Washington was previously viewed, above all, as the leader of NATO and the ultimate guarantor of stability and deterrence vis-à-vis the Warsaw Pact, that Cold-War era geopolitical “glue” weakened substantially beginning in the early 1990s, giving rise to a more competitive notion of transatlantic relations, especially in the realm of economics and trade, but also in the area of foreign policy and defence matters. In other words: to the extent that the Soviet threat subsided / disappeared, Western European nations were simply far less dependent on the United States / NATO to ensure their national security through nuclear and conventional military deterrence. Due to the end of the Cold War, the “identity” of the NATO alliance thus changed considerably, at least for the Western European nations who were far less fearful of a Russian

³¹¹ Katzenstein (1996) pp. 18-19

resurgence than the newly-liberated former Eastern European Warsaw Pact members (many of whom were eager to join NATO in order to secure US protection guarantees vis-à-vis Moscow).

As was already indicated above, constructivist theory is also a useful tool to analyse the emergence of regional integration and their corresponding intra-regional identities, especially in the EU context. Constructivists believe that external systemic changes in the global economy – that is, “deep” international economic integration through FDI, trade, and inter-connected capital markets – leads to shifts in the nature of the state actors involved (that is, their “constructed” interests, identities, etc.) which, in turn, can result in a new (regional) national security environment / culture:

“The theoretical argument that regional economic integration helps promote peaceful security relationships is certainly very compelling. It is critical to recognise that it is the actual experience of deep economic integration – and not merely forming a group – that leads to the processes scholars highlight as beneficial for improved security ties. [...] [T]he most successful regional economic integration scheme in the twentieth century – the European Economic Community / European Union – was consolidated in the presence of a common external security threat.”³¹³

Constructivist authors like Stephen Brooks argue that “the global economy can influence security by changing capabilities, incentives, and the nature of actors”.³¹⁴ At the capabilities level, the “globalisation of production” – defined by the rise of MNCs built around a vast FDI network of internationally dispersed production facilities – has made it increasingly difficult for countries to pursue a “go-it-alone” approach to the development and manufacturing of advanced weapons systems:

“[T]he scales have shifted decisively against a strategy of autarkic defence production: no state, including the great powers, can now effectively remain on the cutting edge in military technology if it does not pursue significant internationalisation in the production of weaponry.”³¹⁵

A state is therefore left with two basic options. First, if a country wants to have access to state-of-the-art weapons systems it needs to embrace globalisation and, in particular, accept the corresponding dependencies / vulnerabilities vis-à-vis foreign technologies, suppliers, etc. From a

³¹² In this context, constructivists also explicitly draw on Carl Schmitt, who argued that friend / foe categories are at the heart of any political relationship.

³¹³ Brooks (2005) p. 52

³¹⁴ Ibid., pp. 5-6

³¹⁵ Ibid., p. 6

neo-mercantilist perspective, of course, this approach raises the spectre of “foreign influence, foreign control, and foreign domination”³¹⁶ in the strategically important A&D industry. Second, any country that instead decides to rely on autarkic weapons production “will not have leading-edge military equipment and will thus be in a weaker position to pursue revisionist aims”.³¹⁷ Either way, Stephen Brooks argues that the globalisation of (defence) production is bound to promote more peaceful great power relations by (1) creating structural international military / technological dependencies that make it much more difficult and costly for countries to go to war (something that would severely disrupt existing international supply chains, trigger embargoes, etc.) or by (2) leaving autarkic (revisionist) states with inferior weapons technologies, thus making them potentially easier to subdue by countervailing international coalitions.³¹⁸

At the incentives level, Brooks points out that “the globalisation of production has greatly lowered the economic benefits of conquest in the most economically advanced states, and hence among all of the current and future great powers”.³¹⁹ Vastly increased international dependencies – based on the cross-border movement of goods (trade), capital (FDI), and people – as well as the shift from a resource-based to a knowledge-based economy have made it much more difficult for revisionist powers to extract significant economic benefits from conquered territories. After all, any military occupation will almost inevitably disrupt existing inter-state and intra-firm (MNC) trade and FDI relationships with other countries. While the aggressor would gain physical control over the production facilities located in the occupied territory, the globalisation of production essentially “means that conquering an advanced country may only result in possession of a portion of the value-added chain, perhaps a very small portion”.^{320 321}

Finally, Stephen Brooks argues that the “globalisation of production” can impact security relations by fostering the emergence of regional economic integration. In particular, geographically dispersed MNCs are viewed as the key driver of regional cooperation, as countries that enjoy close bilateral / multilateral trade and FDI ties have generally strong incentives to pursue closer economic and

³¹⁶ Moran (1990) p. 58

³¹⁷ Brooks (2005) p. 11

³¹⁸ See Brooks *Ibid.*, pp. 10-11

³¹⁹ *Ibid.*, p. 10

³²⁰ *Ibid.*, p. 61

³²¹ Brooks develops a set of specific hypotheses to explain why the globalisation of production has reduced the economic benefits of military conquest in the most advanced economies: “1. A vanquished advanced country is unlikely to attract significant FDI following conquest, and its firms are unlikely to be able to form or sustain extensive international interfirm alliances. 2. In the most advanced states, the ability of a conqueror to extract economic resources is likely to be much lower than in the past because production and technological development are now less concentrated geographically. 3. Conquerors are likely to pursue economic centralisation, especially in a vanquished knowledge-based economy.” *Ibid.*, p. 70. For an in-depth theoretical discussion of how the globalisation of production and the shift to knowledge-based economies impacts the economic benefits of military conquest, see *Ibid.*, pp. 57-71.

political coordination at the governmental level. At first glance, this line of reasoning is similar to neo-functionalism and its projected “spill-over” effects from “low politics” to “high politics” already outlined earlier in this chapter. Brooks, however, pays particular attention to how the external environment (‘globalisation of production’) reshapes security relations by changing “the nature of the actors”. This last notion – which one could also refer to as the changing of the respective state “identities” – is a key element of constructivist IR theory.

Constructivists also readily embrace the notion – first laid out by neo-realist author Stephen Walt in “The Origins of Alliances”³²² – that states balance against threats, not simply against power. The question of why states B or C are viewed as specific threats in a given external environment – and how this threat perception is “constructed” internally based on state A’s identity / national security culture – goes to the heart of the constructivist approach to IR theory. As Peter Katzenstein reminds us, “‘Defining’, not ‘defending’, the national interest is what [constructivism] seeks to understand.”³²³ In other words, why do certain states view each other as “friends” or “allies” while other states perceive each other as “rivals” or even “enemies”? While neo-realists put a premium on balance-of-power considerations to explain these different inter-state political dynamics, constructivists, in contrast, emphasise the role played by individual state identities as well as norms and values in terms of constructing a certain “culture” fostering cooperative or confrontational international security relations.

The fact that some of the empirical material analysed in this thesis relates to actors’ beliefs, identities, and their subjective understandings of the external political, military, and economic environments they were confronted with leading up to the BMD / EADS mergers justifies the inclusion of constructivism as a separate IR theory subchapter. That being said, however, the primary theoretical basis of the entire thesis remains an exploration of neo-realism vs. neo-liberalism. In essence, the BMD / EADS case studies suggest that transatlantic rivalries over the political, military, economic, and technological power and prestige derived from the A&D industry do exist even among close Western NATO allies. The thesis concludes that the two mergers can best be explained by the fact that realist arguments prevailed over liberal-institutionalist arguments among policymakers and business leaders in the countries involved, especially in Washington and Paris. With the A&D industry caught between two very different worlds – realism and national security vs. liberalism, cooperation, globalisation and open markets – political leaders and business executives in the United States and Europe put a premium on the former, thus reinforcing the notion

³²² See Walt (1987)

³²³ Katzenstein (1996) p. 2

that this strategic industry sector remains of tremendous importance for a nation's military and geo-economic security.

While the ethnocentric BMD merger and the regiocentric EADS merger represent two diametrically opposite A&D consolidation strategies, this thesis argues that both transactions were ultimately driven by a similar mix of realist national security and neo-mercantilist ambitions: that is, on the one hand, US concerns about defending American military and economic hegemony in the post-Cold War world vis-à-vis *all* countries (including close NATO allies like Germany, France, and even the UK); and, on the other hand, European concerns about counter-balancing by creating an internationally competitive A&D “European champion” that would also be able to serve as the defence industrial foundation for a viable ESDP autonomous from NATO and the United States. In contrast, transatlantic defence industrial M&As at the prime contractor level – something that proponents of neo-liberalism would normally have expected in a globalised economy – did not materialise.

In essence, this thesis analyses intra-Alliance relations during the post-Cold War period through the prism of the strategically important A&D industry. The lack of full-scale transatlantic mergers and acquisitions involving major US and European A&D companies is interpreted as a sign of the (continuing) appeal of neo-realist thinking and associated relative gains considerations among US policymakers (especially on Capitol Hill and in certain parts of the Clinton administration, like the State Department). On the European side, too, neo-realist forces are seen as the key (political) drivers of the Franco-German-led creation of EADS. For sure, at first glance, one might be tempted to interpret the unprecedented level of deep, transnational A&D industrial integration between AM, Dasa, and CASA as an indication that neo-liberalism is best positioned to explain this merger. Rather, however, the case study research undertaken for this PhD thesis suggests that it was neo-realist counter-balancing considerations vis-à-vis the American hegemon driving French, German, and Spanish political as well as business leaders to support the creation of EADS. The corporate executives involved, of course, were primarily concerned with gaining the necessary economies of scale to successfully compete with US rivals like Boeing.

While constructivism can be a useful analytical tool, especially when it comes to matters of regional economic and political integration, the “problem” with the application of this theory in the context of this particular PhD thesis is that the interests and motivations underpinning the BMD / EADS mergers involve intra-Alliance relations shaped by different “cultures of national security” both within and between the respective NATO and EU frameworks. In other words, France and

Germany have not only a bilateral “security culture” but also an EU-specific “security culture” as well as a NATO-specific “security culture” – with only the latter directly involving the United States. The fact that France and Germany are part of the same NATO military alliance as the US while, at the same time, they form the engine of another regional bloc (the EU) that has repeatedly clashed with the United States on a range of political as well as economic and trade matters (including the crucial A&D sector via the Airbus-Boeing rivalry) makes it extremely difficult (if not impossible) to disaggregate the different norms, values, and identities that constructivists believe have shaped the development (and post-Cold War evolution) of national interests / threat perceptions within distinct NATO and EU “security cultures”.

During the Cold War, the NATO security culture was clearly paramount since close military ties to Washington were seen as indispensable for deterring the Warsaw Pact. After the demise of the Soviet Union, however, one could witness that the EU began to develop a quite robust security culture of its own (especially in the context of ESDP and the stated desire for military autonomy from NATO / the United States). Of course, these two observations are rather obvious and straightforward. However, placing constructivism at the theoretical heart of the BMD / EADS mergers narrative – which involves an analysis of political, economic, and military motivations on both sides of the Atlantic – would require a disaggregation of the interests and identities of a wide range of actors (governments, corporate leaders, Congress, etc.) in different countries across an extended period of time. And even then, constructivism’s ultimate analytical “value-added” for the purpose of this thesis is rather questionable. Especially in the realm of foreign, security, and defence policy, national governments are the ultimate deciders. For example, while individual US mega-primes might have been, in principle, in favour of closer transatlantic defence industrial ties, the nature of the US political system is such that the corporate leaders concerned knew full well that such a deal would meet insurmountable opposition on Capitol Hill – the very political institution that is ultimately in charge of appropriating and approving the Pentagon’s lucrative procurement budget. In this particular context, the rather dominant ability of national governments to shape the A&D industry (derived from, *inter alia*, monopsonic market power and their role as the key regulator of this strategic sector) leaves constructivists with little analytical wiggle room to challenge neo-realist and neo-liberal assumptions regarding the essentially unitary and functionally undifferentiated nature of sovereign states.

2.4 PhD thesis methodology: the case for case studies

Qualitative research “is an effort to understand situations in their uniqueness as part of a particular context and the interactions there. This understanding is an end in itself, so that it is not attempting to predict what may happen in the future necessarily, but to understand the nature of that setting – what it means for participants to be in that setting, what their lives are like, what’s going on for them, what their meanings are, what the world looks like in that particular setting. [...] The analysis strives for depth of understanding.”³²⁴

The point of departure for every PhD thesis is an initial research question – some kind of observed phenomenon that triggers a researcher’s interest and desire to conduct an in-depth analysis to explain the dynamics of the issue at hand. The initial research questions for this thesis can be formulated as follows: (1) Why did the Americans consolidate their A&D industry at a purely national level, with virtually no involvement from other Western allies? (2) Why did the French, Germans, and Spaniards decide to merge their leading national A&D companies into EADS?³²⁵ In an effort to guide (social) scientists in their methodological choices, Yin also developed the following overview of major research strategies and their usefulness / applicability to different research questions and contextual settings:

strategy	form of research question	requires control over behavioural events?	focuses on contemporary events?
experiment	how, why	yes	yes
survey	who, what, where, how many, how much	no	yes
archival analysis	who, what, where, how many, how much	no	yes / no
history	how, why	no	no
case study	how, why	no	yes

As Robert Yin points out, “In general, case studies are the preferred strategy when ‘how’ and ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context”.³²⁶ After the core research questions have been defined, the next key step is the case selection process. According to Kathleen Eisenhardt, “it makes sense to choose cases such as extreme situations and polar types in which the

³²⁴ Patton (1985) p. 1

³²⁵ When case studies are used, a clear formulation of the key research questions is particularly important. As Eisenhardt cautions, “Without a research focus, it is easy to become overwhelmed by the volume of data”. Eisenhardt (1989) p. 536

process of interest is ‘transparently observable’³²⁷. The BMD and EADS case selection for this PhD thesis was specifically guided by Eisenhardt’s methodological recommendation.

This thesis uses two case studies – the BMD and EADS mergers – to test the relevant explanative power of two major IR theories, neo-realism and neo-liberalism. A case study can be defined as “a research strategy which focuses on understanding the dynamics present within single settings”.³²⁸
³²⁹ ³³⁰ Given the focus on two unique and singular events, case studies were deemed to be the best and most appropriate (if not only suitable) methodological approach for the analysis of the BMD and EADS mergers. In general, case studies can be used for several purposes: (1) to provide description; (2) to test theory; and (3) to generate theory.³³¹ ³³² This particular thesis leverages the case study approach to accomplish the first two of these objectives. After all, while describing and analysing a given phenomenon, a case study can, at the same time, test those theories that offer alternative explanations of the facts under review.

The BMD case was selected for several reasons. First, it is the biggest-ever A&D industry merger, combining the world’s largest commercial aircraft manufacturer (Boeing) with the world’s largest military aircraft manufacturer (MDC). Second, both before and after the BMD merger, Boeing has been ranking as the single biggest U.S. industrial exporter, thus underscoring the company’s critical economic importance from a neo-mercantilist perspective. Third, the BMD merger touched directly on the fierce transatlantic rivalry between Boeing and Airbus for supremacy on the global civil aerospace market. For this reason, the BMD merger became the subject of an acrimonious and controversial anti-trust review process, pitting the Washington’s FTC against the EC in Brussels. Finally, the fact that top political leaders on both sides of the Atlantic decided to get personally involved in the BMD anti-trust review process, at times even threatening a U.S.-EU trade war if their demands were not met, demonstrates the unique strategic and economic importance of this particular A&D merger and justifies its selection as the first PhD case study.

³²⁶ Yin (1994) p. 1

³²⁷ Eisenhardt (1989) p. 537

³²⁸ *Ibid.*, p. 534

³²⁹ “The case study is an intensive description and analysis of a phenomenon or social unit such as an individual, group, institution, or community. The case is a bounded, integrated system [...]. By concentrating upon a single phenomenon or entity (the case), this approach seeks to describe the phenomenon in depth.” Merriam (2002) p. 8

³³⁰ “As a research strategy, the distinguishing characteristic of the case study is that it attempts to examine: (a) a contemporary phenomenon in its real-life context, especially when (b) the boundaries between phenomenon and context are not clearly evident.” Yin (1981) p. 59

³³¹ See Eisenhardt (1989) p. 535

³³² See Yin (1981) p. 59

In contrast, the 1994 LMC merger – while leading to the creation of the world’s largest *defence* company – was not selected as a separate case study in view of LMC’s much smaller export revenues, the absence of a corresponding zero-sum transatlantic rivalry à la Airbus vs. Boeing, and the fact that the LMC merger was not the subject of a high-stakes political and regulatory battle involving senior government leaders from the United States and Europe. The other major M&A transactions during America’s post-Cold War A&D industrial consolidation process leading to the creation of mega-primes such as NGC, GD, or Raytheon did not represent appropriate case studies either since each of the companies concerned had even less (transatlantic) strategic, economic, and political weight than the BMD merger.

In comparison, the explanation for the selection of EADS as the second merger study is rather straightforward. After all, the creation of EADS marked the first (and so far only) time that several different, sovereign countries decided to merge the crown jewels of their respective A&D industrial base into one fully integrated company. The unique (quantitative and qualitative) characteristics of the EADS merger – that is, large-scale pan-European consolidation in the strategically important A&D sector – justify its inclusion as a separate case study. While the 1992 Franco-German creation of Eurocopter – through the combination of the rotorcraft divisions of Aérospatiale and DASA – represented “the first time that aeronautics companies from different European countries combined R&D and production capabilities”,³³³ the end result was a much smaller and much more limited case of pan-European defence consolidation than the EADS merger.

Furthermore, the launch of EADS – which consolidated the combined 80-percent Airbus ownership interest of three of the four industry partners (AM, DASA, and CASA) into one corporate entity – also facilitated the subsequent transformation of the rather loose and cumbersome Airbus GIE consortium into a “normal” company (today organized as “Airbus SAS” under French law). Due to this crucial transnational corporate consolidation / streamlining process, first within EADS and then within Airbus, the leading European civil airplane manufacturer would subsequently be in a much better position to decisively break Boeing’s dominance on the world’s large commercial aircraft (LCA) market. Given Boeing’s long-time position as the single most important American industrial exporter, the EADS merger therefore affected core U.S. strategic and commercial interests.

The EADS merger was also selected as a case study because it is – first and foremost – a Franco-German transaction. Given France’s long-time desire to pursue an independent foreign and security policy, coupled with selective counter-balancing against the American hegemon, the EADS merger

³³³ GAO (1994) p. 6

thus promises particularly useful insights into the political and geo-strategic implications / motivations of paneuropean A&D industrial restructuring during the post-Cold War era. In other words, the BMD and EADS case studies are “extreme situations” / “polar types” as they cover both an ethnocentric merger backed by the U.S. hegemon (BMD) and a regiocentric merger (EADS) fostered by a French government that saw this transaction as a *conditio sine qua non* for the launch of an effective ESDP independent of NATO and the United States.

Apart from the two “big” BMD / EADS case studies, this thesis also includes three smaller cases which are used to contrast large-scale transatlantic M&As in a wide range of industries (automotive, banking, and telecommunications) with the absence of major transatlantic mergers in the A&D sector. All three cases involved successful³³⁴ acquisitions of American firms by European (German) companies and were carefully selected to serve as counterfactuals for the ethnocentric BMD merger, which this thesis interprets as an attempt by the American hegemon to consolidate and defend its dominant military, economic, and technological status vis-à-vis *all* potential challengers, including NATO allies like France, Germany, and Spain – the EADS founding nations.

The methodological rationale for including these three counterfactual case studies in this PhD thesis is to highlight those factors that separate the ethnocentric American BMD merger in the strategically important A&D sector from large-scale transatlantic M&A transactions in non-strategic or less-strategic industries. That being said, at least two of the three European companies involved – Deutsche Bank (DB) and Deutsche Telekom (DT) – were able to overcome significant political opposition and / or regulatory hurdles to successfully take-over their respective U.S. acquisition targets. In the case of DT, U.S. resistance to the VoiceStream (VS) purchase was first and foremost based on national security / foreign eavesdropping concerns in the telecommunications industry, which forms an integral part of the country’s critical infrastructure. However, given strong free-trade backing by the Clinton administration and influential Senators on Capitol Hill, the rather sensitive DT-VS deal was ultimately approved, thus further underscoring the special status of the A&D sector as *the* strategic industry par excellence.

The next key step in case study research is the collection of qualitative and quantitative data, leveraging a variety of methods and sources. As Eisenhardt points out:

³³⁴ The term “successful” means that these transactions received shareholder approval and were not blocked by Washington. It does not imply that these acquisitions were successful from a financial or corporate strategy point of view.

“Of special note is the combination of qualitative with quantitative evidence. Although the terms ‘qualitative’ and ‘case study’ are often used interchangeably [...], case study research can involve qualitative data only, quantitative only, or both.”^{335 336}

This particular thesis relies above all on qualitative data, even though quantitative data are also used, for example to analyse and compare relevant corporate statistics such as annual turnover, operating income / profit margins, per-unit-costs of aircraft, break-down of total sales by divisions and geographic markets, the number of employees, etc. Virtually all of these quantitative data are derived from the respective companies’ Annual Reports and other legal documents like SEC filings, etc. In addition, quantitative research is also based on defence / military procurement spending figures compiled by the IISS “Military Balance” series as well as other (official) statistics. However, it is important to emphasise that these quantitative data were used for illustrative or comparative thesis purposes only; but not as “data fodder” in mathematical models to “prove” certain hypotheses or theories. That being said, much relevant quantitative and especially qualitative data regarding the A&D industry and its impact on transatlantic security and defence relations was also collected from news articles and analytical pieces published by major newspapers (“Washington Post”, “Financial Times”, “New York Times”, etc.), the specialised A&D industry press (“Aviation Week & Space Technology”, etc.), and leading IR journals (“International Security”, “International Organization”, Survival, “Foreign Affairs”, “Foreign Policy”, etc.), as well as reports issued by influential think tanks (CSIS, Brookings, RAND, IISS, SIPRI, etc.) and relevant governmental institutions (European Commission, DoD, MoD, etc.).

Last but not least, crucial qualitative research insights for this thesis were also generated through a variety of semi-structured interviews with relevant U.S. and European A&D executives, former government officials, think tank experts, academics, journalists, etc. These interviews were conducted for two key reasons: (1) to double-check previously gathered information contained, for example, in newspaper articles, think tank reports, etc.; and (2) to fill gaps in the existing body of publicly available literature. Given the sensitive, national security-related nature of the A&D industry, the “gap-filling” function of these interviews was of paramount importance for the completion of this PhD. As Eisenhardt points out, case study researchers “typically combine multiple data collection methods” including interviews, observations, and archival sources, which

³³⁵ Eisenhardt (1989) p. 538

³³⁶ In this context, Robert Yin draws particular attention to the fact that there is “frequent confusion regarding types of evidence (e.g., qualitative data), types of data collection methods (e.g., ethnography), and research strategies (e.g., case studies)”. Yin (1981) p. 58.

are particularly common.³³⁷ As a result, this “triangulation made possible by multiple data collection methods provides stronger substantiation of constructs and hypotheses”.³³⁸

In fact, a number of insights generated by this thesis – especially those relating to the U.S. government’s position vis-à-vis transatlantic defence industrial cooperation – were not clearly spelled out in the existing, publicly available literature. In this context, my interviews with former senior Clinton administration officials – including former Deputy Defense Secretary John Hamre; Paul Kaminski, former US Under Secretary of Defense for Acquisition and Technology, and Jacques Gansler, former US Under Secretary of Defense for Acquisition, Technology and Logistics – proved to be particularly valuable. Access to these high-level interview partners was made easier because (1) I could leverage personal introductions / referrals from people we knew in common; and (2) because my interviewees were all political appointees who had already left government and were thus in a position to speak their mind more freely. Personal referrals and recommendations are invaluable as they help establish the trust necessary to conduct frank, meaningful interviews. In addition, once an interview is successfully completed, that person might provide an introduction to another potential interviewee who would normally be either “out of reach” (like Airbus CEO Dr. Tom Enders) or not even known to me.

That being said, of course, not all information gathered during these as well as my other interviews was on-the-record. In fact, virtually none of my interviewees would have felt comfortable having our conversations recorded. Therefore, I took hand-written notes during the interviews to capture key messages and relevant quotes (which generally had to be authorised prior to their inclusion in my thesis). Typically, my interviews would take in the office or personal home of the person concerned and would last somewhere between 60 and 75 minutes. For each interview, I prepared a list of about ten to twelve key questions that I wanted to ask for sure. Depending on how the interview went, I would then adapt my question structure to take the conversation into a new direction to gather additional insights, cross-reference information derived from previous interviews, etc.³³⁹ In that sense, it is important to be flexible, open-minded, and opportunistic about

³³⁷ Ibid., p. 537

³³⁸ Ibid., p. 538

³³⁹ “Overlapping data analysis with data collection not only gives the researcher a head start in analysis but, more importantly, allows researchers to take advantage of flexible data collection. Indeed, a key feature of theory-building case research is the freedom to make adjustments during the data collection process. These adjustments can be the addition of cases to probe particular themes which emerge. [...] Additional adjustments can be made to data collection instruments, such as the addition of questions to an interview protocol or questions to a questionnaire [...]. These adjustments allow the researcher to probe emergent themes or to take advantage of special opportunities which may be present in a given situation.” Ibid., p. 539. This opportunistic approach to data collection is of course applicable to both theory-building and theory-testing research.

these interviews, primarily to identify – as Defense Secretary Donald Rumsfeld famously put it – “unknown unknowns”.³⁴⁰

As was already pointed out earlier, case study research generally involves the collection and analysis of large amounts of information required to reach the necessary intellectual depth to test or even build theories. In doing so, researchers have to walk a fine line between the “ever-present danger of ‘death by data asphyxiation’”³⁴¹ and the necessity “to become intimately familiar with each case as a stand-alone entity”.³⁴² At a minimum, every case study should be based on a detailed write-up that describes the context, characteristics, and particular dynamics of the issues under review. As Eisenhardt puts it, “These write-ups are often simply pure description, but they are central to the generation of insights”.³⁴³ By looking at a certain questions from a variety of angles, using different methods of data collection, case study researchers increase the probability that they generate new insights that previously might simply have been overlooked.

In this context, however, it is also important to reflect on the inherent methodological limitations of the case study / interview technique in particular, and of qualitative research in general. First of all, the fact that only a certain number of people can generally be interviewed (both because of time and space restrictions as well as because not everybody who would be a relevant interview partner is actually available for such a conversation) means that the data collection efforts are by definition limited. In other words, what about those people who were not interviewed and who might have given a rather different account of the A&D mergers under review? After all, there is always the risk that the researcher, either consciously or unconsciously, focuses precisely on those interviewees that tend to confirm his preconceived notions about the particular issue that is being analysed. By the same token, interview partners who offer to provide referrals to relevant colleagues and peers (“I think you should definitely talk to so and so...”) might inadvertently steer one to the very people who already share their perceptions and / or points of view. While these additional interviewees might thus all “fit the picture” and provide information that dovetails nicely with the previously gathered insights, the researcher involved does of course run the risk of pursuing a self-fulfilling research design; one that delivers just one side of the story.

³⁴⁰ During a press briefing on 12 February 2002, then-Defense Secretary Donald Rumsfeld made the following statement: “There are known knowns; there are things we know that we know. There are known unknowns; that is to say, there are things that we now know we don’t know. But there are also unknown unknowns; there are things we do not know we don’t know.”

³⁴¹ Eisenhardt (1989) p. 540

³⁴² The term “death by data asphyxiation” was first coined by Andrew Pettigrew in a 1988 paper presented to the National Science Foundation. See *Ibid.*, p. 540

³⁴³ Eisenhardt (1989) p. 540

Finally, this methodological section also reflects on the nature of proof and the use of evidence in qualitative research. In contrast to quantitative research techniques, which essentially rely on mathematical formulas and statistical modelling to establish theories and / or to verify hypotheses, qualitative research designs are focused on the description and ultimately subjective interpretation of the characteristics and particular dynamics of the question under review.

“The key to understanding qualitative research lies with the idea that meaning is socially constructed by individuals in interaction with their world. The world, or reality, is not the fixed, single, agreed upon, or measurable phenomenon that it is assumed to be in positivist, quantitative research. Instead, there are multiple constructions and interpretations of reality that are in flux and that change over time. Qualitative researchers are interested in understanding what those interpretations are at a particular point in time and in a particular context.”³⁴⁴

Given these inherent methodological limitations, qualitative research therefore cannot really provide the same type of clear-cut scientific “proof” that one would expect from quantitative research / data analysis based on mathematical formulas and statistical modelling, let alone experiments in the natural sciences. Rather, as was already pointed out above, the nature of proof and the use of evidence in qualitative research are virtually always based on a subjective interpretation of the issues under review. For example, as Robert Yin points out with regard to “case study attempts to explain a phenomenon”³⁴⁵ (i.e., why did the Americans consolidate their A&D industry at a purely national level, with virtually no involvement from other Western allies, while the French, Germans, and Spaniards decided to merge their leading national A&D companies into EADS?):

“An explanatory case study consists of: (a) an accurate rendition of the facts of the case, (b) some consideration of alternative explanations of these facts, and (c) a conclusion based on the single explanation that appears most congruent with the facts.”³⁴⁶

As point (b) indicates, qualitative (explanatory) case study research is generally based on the notion that a given phenomenon can be potentially accounted for by a variety of explanations. First of all, this state of affairs is due to the fact that qualitative case study researchers need to make decisions about (1) what types of evidence to consider, and (2) about how much relative weight / importance to assign to the different collected data. In fact, given the ever-present threat of “death by data-asphyxiation”, case study researchers are under constant pressure to reduce complexity by limiting

³⁴⁴ Merriam (2002) pp. 3-4

³⁴⁵ Yin (1981) p. 61

³⁴⁶ Ibid., p. 61

the type and / or the amount of evidence admitted in their analysis. It is this very kind of necessary and deliberate reduction in complexity that inevitably leads to “multiple constructions [...] of reality”³⁴⁷ in the case study write-up / narrative. In other words, different researchers working independently on the same case study topic are likely to arrive at different descriptions and appreciations of the issues under review.

However, it is not only the data collection and reality construction processes that are subjectively influenced by the respective researcher’s individual perceptions, experiences, biases, and preferences. In addition, and very importantly, there are also “multiple [...] interpretations [that is, explanations] of reality”.³⁴⁸ Ultimately, the one interpretation that a researcher settles on to account for a given phenomenon is the “conclusion based on the single explanation that appears most congruent with the facts”.³⁴⁹ In his excellent foreword to Robert Yin’s influential book titled “Case Study Research: Design and Methods”, Donald Campbell refers to this reasoning / elimination process as the “plausibility-reduction of rival hypotheses”:

“More and more I have come to the conclusion that the core of the scientific method is not experimentation per se but the strategy connoted by the phrase ‘plausible rival hypotheses’. This strategy may start its puzzle-solving with ‘evidence’ or it may start with ‘hypothesis’. Rather than presenting this hypothesis or evidence in the context-independent manner of positivistic ‘confirmation’ (or even postpositivistic ‘corroboration’), it is presented instead in extended networks of implications that (while never complete) are nonetheless crucial to its scientific evaluation.

This strategy includes [...] seeking out rival explanations of the focal evidence and examining their plausibility. The plausibility of these rivals is usually reduced by ‘ramification extinction’, that is, by looking at their implications on other data sets and seeing how well these fit.”³⁵⁰

The decision about which explanation / hypothesis / theory fits the case most is of course rather subjective and might at times even be perceived as arbitrary, especially when it comes to singular event case studies like the BMD and the EADS merger which cannot be replicated. In this context, Yin compares the research and reasoning process involved to a crime investigation conducted by a detective:

³⁴⁷ Merriam (2002) pp. 3-4

³⁴⁸ Ibid., pp. 3-4

³⁴⁹ Yin (1981) p. 61

³⁵⁰ Foreword by Donald T. Campbell in: Yin (1994) p. ix

“There are no fixed recipes for building or comparing explanations. An analogous situation may be found in doing detective work, where a detective must construct an explanation for a crime. [...] Presented with the scene of a crime, its description, and possible reports from eyewitnesses, the detective must constantly make decisions regarding the relevance of various data. Some facts of the case will turn out to be unrelated to the crime; other clues must be recognized as such and pursued vigorously. The adequate explanation for the crime then becomes a plausible rendition of a motive, opportunity, and method that more fully accounts for the facts than do alternative explanations.”³⁵¹

Applied to an academic setting, the goal of the researcher (detective) is thus to convince his relevant peers (the judge or jury) that his interpretation of the phenomenon is the most appropriate and the most congruent with the facts. Of course, in contrast to the legal burden of proof – usually defined as “beyond reasonable doubt” as required by the prosecution in most criminal cases within an adversarial system – the corresponding academic level of proof does not generally live up to the same standard. After all, given the traditional academic freedom of research, scientists are essentially free to choose their own “jury of peers” and often do so by associating themselves with a certain “school of thought” comprised of fellow academics that share similar core beliefs and assumptions about their discipline. In other words, the acceptable levels and types of (qualitative) proof in one academic community might differ significantly from the analogous standards in other communities.

“The degree of certainty or consensus that the scientific community is able to achieve will usually be less in out-of-doors social science, due to the lesser degree of plausibility-reduction of rival hypotheses that is likely to be achieved. The inability to replicate at will (and with variations to rule out specific rivals) is part of the problem. We should use those singular event case studies (which can never be replicated) to their fullest, but we should also be alert for opportunities to do intentionally replicated case studies.”³⁵²

Furthermore, as was pointed out earlier, qualitative research involves “multiple constructions and interpretations of reality that are in flux and that change over time”.³⁵³ This clear reference to the dynamic nature of qualitative research is very important, because it further refines the corresponding methodological discussion of the nature of proof and the use of evidence. Constructions and interpretations of reality are in flux and can change over time for several reasons. First, researchers might discover new data (possibly by using new data collection methods). Second, researchers might discard previously used data because of concerns about their relevance,

³⁵¹ Yin (1981) p. 61

³⁵² Foreword by Donald T. Campbell in: Yin (1994) p. x

³⁵³ Merriam (2002) pp. 3-4

validity, etc. Third, researchers might change the relative weight and importance of the different variables under consideration in a given situation. Fourth, researchers might develop a new theory to better explain a phenomenon. In qualitative case study research, this kind of theory building / theory improvement is often achieved as a result of cross-case analysis. As Yin puts it:

“The craft of detective work again provides an analogous example. Assume that a detective has already produced a tentative explanation for a single crime (within-case analysis). Now the detective is confronted with another case, where the relevant conditions appear to be similar to those of the first case, and where the detective may be able to use the first explanation and establish that both crimes were committed by the same person. Modification may be necessary in applying the explanation to the second case, and the detective must learn to ignore irrelevant variations from case to case. How the detective carries out this work in (a) constructing an adequate explanation for each case singly, and (b) knowing the acceptable levels of modification in the original explanation as new cases are encountered, may be considered analogous to what confronts the researcher in doing cross-case analysis.”³⁵⁴

Given these constraints, “proof” in qualitative research is thus much more tenuous compared to the findings in quantitative research. Therefore, a qualitative researcher is well advised to refrain from making any sweeping statements claiming, for example, that his research “proves” a certain theory right or that it “demonstrates” that there is a clear, causal relationship between factors A and B, etc. Rather, a qualitative researcher should phrase his findings much more carefully, for example by saying that the interpretation of the currently available data (and data collection methods) “suggests” that a certain theory is most appropriate to explain a particular phenomenon, or that there “appears” to be a causal relationship between A and B. Such a cautious approach is not only in line with the nature of proof and the use of evidence in qualitative research, it also demonstrates that this method of academic inquiry takes nothing for granted and that the quest for new and better insights continues unabatedly.

³⁵⁴ Yin (1981) p. 63

Chapter 3: The Boeing / McDonnell Douglas Merger

3.1 *Scaling back: the post-Cold War downturn in military spending*

The purpose of this chapter is three-fold. First, it describes the post-Cold War downturn in US military spending and its effect on the A&D industry. Second, this chapter analyses the efforts by the US government to promote national A&D industry consolidation, especially at the prime contractor level. Finally, it provides an overview of Boeing and MDC at the time of their 1997 merger. Building on this chapter and incorporating additional research, chapter 5 will then provide an in-depth analysis of the different political and economic forces behind the BMD merger.

US defence spending reached a peak at 6.5 percent of GDP in the mid-1980s – during President Reagan’s massive arms build-up – and dropped sharply after the end of the Cold War.³⁵⁵ During the 1986-1989 period, overall US defence spending peaked at an average of US\$356 billion per year.³⁵⁶ The trough in military spending was reached during 1996-1997, when Washington had reduced the Pentagon budget by more than US\$100 billion to US\$254 billion (3.3 percent of GDP).³⁵⁷ This dramatic decline in US military spending also triggered an unprecedented consolidation in the American A&D industry. “The defence industry is more concentrated today than at any time in more than half a century”.³⁵⁸ Between 1990 and 1998, the number of US prime contractors “declined in 10 of the 12 markets DoD identified as important to national security”³⁵⁹. The biggest reductions occurred in the aerospace industry, namely in the areas of tactical missiles (2 contractors in 1998 vs. 13 in 1990), fixed-wing aircraft (2 vs. 8), expendable launch vehicles (2 vs. 6), and satellites (5 vs. 8). US defence industry consolidation was less pronounced in other sectors, such as surface ships (5 vs. 8 contractors), tactical wheeled vehicles (4 vs. 6), tracked combat vehicles (2 vs. 3), strategic missiles (2 vs. 3), torpedoes (2 vs. 3) or rotary wing aircraft (3 vs. 4).³⁶⁰ Between 1990 and 2002, the number of prime contractors in the US A&D industry came down from 18 to five so-called mega-primes: Boeing, the world’s biggest A&D company; LMC, the world’s biggest defence firm; Raytheon, the world’s biggest missile manufacturer; NGC, a diversified defence conglomerate manufacturing reconnaissance aircraft, submarines, aircraft carriers, etc.; and diversified A&D conglomerate General Dynamics (GD). See Annex Table 5 for more details.

³⁵⁵ (Gholz & Sapolsky, 1999/2000) p. 15. All figures are in constant 1996 US dollars.

³⁵⁶ *Ibid.*, p. 15

³⁵⁷ Morrocco (1991)

³⁵⁸ GAO (1998) p. 1

³⁵⁹ *Ibid.*, p. 2

³⁶⁰ *Ibid.*, pp. 6-7

“The [US defence] industrial base inherited from the Cold War included significant excess capacity that was purposely maintained to meet national security requirements”³⁶¹. After the end of the Cold War, the US government strongly encouraged America’s defence companies to consolidate production facilities and cut excess capacity through M&As to achieve the economies of scale and cost savings necessary to remain competitive and financially viable. The sharp reduction in defence spending following the Reagan-era military build-up – during which the number of US defence contractor employees had jumped from 1.7 million in 1976 to 3.3 million in 1986 – proved to be a serious shock with far-reaching repercussions:

*“More than two million defence workers, military personnel, and civil servants [...] lost their jobs. Thousands of firms [...] left the industry. More than one hundred military bases [...] closed, and the production of weapons is down considerably.”*³⁶²

A historical analysis of US military procurement and R&D expenditures between 1948 and 1998 reveals clear boom and bust patterns.^{363 364} These cycles track closely the shifts in relative military threat perceptions over time. During WWII, US defence spending peaked in 1944/1945 at US\$753 billion (39.3 percent of GDP).³⁶⁵ After WWII, the US demobilised at record speed and made drastic defence budget cuts. Military spending increased again sharply with the beginning of the Cold War in the late 1940s – reaching US\$316 billion (14.5 percent of GDP) in 1953³⁶⁶ – and then dropped significantly after the end of the Korean War that same year. American defence expenditures continued to decline (small hikes notwithstanding) until the early 1960s, when rising superpower tensions over Cuba and Vietnam triggered massive investments in military (missile and space) technology programs. In 1968, US defence spending reached US\$358 billion (9.6 percent of GDP).³⁶⁷ Subsequently, defence expenditures declined again until the late 1970s, when the 1979 Soviet invasion of Afghanistan and President Reagan’s election in 1980 triggered a major boost in US military spending. At the height of Reagan’s aggressive efforts to push the “Evil Empire” over the brink and into the dust bin of history (through SDI³⁶⁸ and other initiatives), total US defence spending reached 6.5 percent of GDP in 1986. Despite sharp increases in the Pentagon budget following the 9-11 attacks, current annual American military expenditures – projected to reach US\$708 billion in FY2011³⁶⁹ including operations in Iraq and Afghanistan – amount to only about

³⁶¹ Oden (1999) p. 75

³⁶² (Gholz & Sapolsky, 1999/2000) p. 5

³⁶³ Ibid., pp. 7-8

³⁶⁴ (Cooling & Gropman, 2005) pp. 1-10

³⁶⁵ (Gholz & Sapolsky, 1999/2000) p. 15

³⁶⁶ Ibid., p. 15

³⁶⁷ Ibid., p. 15

³⁶⁸ SDI = Strategic Defence Initiative

³⁶⁹ FY = fiscal year

4.7 percent of GDP. Yet even at these comparatively low levels of relative military spending, America still spends more on its national defence than the next twenty countries combined.

During the three Cold War military boom cycles (Korea, Vietnam, Reagan-era), privately-owned American A&D companies heavily expanded their production and R&D capacities to respond to rising government demand. During the ensuing bust cycles, however, these firms cut less capacity than they had previously built up.³⁷⁰

“Even at the Cold War low points, outlays for R&D and defence procurement were sufficient to keep the defence industry focused on military rather than commercial markets [...]. During the cyclical downturns, the government closed the [government-owned] arsenals, shifting more business to private sector contractors, who were more politically influential than the managers and employees of the public facilities.”³⁷¹

Defence procurement is a highly political business, driven both by external threat perceptions and domestic lobbying efforts (targeted primarily at the legislative branch) led by the defence industry. Talking about lobbying, it is important to recognize that “the right to petition the government for redress of grievances” is enshrined in the US Constitution’s First Amendment. In the case of Senators and Congressmen, lobbying is not only the process through which special interest actors (i.e., trade associations, unions, companies) make their voices heard, but also how the elected officials on Capitol Hill interact with their constituents. That being said, legislative lobbying efforts by corporate actors related to defence procurement are often both particularly sensitive and effective as they involve millions if not billions of dollars worth of business with direct repercussions on jobs and capital investments for voters back home.

In America, the crucial importance of money and the weakness of the party system have forced Members of Congress to constantly raise new funds and to run for re-election as the defender of his home district, its companies and their workers. The configuration of America’s political system has therefore provided lobbyists and industry associations much greater influence in Congress than in the finance-limited and party-controlled parliamentary systems of Europe. Furthermore, the separation of powers has enabled Congress repeatedly to block or delay administration preferences with regard to US defence acquisition programmes. In the late 1980s, then-Defense Secretary Cheney tried to “kill” the V-22 Osprey tiltrotor aircraft after the projected development costs had skyrocketed from US\$2.5 billion to US\$30 billion. He was overruled by Congress, where

³⁷⁰ (Gholz & Sapolsky, 1999/2000) p. 7

³⁷¹ Ibid., pp. 7-8

influential Members were determined to keep this multi-billion dollar procurement programme and the associated jobs in their home districts alive.

“After more than two decades and \$16.4 billion, the history of the V-22 is a sorry tale of cost overruns, shoddy construction, and managerial incompetence. Thirty people have died in four Osprey crashes, making the V-22 one of the killingest experimental planes ever. The program has teetered on the brink of elimination since almost the beginning. But it never went away, propped up by genuine need, pork barrel politics, and the hope that the money already spent wasn’t money wasted.”³⁷²

In June 2009 – two months after US Defense Secretary Gates had called for the termination of the F-22 program by FY2011 (capping production at 187 aircraft) in favour of the F-35 Joint Strike Fighter (JSF) – the House and Senate Armed Services Committees allocated an additional US\$368.1 million and US\$1.75 billion, respectively, to the Pentagon defence authorisation bill to procure more F-22s and keep the production lines “hot.” President Obama, who decried this additional F-22 funding as an “inexcusable waste of money”³⁷³, threatened to veto his own defence budget and launched a Congressional lobbying campaign to ensure that his government’s defence procurement priorities prevail on Capitol Hill. The Obama administration’s massive push-back succeeded and in July 2009, the Senate voted 58-40 to defeat the F-22 funding amendment. “This is the first case in recent years when Congress, the defence industry and the dissident voices in the military haven’t been able to prevail in a contest with a Defense secretary over the fate of a weapons program”.³⁷⁴ ³⁷⁵ However, there is also a more intriguing interpretation of the F-22 episode:

“Why is it that the Obama administration, the defence industry, and Congress have all lined up against the F-22 – a plane with known costs and capabilities – in favour of a plane that may cost more and offer less? Why isn’t Lockheed pushing to repeal the export ban on the F-22? For that matter, why did Lockheed stop lobbying the Hill for continued production of the F-22 once the Gates budget came out? And why did Lockheed request that Boeing – the junior partner on the F-22, responsible for about a third of the aircraft’s production – cease its own lobbying campaign on behalf of the aircraft? There is one obvious explanation for all of this: The military-industrial complex stands to make a lot more money off the F-35 than it could from the F-22. And Boeing is not a Lockheed partner on the F-35. So once the

³⁷² Berler (2005) p. 1 (online)

³⁷³ Cole (2009)

³⁷⁴ Ibid.

*F-22 production line closes, Boeing will be out of the fighter business entirely, leaving Lockheed the US government's only supplier of fighter aircraft.*³⁷⁶

As lobbyist Jed Babbin – a former Pentagon official in the George H.W. Bush administration – summed up his work on Capitol Hill: “Money meant access, and access meant influence. Political campaign contributions were the currency of access.”³⁷⁷ The offering or solicitation of campaign contributions in exchange for a Member’s specific legislative action (i.e., to support or defeat a certain bill, etc.) certainly constitutes corruption and is illegal. That being said, it is clear that Senators and Congressmen do pay close attention to the needs and concerns of major (defence) firms located in their districts and will often steer procurement business to them. Defence lobbyists are especially eager to cultivate close ties with the chairmen and ranking members of relevant committees such as Armed Services or Appropriations in an effort to advance specific procurement projects. In a legislative branch operating on the principle of seniority, these key members are “Old Bulls” with “decades of service and around whom had grown a hard shell of power and influence. And money.”^{378 379}

A&D companies have a long history of over-promising and under-delivering when it comes to the procurement of new defence systems.³⁸⁰ “The US defence procurement system has effectively become a liar’s contest in terms of projected costs, risk, performance, and delivery schedules.”³⁸¹ One lobbying scandal erupted in 1982, when the GAO³⁸² determined that officials from the US Air Force (USAF) and the OSD (Office of the Secretary of Defense) along with representatives from Lockheed and other defence (sub-)contractors made “an extensive and cooperative effort [...] to influence [House Members] and later the House and Senate conferees, on the proposed US\$10 billion procurement of the C-5B “Galaxy” strategic lift aircraft”³⁸³. The lobbying campaign was triggered by opposition to the programme in the Senate and the House, both of which had voted

³⁷⁵ The dissident military voices were the USAF Chief of Staff and the Commander of Air Combat Command. Goldfarb (2009)

³⁷⁶ Ibid.

³⁷⁷ Babbin (2006) p. 28

³⁷⁸ Ibid., p. 28

³⁷⁹ “With every re-election, a congressman or senator gains power among his peers, the press, and the lobbying community. The support of a ten-term congressman means infinitely more than that of a freshman because his influence over other members is that much greater. A six-term senator’s word carries more weight, proportionate to his time in Washington, than a newcomer’s. Security in office is not just prestige. It is power, and with each passing election, the Old Bulls’ horns grow longer.” Ibid., p. 30

³⁸⁰ “At the individual programme level, a military service typically establishes and DoD approves a business case containing requirements that are not fully understood and cost and schedule estimates that are based on optimistic assumptions rather than on sufficient knowledge. This makes it impossible to successfully execute the programme within established cost, schedule, and performance targets.” GAO (April 2009) p. 5

³⁸¹ (Cordesman & Kaeser, 2008) p. 1

³⁸² GAO = General Accounting Office / Government Accountability Office (renamed since 7 July 2004)

³⁸³ GAO (1982) p. 1

against the Pentagon's C-5B procurement authorization and instead "authorized the procurement of new and used commercial wide-body cargo aircraft" to meet military airlift needs – thus favouring rival Boeing. The lobbying effort – which involved lobbyists working for Lockheed and relevant sub-contractors – was "initiated, organized, and directed"³⁸⁴ by senior Pentagon officials and the GAO established that "material, but undeterminable, amounts of appropriated and Government resources were [illegally] spent for the purpose of influencing this procurement authorization measure"³⁸⁵.

The end of the Cold War fundamentally changed the West's defence and security environment. With the Warsaw Pact and the Soviet Union gone, much of the US and European defence industries' "economic distinctiveness" vanished as well:³⁸⁶

*"[T]he defence industry has to an extent lost its singular character among manufacturing industries of having to attend mainly to very special technical requirements specified by military demand without a compelling attention to the costs incurred"*³⁸⁷.

As a result of this post-Cold War "normalisation", US and European defence companies could no longer automatically rely on lucrative "cost-plus" procurement contracts to obtain specified and guaranteed profits irrespective of their own corporate cost structure. Furthermore, it became increasingly difficult for companies with military and civilian operations to use relatively steady profits from the defence side to cross-subsidise R&DP for commercial applications. "Such financial spill-over – in effect, cross-subsidy – has for a long time probably been much more significant than the technology spill-over from defence-related to civilian industrial activities."³⁸⁸ It is important to emphasise this link in the defence / civil aerospace relationship since Boeing's desire to balance its cyclical commercial aircraft business with MDC's less cyclical military aircraft division was a crucial driver behind the BMD merger. EADS, in contrast, is at a competitive disadvantage since the European company derives most of its turnover and profits from the commercial (Airbus) division.

³⁸⁴ Ibid., p. 9

³⁸⁵ Ibid., p. 1

³⁸⁶ van Scherpenberg (1997) p. 101

³⁸⁷ Ibid., p. 102

³⁸⁸ Ibid., p. 101

3.2 *Corporate strategies to deal with the post-Cold War downturn in defence spending*

A&D companies could choose among different strategies to cope with the sharp post-Cold War downturn and the related military “procurement holiday”. The first corporate strategy was one of “market exit”³⁸⁹: companies divested of defence operations to concentrate on their core civilian business units. In the US, a number of diversified industrial companies like General Electric (GE), Ford, and General Motors (GM) made that choice.³⁹⁰ The second corporate strategy aimed at “achieving greater economies of scale and scope”³⁹¹, namely through horizontal and vertical mergers with other defence companies, as well as the acquisition of defence operations from those companies seeking to exit the market. Consolidation through M&As also promised access to new markets and additional clout when negotiating with suppliers or government procurement agencies.³⁹² The third corporate strategy, dubbed “integration with civilian industry”³⁹³, aimed at leveraging potential synergies between defence and civilian operations. In particular, companies were trying to identify spin-on and spin-off possibilities by increasing the use of civilian or dual-use technologies and production processes in their defence equipment and / or by deriving commercial applications from defence-related products. This last strategy promised to allow defence companies to weather the “procurement holiday” by (partly) reversing the direction of the long-standing cross-subsidisation from defence to commercial products. The end of the Cold War created hyped expectations for a swift conversion of the defence industry from military to commercial applications. The Clinton administration launched a multi-billion dollar Technology Reinvestment Programme (TRP) to support the conversion and diversification efforts of US A&D companies. However, despite a high degree of integration and overlap between the commercial and military sectors within the aerospace industry – the technology base, much of the supplier base, and the skills and processes used were essentially common – virtually all of the post-Cold War defence conversion experiments failed as defence companies found it very difficult to adapt from the demands of slow-moving bureaucratic government procurement to the fast-paced, intense competitive pressures of the private sector. While defence companies relied on “cost-plus” contracts

³⁸⁹ van Scherpenberg (1997) pp. 102-104

³⁹⁰ Many of these firms had initially entered the defence electronics business after the 1973 Arab-Israeli war. Shocked by the fact that the Egyptians had used Soviet-made missiles to down about 100 American-made Israeli fighter jets, US industry leaders came to realise “that the shell of the plane or ship was less important than the technology inside” – thus leading credence to the notion that rapidly growing IT and computer capabilities were transforming the industry, making planes and weapons systems ever more complex and expensive. “Almost overnight, the defence electronics industry was born [...] and some of the biggest names in corporate America rushed to get into the game.” Ultimately, however, many of these big, diversified companies “underestimated the financial, technological, and political risks involved. And one by one, all decided to exit the business and sell out”. Pearlstein (1996)

³⁹¹ van Scherpenberg (1997) p. 102

³⁹² “In those cases where the creation of ‘national champions’ has been the declared aim of an industrial policy driven by the ‘love of scale’, disregarding economies of scope, even the cost advantages of scale may not be achieved”. van Scherpenberg (1997) p. 102

³⁹³ *Ibid.*, p. 102

that put a premium on high performance and state-of-the-art technology (with little or no regard to the costs and R&D / production lead times / delays involved), they suddenly had to deal with an environment in which cost and timely delivery of products were crucial factors in winning and retaining customers. Ultimately, defence conversion efforts were often a disappointment since the profound differences between doing business with the government and doing business with the private sector proved too difficult to overcome.

While A&D companies frequently pursued a combination of the three strategic options outlined above, they often also tried a fourth option to compensate for the loss of US defence spending: “gaining new export markets abroad”. Conversion and diversification efforts became less and less relevant as A&D companies began pushing hard to find new customers abroad. During the Cold War, advanced US weapons sales were often driven by political and military-strategic considerations, notably to support allied governments against the Soviet Union and its proxies.³⁹⁴
³⁹⁵ ³⁹⁶ After the Cold War, economic factors began to play a much bigger role in the review of arms exports permits.³⁹⁷ ³⁹⁸ In America, defence contractors successfully lobbied the Clinton administration to relax export restrictions by arguing that crucial yet expensive production lines and technological expertise could only be kept “hot” by producing for markets abroad. However, apart

³⁹⁴ American companies lobbied hard for defence sales to Europe (e.g., the 1975 “sale of the century”) even when successive US governments were trying to promote a transatlantic “two-way street” to encourage the European allies to spend more on military procurement through gaining a greater share in its production.

³⁹⁵ “[F]rom the early 1960s to the late 1980s, the global arms traffic was largely governed by the competitive practices of Washington and Moscow. [...] In their pursuit of Third World allies, the superpowers concentrated their arms-supply activities in a number of major areas considered pivotal to the global correlation of forces – most notably the Middle East, South Asia, and East Asia. As a result, the bulk of the weapons transferred internationally during this period was delivered to a number of key states in each of these regions, including Algeria, Egypt, Ethiopia, India, Iran, Iraq, Israel, Libya, Pakistan, Saudi Arabia, Syria, Taiwan, Turkey, and the two Koreas. Together, these key states (along with favoured allies Cuba and Vietnam) accounted for some three-quarters of all arms transfers during this period. In seeking to maintain their friendly ties with these states, moreover, the superpowers provided them with major combat systems – tanks, fighter planes, missiles, and so forth – of increasing sophistication, thus generating the high dollar values for global arms transfers in the late 1970s and the 1980s.” [...] US and Soviet arms accounted for 65 percent of the total worldwide weapons traffic in 1972-1988 (when measured in dollars), while those provided by all NATO and Warsaw Pact countries combined accounted for about 90 percent of the traffic during this period.” Klare (1996) pp. 857-858; 857

³⁹⁶ The Cold War paradigm of arms trafficking can be summarised as follows: “(1) the overwhelming dominance of the two superpowers (and their respective allies) over the global arms flow; (2) the primacy of ideological and geopolitical factors in determining the recipients of arms; (3) the emergence and acceleration of regional arms rivalries in key Third World areas; and (4) a preference, on the part of leading recipients, for transfers of sophisticated front-line combat systems.” Ibid., p. 858

³⁹⁷ The post-Cold War paradigm of arms trafficking can be summarised as follows: “(1) the unrivalled dominance of the [US] in the global arms traffic; (2) the primacy of economic (as against ideological and geopolitical) motives for arms exports; (3) the emergence of new arms rivalries in East Asia and the expansion of existing markets in a number of other areas; (4) a focus on internal (as against external) defence in the selection of arms by many states; (5) the growing salience in the arms trade of sectarian militias, insurgent groups, black-market dealers, and other non-state actors.” Ibid., p. 859

³⁹⁸ “During the Cold War, the [US] did not consider that arms sales contributed to defence industry viability and placed little emphasis on the domestic impact of export decisions. From 1990, however, Washington began to attach greater importance to the economic value of defence exports. In February 1995, a presidential directive made strengthening the domestic defence industry one of the five main goals of US conventional-arms-transfer policy.” Grant (1997) p. 113

from potentially aggravating military tensions around the world, liberal arms export policies also increase the risk that Western weapons technologies fall into the hands of hostile regimes or terrorists and could be used for attacks against America and its allies. This post-Cold War “US export offensive”³⁹⁹ also put American A&D companies in fierce competition with their European counterparts, prompting senior French officials to accuse Washington of trying to “eliminate” Europe’s defence industrial base.⁴⁰⁰

America’s status as the sole post-Cold War superpower provided its A&D companies with geo-strategic and technological advantages over their European competitors. First, geo-strategically speaking – given America’s global preponderance – third countries in Eastern Europe Asia, etc. would often prefer to buy US over European weapons in an effort to cement ties with Washington and to gain “the implicit sympathetic [US] involvement in [their] security affairs that usually goes with such contracts”⁴⁰¹. In contrast to the 800-pound American super gorilla, “the EU countries [...] [were] obviously still lacking an important, often decisive selling point of any major arms exporter: the ability credibly to project military power and provide security cover beyond their immediate sphere of influence”⁴⁰².⁴⁰³ BAe / BAE Systems’s Al-Yamamah contracts – first brokered between the UK and Saudi governments in 1985 with follow-on arrangements in 1988 and 2006 – is probably the only example of a European company striking a multi-billion dollar defence deal with a major non-European US ally.⁴⁰⁴ ⁴⁰⁵ Second, technologically speaking, US weapons systems were

³⁹⁹ van Scherpenberg (1997) p. 104

⁴⁰⁰ “Europeans have felt disadvantaged by this heightened competition with the US over weapons exports, because of the far larger domestic base from which US companies operate and a perceived undervaluation of the dollar. The US export drive fuelled European feelings, above all in France, that the US was deliberately attempting to ‘eliminate’ Europe’s defence-industrial base.” Grant (1997) p. 114. The “elimination” charge was made by Yves Sillard, France’s defence acquisition chief during 1989-1993.

⁴⁰¹ van Scherpenberg (1997) p. 105

⁴⁰² *Ibid.*, p. 105

⁴⁰³ During 1987-1990, Washington and Paris accounted for 21 and 6 percent, respectively, of all global arms transfers to Third World countries (totalling US\$190 billion in constant 1994 dollars). During 1991-1994, the two countries captured 48 and 21 percent, respectively, of that same market segment (totalling US\$106 billion). US exports increased from US\$40.8 billion to US\$50.7 billion during these time periods whereas France nearly doubled its exports from US\$11.9 billion to US\$22.4 billion. The UK’s export share dropped from 15 percent during 1987-1990 to 5 percent during 1991-1994. Germany increased its share from 2 to 3 percent. Klare (1996) p. 861. French arms appealed especially to those countries looking for an alternative to US weapons. “There is a sound reason for keeping a healthy, if somewhat inferior, European defence industry producing locally designed goods. For example, [Washington] clearly wishes to wean the Egyptians away from Soviet arms, but cannot (or will not) provide them with large numbers of sophisticated aircraft. It is desirable, in that case, that they buy Jaguars and Mirage, which will have a lesser impact on Israel air superiority.” Cohen (1978) p. 89

⁴⁰⁴ The Al-Yamamah 1 and 2 contracts totalled GBP42 billion. The Al-Yamamah 3 contract totalled GBP10 billion. Gribben (2006)

⁴⁰⁵ Saudi Arabia decided not to buy military hardware from America for fear that pro-Israel Members of Congress would either block such a defence deal or would impose significant usage restrictions on any exported US aircraft. The Reagan administration supported the Al-Yamamah deals as they strengthened the Saudi military at a time of rising Gulf tensions and allowed Prime Minister Thatcher to secure the country’s biggest export contract ever. However, in the run-up to the 2006 Al-Yamamah 3 Eurofighter deal, there was lots of competition by US and French companies trying to sell planes to Riyadh. “BAE and the [UK] Government have been accommodating [the Saudis], helping to fight off competition from American and French rivals wanting to dip into the Saudi defence honey pot. They have benefited

often more advanced than those of their European competitors, and therefore also more appealing to potential buyers.⁴⁰⁶ “[F]or the [US], technological superiority is a *conditio sine qua non* of its military strategy”⁴⁰⁷. From a geo-strategic and technological perspective, “the Persian Gulf War [of 1991] was great advertising for US weapons”⁴⁰⁸.

from a regime anxious to avoid becoming too dependent on American suppliers and technology and risk being hit by an Israeli-influenced embargo as well as a fruitful 20-year [Saudi-UK defence] relationship.” Ibid.

⁴⁰⁶ “Nations that seek the latest in military technology – and that possess the necessary funds or credits – have tended to acquire US weapons whenever possible.” Klare (1996) p. 862

⁴⁰⁷ van Scherpenberg (1997) p. 106

⁴⁰⁸ Pearlstein (1991)

3.3 *“The Last Supper”*: how the US government promoted and constrained aerospace and defence industry consolidation in the United States

President Clinton was elected at a time of wide-spread unease and doubts about America’s industrial and technological competitiveness. In the 1980s, the US had experienced huge budget deficits, massive job losses and a steep decline in the dollar. In the early 1990s, Japan and a re-unified Germany were expected to translate their (“soft”) industrial and technological power into (“hard”) political and military power. Therefore, US political pundits and public opinion feared a decline in America’s relative international economic as well as politico-military power position as an emboldened Japan and Germany were no longer limited by the constraints of the Cold War order and decided to pursue independent national foreign and security policies. In response to these perceived challenges, Bill Clinton and his team – probably more than any other administration in US history – put a heavy emphasis on economic security when defining their country’s national security strategy. In his 1993 “Report on The Bottom-Up Review: Forces For A New Era”, then-Defense Secretary Les Aspin even argues that the “armed forces [...] can play a significant role in [addressing] economic dangers to our national security”.⁴⁰⁹ “Linking military dominance with an aggressive pursuit of economic interest has since become a core element of the US economic policy agenda.”⁴¹⁰

Starting in 1993, the Clinton administration began a systematic push for greater consolidation in the American A&D industry. Given sharply reduced defence budgets, the overriding challenge for US policymakers was to ensure that military contractors remained active in all key weapons areas – both to produce current systems and to develop new ones. While the Bush Senior administration embraced “laissez-faire economics” and was opposed to any direct government actions to promote consolidation in the US A&D industrial base, the Clinton administration decided to change course soon after taking office. On 22 July 1993, US Defense Secretary Les Aspin invited 15 CEOs from America’s leading A&D companies for dinner to discuss the Pentagon’s plans for greater industry consolidation with Deputy Defence Secretary Bill Perry and Under Secretary for Technology and Acquisition John Deutch. Perry underlined the Pentagon’s concerns about the massive overcapacities plaguing the US defence industry. After the end of the Cold War, the Pentagon could

⁴⁰⁹ “The final – and in the post-Cold War period, perhaps most important – set of dangers that US strategy must confront is economic. In recent years, the U.S. economy has been plagued by an enormous and growing federal debt, sluggish growth, inadequate job creation, and a large trade imbalance. Further, our growing dependence on imported petroleum constitutes an economic danger of its own. The [Pentagon] can help address these economic dangers. DoD can help America seize the opportunity presented by the end of the Cold War to enhance its economic security. We must stress the productive reinvestment of defence resources, facilities, and technology into the civilian economy. Placing new emphasis on key technologies – information and manufacturing technologies and advanced materials – will help strengthen both the military and civilian sectors.” DoD (1993)

⁴¹⁰ van Scherpenberg (1997) p. 108

no longer afford to maintain several independent defence manufacturers for each major weapons platform. Perry and Deutch “[made] it abundantly clear the [DoD] was not going to solve industry’s overcapacity problem – that would be up to those in the audience”.⁴¹¹ However, Perry and Deutch assured the CEOs that “the DoD would strongly support industry consolidation and approve financial arrangements that benefited companies as long as they also significantly benefited the government”.⁴¹²

The day before, Deutch spelled out the Pentagon’s pro-consolidation merger strategy to “[promote] the rational downsizing of the defence industry”⁴¹³. A&D companies were now allowed to include the restructuring costs (plant modifications, equipment relocation, severance pay and retraining costs)⁴¹⁴ incurred as a result of M&As in the reimbursable cost base of their cost-plus contracts – provided that the consolidation process created long-term net procurement savings for the Pentagon.^{415 416} The Deutch memo was a direct response to lobbying pressures exerted by the CEOs of Martin Marietta, Lockheed, Loral and Hughes on Defense Secretary Perry.⁴¹⁷ Otherwise, they argued, their companies would not be able to reap the rewards of post-merger integration savings since profits would remain constant given the fixed-price-contract nature of the defence business. LMC Chairman Norman Augustine claimed in 1994 that his company would not have made its acquisitions without DoD merger aid.⁴¹⁸ By reimbursing the defence companies for part of their merger costs, the Pentagon aimed to create a win-win situation where corporate players are financially encouraged to generate synergies and savings through M&A transactions which would, in turn, benefit US taxpayers in the form of lower procurement spending (“more bang for the buck”). The “DoD provided significant direct and indirect subsidies to merging companies, an action that accelerated the merger and consolidation movement [during 1993-1996]”⁴¹⁹.

The Pentagon’s pro-merger policy was also sharply criticised. First, as Larry Korb pointed out, “like Mark Twain’s death, the decline of the defence industry in this country has been greatly exaggerated”⁴²⁰. Inflation-adjusted annual US defence spending in the mid-1990s was still about US\$30 billion higher than in 1975. Using 1985, the height of the Reagan arms build-up as the

⁴¹¹ Augustine (2006)

⁴¹² Ibid.

⁴¹³ Quoted in Korb (1996)

⁴¹⁴ Oden (1999) p. 81

⁴¹⁵ Defence contractors often sign cost-plus contracts with the government: the MoD reimburses the R&DP costs for weapons systems (which can vary significantly due to long development and production cycles and are therefore not fixed ahead of time to protect companies against excessive commercial risks) plus a fixed profit for the contractors.

⁴¹⁶ The merger subsidies did not apply to “fixed-price” contracts.

⁴¹⁷ Korb (1996)

⁴¹⁸ Mintz (1994)

⁴¹⁹ Oden (1999) p. 81

baseline year, clearly distorted the relative fluctuations of American defence spending over time. The bottom-line? “Defence is still a profitable business.”⁴²¹ Second, taxpayer money should not be used to subsidise M&A transactions. Defence companies need to decide for themselves whether any given deal makes good business sense or not. Third, market forces, not Pentagon bureaucrats should determine the shape of the US defence industry. “While government shouldn’t discourage restructuring, it should stay at arm’s length.”⁴²² Fourth, previous defence mergers did not yield the claimed procurement savings for the Pentagon.⁴²³ In fact, Deutch’s memo allowed defence contractors to bill the Pentagon in advance for *projected* future cost savings; a risky strategy given the uncertainties of the defence business. Finally, the Pentagon’s merger aid also sparked a backlash on Capitol Hill, where several Congressmen from those districts that lost jobs as a result of the DoD-promoted defence consolidation process convinced the House to pass a bill in early March 1997 prohibiting the Pentagon to treat restructuring costs in connection with defence M&As as allowable costs in (“cost-plus”) defence contracts.⁴²⁴ The Senate, however, failed to follow suit and the provision did not become law.⁴²⁵

John Deutch defended his pro-merger memo by arguing (1) that it merely “clarified” existing US laws and regulations and did not depart from previous government policy; (2) that the memo would be indispensable to allow for the consolidation and rationalisation of the American A&D industry; and (3) that it would ultimately save American taxpayers billions of dollars due to lower Pentagon acquisition costs.⁴²⁶ Interestingly, Deutch did not discuss his memo with the US military or Congress, which only found out about it nine months later when Martin Marietta attempted to recoup US\$60 million of the US\$200 million it had paid for GD’s space division from the Pentagon.⁴²⁷ Even strong supporters of the Deutch memo, including the Aerospace Industries Association, considered it a departure from existing government policy and were pushing the Pentagon to formally announce the policy change in the US Federal Register. Secretary Perry later conceded that the Pentagon should have received a green light from Congress before implementing the new policy.⁴²⁸

⁴²⁰ Korb (1996)

⁴²¹ Ibid.

⁴²² Ibid.

⁴²³ Neither the GAO nor the DoD could verify Hughes Aircraft’s claim that the acquisition of GD’s missile division saved the Pentagon US\$600 million. Ibid.

⁴²⁴ Mintz (1994)

⁴²⁵ Ibid.

⁴²⁶ Oden (1999)

⁴²⁷ Korb (1996)

⁴²⁸ Ibid.

The fact that there are no official figures reflecting the total cost of the Pentagon's consolidation-related subsidies to US defence companies during 1993-1996 raises red flags for those concerned about the non-transparent, behind-the-scenes power and influence exerted by the military-industrial complex. Korb estimates that LMC alone obtained US\$1 billion in DoD merger support. By mid-1996, the Pentagon had received about 30 aid requests from merging defence companies.⁴²⁹ Based on Korb's US\$1 billion LMC price tag, Oden estimates that the total amount of Pentagon merger aid could be in the US\$3 billion to US\$5 billion range.⁴³⁰ US defence companies also received government export subsidies worth between US\$5 billion to US\$7 billion annually⁴³¹; a move which helped America regain its position as the world's leading arms exporters in 1996. In contrast, the Pentagon paid only US\$643 million to defence companies during 1993-1995 as part of the TRP dual-use technology development effort.⁴³²

The Clinton administration's merger strategy boiled down to the "Noah's Ark approach to industrial policy: two makers of everything the [DoD] needs."⁴³³ ⁴³⁴ However, while the massive US defence consolidation in the 1990s led to a drastic reduction in the *number* of prime contractors, overall defence industrial *capacity* remained almost unchanged.⁴³⁵ "The most obvious interpretation of this murky process is that the DoD's main concern is keeping capacity in weapons production and design."⁴³⁶ By fostering the creation of mega-primers, the US government made it possible for these often highly diversified companies to keep less profitable production lines "hot" through cross-subsidisation from more lucrative defence / business units.

*"There are, therefore, strong reasons to believe that maintaining production and development capability was more important than cost savings in prompting the permissive [US] government stance towards mergers."*⁴³⁷

Realist security concerns and corporate lobbying efforts targeted at Members of Congress eager to save A&D jobs in their districts thus trumped liberal economic concerns about realising potential cost-savings. However, the massive consolidation of the US A&D industry resulting in a few mega-

⁴²⁹ Ibid.

⁴³⁰ Oden (1999) p. 81

⁴³¹ Ibid., p. 84.

⁴³² Potomac Institute for Policy Studies (2004)

⁴³³ (Crock, Schine, & Borrus, 1996)

⁴³⁴ In support of their "Noah's Ark" approach, Pentagon leaders pointed to the US aircraft engine market, where GE and P&W fiercely competed for DoD contracts. Gansler (2006) p. 12

⁴³⁵ LMC manufactures F-22s in Georgia and F-35s in Texas. Boeing still has production facilities in Washington, Missouri, and California. Gansler (2006) p. 15. On the political and economic impediments to the consolidation and conversion of the defence industry, see (Gholz & Sapolsky, 1999/2000).

⁴³⁶ Oden (1999) p. 84

⁴³⁷ Ibid., p. 85

primes also raised alarm, especially among those managing the Pentagon's procurement budget and the DoJ⁴³⁸ / FTC⁴³⁹ anti-trust watchers. In 1997, the Clinton administration abandoned its pro-merger policy to maintain a certain degree of competition and to prevent the creation of harmful monopolies. The potential shift of market power from buyers (governments) to sellers (A&D companies) is a major public policy risk associated with large-scale industry consolidation leading to duo- or monopolies. Specifically, defence experts feared that "the West could end up with a small set of very large, very powerful, and not very competitive defence firms, favouring the maintenance of Cold War thinking and technologies."⁴⁴⁰ This quote is an explicit acknowledgment of the A&D sector's significant political influence vis-à-vis their respective national governments.⁴⁴¹

Neither monopolies nor duopolies are generally conducive to fostering technological breakthroughs as the dominant companies are often reluctant to embrace radical change for fear of losing their existing government contracts. The industry structure most prone to technological innovation is characterised by two incumbents and a well-financed "challenger" that forces the established players to remain on the edge.⁴⁴² An industry structure with many small players is not advisable either as R&D subsidies are spread too thin among too many companies, each of which is lacking the necessary "critical mass" to achieve major technological breakthroughs.⁴⁴³

A key question is how the gains derived from A&D industry consolidation are divided between taxpayers (through cheaper, more capable weapons) and shareholders (through higher profits). One of the main arguments in favour of defence mergers is that they create efficiencies that will ultimately benefit the consumer, i.e. the government. This is the same yardstick applied by American anti-trust law, which puts the interests of consumers above those of producers by allowing for the creation of very efficient companies, even at the expense of reducing competition. US anti-trust officials have generally taken a benign view of mergers that drive out weaker and less competitive firms, provided that the efficiency gains ultimately benefit the customers. In principle, mergers are only blocked if they cause a "substantial lessening of competition" allowing the merging firms or post-merger market participants to exercise "market power" (either unilaterally or

⁴³⁸ DoJ = Department of Justice

⁴³⁹ FTC = Federal Trade Commission

⁴⁴⁰ (Markusen & Costigan, 1999) p. 29

⁴⁴¹ "During the Cold War, the high level of perceived threat placed a premium on military expertise, which checked the contractors' political influence. Now, without the Soviet threat, contractors have too much influence over defence procurement decisions" (Gholz & Sapolsky, 1999/2000) pp. 16

⁴⁴² Pearlstein (1997)

⁴⁴³ Ibid.

in coordination with each other) to increase prices; lower product quantity, quality or service levels, or to reduce technological innovation in the relevant product and / or geographical markets.⁴⁴⁴

The objective of EU “competition policy” is to establish “a system ensuring that competition in the internal market is not distorted”.⁴⁴⁵ Regarding M&As, the aim is to block “a concentration which creates or strengthens a dominant position as a result of which effective competition in the common market or in a substantial part of it is significantly impeded”.^{446 447} These transatlantic anti-trust law differences have repeatedly led to major economic and political tensions between Washington and Brussels, not least over the BMD merger. Americans view the EC’s restrictive anti-trust approach as an attempt to shield Europe’s companies from globalisation, particularly US competition. Europeans, in turn, charge that Washington is lax about anti-trust enforcement to allow US companies to become dominant global players, which, ultimately, would also threaten the survival of their European competitors. “Where Americans see tough competition, Europe sees unfair competition.”⁴⁴⁸

LMC’s US\$11.6 billion NGC take-over attempt, announced in July 1997, was an important turning point in the US government’s permissive A&D merger policy.⁴⁴⁹ The LMC bid was clearly driven by the BMD merger, which had just received US anti-trust approval.⁴⁵⁰ To allay DoJ fears of an even bigger LMC dominating the defence market, Norman Augustine argued that his company was a “merchant buyer and merchant supplier” that buys from and sells to its competitors.⁴⁵¹ He also emphasised that “size alone is not a factor in anti-trust” and asked regulators to analyse LMC’s competitive position “market by market”.⁴⁵²

In March 1998, DoJ and DoD decided against the LMC / NGC deal since it would reduce A&D competition to unacceptable levels. According to Jacques Gansler, the merger was blocked because of concerns about the anti-competitive effects of vertical integration – with NGC serving as a key subcontractor to Boeing and LMC – rather than horizontal integration.^{453 454} The Clinton

⁴⁴⁴ FTC (24 July 1997)

⁴⁴⁵ Article 3(g), EC Treaty. The Lisbon Treaty repealed this provision. A new legally-binding Protocol on Internal Market Competition states that “the internal market as set out in Article 2 of the Treaty on European Union includes a system ensuring that competition is not distorted”. This thesis is based on the EC Treaty.

⁴⁴⁶ The principles of EU “competition policy” are laid out in Articles 81 to 89 of the EC Treaty.

⁴⁴⁷ The EU’s anti-trust authority covers all “concentrations” with a “Community dimension”. For more details: http://europa.eu/legislation_summaries/other/l26046_en.htm

⁴⁴⁸ Anti-trust expert Eleanor Fox quoted in Pearlstein (1997)

⁴⁴⁹ Chuter (1997)

⁴⁵⁰ Ibid., p. 24

⁴⁵¹ Chuter (1997)

⁴⁵² Warwick (1997)

⁴⁵³ Gansler (2006) p. 14

⁴⁵⁴ Nicoll (1998)

administration's volte-face took many business leaders by surprise and brought the "merger mania" that had gripped the US A&D industry after the end of the Cold War to an abrupt end.⁴⁵⁵

⁴⁵⁵ "The 'Last Supper' in the early 1990s ushered in a period of industry consolidation, and the disapproval of the [LMC / NGC] transaction in the late 1990s was accompanied by statements from senior [government] leaders that further top-level consolidation would be more difficult. Since that time, however, DoD has not given any top-level guidance." Bialos (2009) vol. II, p. 646

3.4 *The race to scale: US aerospace and defence industry consolidation after the Cold War*

“[T]he most powerful DoD actions [in response to the post Cold-War downturn] by far were directed at supporting and subsidising merger and consolidation in the defence industry”⁴⁵⁶. Even before the Clinton administration began to promote A&D consolidation, US companies had already embarked on a path toward an ethnocentrically-concentrated defence industrial base.⁴⁵⁷ An analysis of key M&As in the American defence industry during 1989-1996 – after the end of the Cold War but before the BMD merger – demonstrates that “this merger movement, involving predominantly defence versus commercial acquisitions, did accelerate significantly through 1993 [the year of the Clinton administration’s first BUR] and culminated in a series of mega-mergers in 1994, 1995, and 1996”⁴⁵⁸. In 1991, the total M&A volume in the US defence industry amounted to US\$300 million; by 1993, that figure skyrocketed to US\$14.2 billion; and in 1996, the value of defence M&As topped US\$20 billion.⁴⁵⁹ It is important to emphasise that virtually all of these US transactions were based on ethnocentric consolidation, not international integration.

The US A&D industrial consolidation process can be divided into several “waves”:⁴⁶⁰ 1st wave: M&A activity involving top-tier manufacturers (Boeing, MDC, Lockheed, etc.) leading to the creation of mega-primers; 2nd wave: M&A activity involving lower-tier suppliers (Loral, Hughes Electronics, etc.); 3rd wave: post-merger integration / rationalisation within the “new”, bigger primers and suppliers, notably through restructuring, cost and job cuts, divestitures, etc. Many industry experts also anticipated a fourth “wave” involving major transatlantic M&As between US and European companies, though the exact timeline for such unprecedented moves was seen as very uncertain.⁴⁶¹

The first of the major “pure play” defence M&A deals that would eventually lead to the creation of several US mega-primers took place in 1994, just one year after the famous “Last Supper”.⁴⁶² In April 1994, defence electronics maker Grumman accepted a US\$2.17 billion hostile “market extension” takeover bid by rival Northrop. Having failed in two previous takeover attempts, Northrop CEO Kresa indicated that his company “was under pressure to make an acquisition or face being swallowed by another military contractor”⁴⁶³ – a clear reflection of the “conquer-or-perish

⁴⁵⁶ Oden (1999) p. 75

⁴⁵⁷ *Ibid.*, p. 80

⁴⁵⁸ *Ibid.*, pp. 82-83

⁴⁵⁹ Korb (1996)

⁴⁶⁰ Velocci (1997) p. 44

⁴⁶¹ *Ibid.*, p. 44

⁴⁶² Mintz (July 1997)

⁴⁶³ Sims (1994) p. 6

ethic”⁴⁶⁴ that dominated the thinking of A&D executives in the 1990s. The biggest “pure play” defence link-up was announced in August 1994, when Lockheed and Martin Marietta declared their intention to engineer a US\$10 billion “merger of equals”. Lockheed and Martin Marietta were the second and third largest US defence contractors with 1993 sales of about US\$13.2 billion and US\$9.4 billion, respectively.⁴⁶⁵ LMC posted 1994 revenues of US\$23.5 billion, replacing MDC (US\$13.2 billion turnover) as the world’s #1 defence contractor. Boeing had 1994 sales of US\$21.3 billion and remained the world’s biggest (civilian) aerospace company.⁴⁶⁶

There were four strategic implications of the LMC merger for the rest of the US A&D industry:⁴⁶⁷ First, “consolidation is far from over and the LMC merger is graphic evidence of the direction in which the industry is headed”; second, “more mega-mergers could take place during the next year or two, with some industry officials convinced that they are inevitable”; third, “the more pro-active management’s strategy, the greater the potential rewards”; and fourth, “pressure to become active in the consolidation process will increase enormously, [...] [and] companies that have remained on the sidelines will feel the increased competitive [cost] pressure most”.⁴⁶⁸ In retrospect, all of these predictions turned out to be true. The consolidation process intensified and weak, less competitive firms were generally either bought up or exited the market altogether. In that sense, the LMC deal was just a prelude to the industry’s biggest-ever merger involving Boeing and MDC. As to the “21st century “end game” – that is, the industry’s post-consolidation structure – Velocci made this remarkable statement:

*“[A]n image is emerging of an industry marked by the concentration of vast market and financial power in the hands of a relatively small number of companies. Their political clout will be enormous, given the breadth of their operations scattered among many states, including the most populous one”.*⁴⁶⁹

A&D consolidation in America was also bound to have an impact on other regions of the world, notably Europe. In sharp contrast to their fragmented and often government-controlled European competitors, the emerging US mega-primers were the industry’s dominant technology leaders *and* “clear cost leaders”⁴⁷⁰:

⁴⁶⁴ (Reuters & Bloomberg, 1994)

⁴⁶⁵ Harrison (1995)

⁴⁶⁶ Velocci (1994) p. 36

⁴⁶⁷ Ibid., p. 36

⁴⁶⁸ Norman Augustine referred to “Darwinian times” in the A&D industry. “Failure to change is failure to survive”.

Ibid., p. 36

⁴⁶⁹ Ibid., p. 36

⁴⁷⁰ Velocci (1994) p. 36

“This is crucial because new business will be won as much on costs as on technology differentiation. [American] companies will be more capable than they are now of competing against non-US firms, including those subsidised by governments, and of winning new business based on their ability to deliver high-quality products faster and cheaper.”⁴⁷¹

This quote sums up the fundamental competitive threat the LMC deal and previous as well as expected future US mergers posed to Europe’s A&D industries. As more and more US A&D companies were bought up by the emerging American mega-primers, it became clear that the only way these giants would be able to grow further was to boost their operations / exports abroad. Starting in early 1996, European political and corporate leaders became increasingly worried about the rapid pace of ethnocentric US A&D industrial consolidation, which was seen as a direct threat to the viability and independence of the European industry.⁴⁷² Interestingly, it was the UK that first recognised the problem and began to push for more pan-European A&D industrial cooperation.⁴⁷³

“[T]here is a much greater recognition among European governments that autarky in the defence industry is no longer a practical policy.” [...]

“Although governments, and the companies they are so closely entwined with, can buck worldwide pressures for more efficient production for some time, they cannot do so forever.”⁴⁷⁴

If the Old Continent failed to achieve cross-border A&D consolidation, “the risk is that Europe will obtain increasingly ineffective defence equipment at rising prices”⁴⁷⁵. Furthermore, protectionist “Buy European” instincts were awakened as European industry leaders pushed for a true “two-way street” in terms of transatlantic defence procurement and demanded better access to the US market.⁴⁷⁶ As one analyst commented in mid-1996: “Everyone, it seems, is talking to everyone else about deals, alliances, mergers and trades. Yet while the political manoeuvring is intense, few companies have signed firm deals.”⁴⁷⁷

⁴⁷¹ Ibid., p. 36

⁴⁷² Gray (August 1996)

⁴⁷³ Gray (1995)

⁴⁷⁴ Ibid.

⁴⁷⁵ Ibid.

⁴⁷⁶ BAE only launched its buying spree in the American defence sector in April 2000, well after the BMD merger.

⁴⁷⁷ Gray (August 1996)

3.5 *Boeing, McDonnell Douglas, and the “new” Boeing*

On 15 December 1996, Boeing and MDC announced the creation of the world’s largest A&D company, allowing the world’s biggest civilian aircraft manufacturer (Boeing) to join forces with the world’s largest military aircraft manufacturer (MDC). Both Boeing, founded in 1916, and MDC, which was the result of the 1967 merger between Douglas and McDonnell Aircraft, ranked among America’s best known companies, having manufactured aerospace flagship products such as the 747 “jumbo jet”, the B-52 (Boeing), and the Tomahawk cruise missile (MDC). Boeing’s breakthrough came in WWII, when the company developed the B-17, the backbone of the US strategic bombing campaign. During the Cold War, Boeing was instrumental in building America’s nuclear deterrent through the Minuteman ICBMs⁴⁷⁸. Milestones in Boeing’s commercial aircraft operations include the 1958 jet-powered 707, which triggered massive growth in air travel, and the 747 – introduced in 1969 – which would ultimately become the world’s most profitable aircraft model.

While Douglas was quite successful in the commercial aircraft business (DC-3, DC-8, DC-9 models), its sales began to falter as Boeing expanded its market share in the 1960s. The 1967 MDC merger was designed to balance Douglas weakening commercial operations with McDonnell’s strong defence division (F-101, F-4 and, later on, F-15 and F-18 fighters). The market entry of Airbus in the early 1970s would lead to the gradual replacement of MDC as the world’s second largest commercial aircraft manufacturer by the late 1980s.⁴⁷⁹ Ultimately, as the BMD merger demonstrates, MDC opted to merge with an even bigger company to assure its own survival in the face of increasing competition and declining procurement budgets.

The US\$16.3 billion transaction, the biggest A&D deal ever recorded, was completed on 1 August 1997. In 1997, the “new” Boeing, as the company was initially called, had revenues of US\$45.8 billion.⁴⁸⁰ This figure compares to a combined turnover of Boeing and MDC of US\$35.5 billion the year before and of US\$33.0 billion in 1995. In 1996, the last year before the BMD merger, the “old” Boeing had total revenues of US\$22.7 billion and posted earnings of US\$1.1 billion (4.8 percent operating margin).⁴⁸¹ The year before, Boeing had sales of US\$19.5 billion and net earnings of US\$393 million. In 1996, Boeing’s commercial aircraft division accounted for US\$16.9 billion

⁴⁷⁸ ICBM = Intercontinental Ballistic Missile

⁴⁷⁹ The reasons for Airbus’s growing success included the company’s focus on building an entire family of similarly designed aircraft (thus lowering maintenance costs and making it relatively easy for airlines to assign pilots trained on one Airbus type to other Airbus planes) and the introduction of innovative fly-by-wire technology. The respective global market shares of the manufacturers of large commercial aircraft between 1975 and 1995 evolved as follows: 1975: Airbus 5 percent; Boeing 65 percent; Lockheed 5 percent; MDC 25 percent; 1985: Airbus 20 percent; Boeing 60 percent; Lockheed 0 percent (market exit); MDC 20 percent; 1990: Airbus 25 percent, Boeing: 60 percent; MDC 15 percent; 1995: Airbus 30 percent; Boeing 64 percent; MDC 6 percent. Figures quoted from Kovacic (2001) p. 815

⁴⁸⁰ Boeing (1998) p. 1

(or 75 percent) of total sales. In that sense, Boeing was predominantly a commercial aerospace company. In contrast, defence and space operations – comprising the development and production of military aircraft, helicopters, space and missile systems, rocket engines, mainly through US government contracts⁴⁸² – generated only US\$5.8 billion (25 percent) in revenues.

MDC posted total 1996 revenues of US\$13.8 billion and earnings of US\$788 million (5.7 percent operating margin).⁴⁸³ In 1996, MDC had sales of US\$14.3 billion but suffered a loss of US\$416 million due to the discontinuation of the MD-11. That year, MDC's revenues broke down as follows: military aircraft: US\$8.0 billion (57 percent of sales); commercial aircraft: US\$3.3 billion (24 percent); missiles, space, and electronic systems: US\$2.2 billion (16 percent); and financial services: US\$367 million (2 percent). As of 31 December 1996, Boeing and MDC accounted for 64 percent and 36 percent, respectively, of the combined pro-forma revenues of the “new” Boeing. In terms of the “new” Boeing's combined pro-forma assets, the Boeing and MDC shares were 72 percent and 28 percent, respectively.

The “new” Boeing's dominant position was powerfully summarised in the opening paragraph of its (first post-merger) Annual Report 1997:

*“The Boeing Company, based in Seattle, Washington, is the largest aerospace company in the world, as measured by total sales, and the nation's leading exporter. Boeing is the world's largest manufacturer of commercial jetliners and military aircraft, and the nation's largest NASA [National Aeronautics and Space Administration] contractor. The company's capabilities in aerospace also include helicopters, electronic and defence systems, missiles, rocket engines, launch vehicles, and advanced information and communication systems. The company has and extensive global reach with customers in 145 countries and operations in 27 US states. Worldwide, Boeing and its subsidiaries employ more than 238,000 people.”*⁴⁸⁴

Due to the BMD merger, the commercial aircraft division's total revenue share dropped from 75 to 60 percent, thus enabling Boeing to better balance its cyclical commercial aircraft activities with MDC's more stable military aircraft business. As the “new” Boeing leaders Phil Condit and Harry Stonecipher put it, “We have the confidence of knowing that when one market is down, another is likely to be up.”⁴⁸⁵ It was this ability to balance commercial and military operations that – along

⁴⁸¹ (Boeing & MDC, 1997) p. 13

⁴⁸² Ibid., p. 6

⁴⁸³ Ibid., p. 14

⁴⁸⁴ Boeing (1998) p. I

⁴⁸⁵ Ibid., p. 4

with Boeing's sheer size and corresponding economies of scale – threatened to give the US giant a decisive competitive advantage over Europe's fragmented A&D industry and its crown jewel Airbus: "We have created the world's largest aerospace company. Now we must prove that this giant new bird will fly farther, faster, higher – and more efficiently – than anything else in the aerospace world. And we will."⁴⁸⁶

For Boeing, the MDC acquisition was a major strategic step designed to make the company less vulnerable to the volatile market conditions in the commercial aerospace sector. Indeed, Boeing's mantra – "when one market is down, another is likely to be up" – is generally true. After 9/11, the commercial aircraft market collapsed as airlines struggling with falling demand for air transport slashed orders and / or went into chapter 11 bankruptcy protection. Boeing's commercial aircraft division was severely hit by the economic fall-out from the 9/11 attacks. The company's defence division, however, received a major boost from the massive post-9/11 increases in the Pentagon's procurement and operations budget as part of the Bush administration's "global war on terror", thus helping to stabilise the company at a time of weak commercial sales. In that sense, Boeing's decision to acquire MDC and become a diversified commercial and military aerospace company was definitely a smart move.

The sharp rise in Boeing's 1997 revenues (+ US\$10 billion) was due to its booming commercial aircraft and information / space / defence systems divisions, as well as Boeing's US\$3.1 billion acquisition of Rockwell's A&D activities in 1996. Boeing's Commercial Airplane Group – its biggest and most important division – had revenues of US\$26.9 billion in 1997 (60 percent of total turnover), compared to US\$19.9 billion (56 percent) the year before; a stunning increase of about US\$7 billion (35 percent). The overall number of commercial aircraft delivered by Boeing rose even stronger, from 271 units in 1996 to 375 units in 1997 – an increase of 39 percent – although one must not forget that the 1996 delivery figures were exceptionally weak compared to surging archrival Airbus. As will be explained in more detail below, Airbus managed to gain crucial ground on Boeing during the 1990s and early 2000s, thus eventually overtaking it both in terms of commercial aircraft orders and deliveries. Also, while Boeing's turnover increased sharply, the company's profitability was disappointing. Due to a US\$3 billion pre-tax charge in 1997 primarily related to production problems in Boeing's (post-merger) commercial aircraft business, that division swung from a profit of US\$956 million in 1996 to a loss of more than US\$1.8 billion in 1997, causing Boeing to suffer a net loss (-US\$178 million) for the first time in 50 years. Boeing's R&D expenditures amounted to US\$1.9 billion (4.1 percent of turnover) in 1997 and US\$1.6 billion

⁴⁸⁶ Ibid., p. 3

(4.5 percent of revenues) in 1996.⁴⁸⁷ In 1997, Boeing’s workforce amounted to about 238,000, compared to 211,000 in 1996 and 169,000 in 1995.

In the three decades prior to the 1997 BMD merger, Boeing had established a commanding global leadership position in the commercial aircraft business. That being said, it also became clear that Boeing’s supremacy was increasingly challenged by Europe’s Airbus. During 1992-2004 in particular, Airbus was gaining ground on Boeing as it came closer to and finally exceeded its long-term goal of capturing 50 percent of the world’s 100-seat-plus commercial aircraft market. The following statistics clearly illustrate the absolute and relative rise of Airbus vis-à-vis Boeing:⁴⁸⁸

Year	Aircraft Deliveries			New Orders		
	Boeing	Airbus	Ratio	Boeing	Airbus	Ratio
1992	572	157	3.64:1	266	136	1.96:1
1997	375	187	2:1	543	460	1.18:1
1999	620	294	2.11:1	355	476	1:1.34
2000	491	311	1.53:1	588	520	1.13:1
2004	281	305	1:1.09	272	370	1:1.37

In 1992, Boeing delivered 572 aircraft vs. 157 units for Airbus. That year, Boeing recorded 266 orders compared to 136 for Airbus. Whereas in 1992 Boeing held an 3.64 : 1 lead over Airbus in terms of deliveries, the corresponding figure for incoming orders was merely 1.96 : 1. While in the short term, aircraft deliveries are a much better indicator of an aerospace company’s performance, it is incoming aircraft orders that are generally the best indicator of how that company will fare in the future. After all, today’s aircraft orders are tomorrow’s aircraft deliveries – various degrees of order “firmness” and escape clauses notwithstanding.⁴⁸⁹ In 1997, Boeing and Airbus delivered 375 and 187 aircraft, respectively, yielding a 2 : 1 lead ratio for the Americans. That year, Boeing received 543 orders vs. 460 for Airbus, translating into an even smaller lead ratio of just 1.18 : 1.

In 1999, Boeing delivered 620 aircraft (a figure boosted by the MDC merger), while the Airbus figure stood at just 294. Boeing was temporarily able to slightly widen its lead over Airbus in terms of unit deliveries to 2.11 : 1. However, that same year, Airbus managed for the first time to secure more aircraft orders than Boeing, beating its archrival 476 vs. 355 units and giving the European challenger a 1.34 : 1 lead ratio. In 2000, Boeing delivered 491 aircraft vs. 311 for Airbus, a lead ratio reduced to 1.58 : 1. With 588 new orders that year, Boeing just narrowly managed to reclaim

⁴⁸⁷ Boeing (1998) p. 1

⁴⁸⁸ Airbus order and delivery figures: http://www.airbus.com/en/corporate/orders_and_deliveries/ Boeing order and delivery figures: <http://active.boeing.com/commercial/orders/index.cfm>

⁴⁸⁹ “In the last few years, Airbus and Boeing have repeatedly disputed market share-related statistics as well as the definition of firm orders, options, commitments, and letters of intent.” Sparaco (March 1998) p. 49

its leadership position compared to 520 new aircraft orders for Airbus (1.13 : 1 lead ratio for Boeing). Finally, by 2004, Airbus had firmly secured its long-term goal of capturing 50 percent of the world's large commercial aircraft market: Airbus delivered 305 aircraft vs. 281 for Boeing (a near-parity lead ratio of 1.09 : 1) and received orders for 370 planes vs. Boeing's 272 (a lead ratio of 1.37 : 1). Since 2003 Airbus has persistently outperformed Boeing in terms of new aircraft deliveries.

The rise of Airbus is also very impressive when one analyses the financial performance figures for the 1992-2004 period.⁴⁹⁰ In 1992, Airbus had an annual turnover of US\$ 7.7 billion while new orders amounted to US\$9.8 billion. By 1997, Airbus's turnover had increased to US\$11.6 billion while its incoming orders soared to US\$ 29.6 billion. Boeing's corresponding commercial aircraft turnover in 1997 was US\$27.0 billion (giving it a 2.33 : 1 lead ratio) while new orders totalled US\$39.1 billion (Boeing lead ratio of 1.32 : 1). In 1999, Airbus's revenues reached US\$16.7 billion while new orders totalled US\$30.5 billion. The corresponding Boeing 1999 commercial aircraft revenue figure was US\$38.5 billion (thus reducing Boeing's lead ratio to 2.30 : 1). In 2000, the Airbus turnover amounted to US\$17.2 billion, with new orders totalling US\$41.3 billion. The corresponding 2000 commercial aircraft revenue figure for Boeing was US\$31.2 billion, thus further eroding the American company's lead ratio over Airbus to 1.81 : 1. By 2004, Airbus revenues had reached EUR20.2 billion (US\$27.5 billion)⁴⁹¹ while new orders totalled US\$34.4 billion. The corresponding turnover figure for Boeing's commercial aircraft group that year was US\$21.0 billion, giving Airbus a 1.31 : 1 lead ratio over its archrival.

All of the metrics highlighted above paint the same picture of a rising European Airbus challenger gaining ground and eventually overtaking long-time US hegemon Boeing in the world's commercial aircraft market during the 1992-2004 time frame; that is in the run-up to, during, and after the BMD merger:

“Over the past ten years, the [Boeing] Company (including [MDC]) has maintained, on average, approximately a two-thirds share of the available commercial jet aircraft market. Airbus Industrie is an aggressive competitor seeking to increase market share. This market environment has resulted in intense pressures on pricing and other competitive factors.”⁴⁹²

⁴⁹⁰ All Airbus figures are based on the company's 1989-2008 results available at: <http://www.airbus.com/en/airbusfor/analysts/>. The Boeing figures are compiled from Annual Reports.

⁴⁹¹ EUR1 = US\$1.36 (31 December 2004)

⁴⁹² Boeing (2000)

To compensate for the rise of Airbus, “Boeing set out to build a position of leadership in information, space, and defence markets comparable to the one [...] [it had] long held in commercial aircraft”⁴⁹³. The BMD merger was therefore an important milestone towards creating a “new” Boeing which would be more diversified and better able to weather the ups and downs of the commercial and defence aircraft businesses:

*“Based on 1997 results, it is clear that the new combined company has, indeed, achieved a position of enormous breadth and strength in the targeted areas [...] [which promise a] tremendous future for Boeing in information, space and defence.”*⁴⁹⁴

Boeing’s Information, Space, and Defence Systems (ISDS) division comprises the development and production of fighter, bomber, and military transportation aircraft, helicopters, as well as missile systems. In 1997, ISDS had revenues of about US\$18.1 billion – accounting for 40 percent of total turnover⁴⁹⁵ – and an operating profit of US\$1.3 billion (7.3 percent margin). Key ISDS programmes include the F/A-18E/F and F-22 fighters, the C-17 Globemaster III airlifter, the Apache and Comanche helicopters, the V-22 Osprey, the AWACS-equipped⁴⁹⁶ Boeing 767, the Space Shuttle (in a joint venture with LMC). The ISDS group was highly diversified, with no single program accounting for more than 15 percent of total division revenues during the 1995-1997 timeframe. A high degree of diversification in its stable defence business provided the “new” Boeing with an additional hedge against its cyclical commercial aircraft business.

A look at the evolution of Boeing’s revenue mix during 1996-2004 clearly illustrates the growing importance of the company’s defence activities. After the share of military sales had temporarily dropped to 33 percent (due to a strong increase in commercial aircraft sales), Boeing managed to bring that figure back to 40 percent in 2000. In 2002, as the Bush administration’s post-9-11 defence spending began to kick in, the share of Boeing’s defence-related revenues rose to 46 percent. In 2003, that share increased to 54 percent while in 2004 it even reached 58 percent.⁴⁹⁷ Within eight years, Boeing had transformed itself from an aerospace company heavily dependent on commercial sales (75 percent in 1996) to one where defence operations constituted the majority of its revenues (58 percent in 2004).

⁴⁹³ Ibid., p. 24.

⁴⁹⁴ Ibid., p. 24.

⁴⁹⁵ Boeing’s 1997 ISDS sales broke down as follows: USAF: 30 percent; Navy: 18; NASA: 15; Army: 6; other: 9; exports: 22.

⁴⁹⁶ AWACS = Airborne Warning and Control System

⁴⁹⁷ Boeing (2005) pp. 38-47

Prior to Boeing's take-over, MDC experienced major problems with its commercial aircraft division (DAC)⁴⁹⁸. By 1996, DAC's share of new orders world-wide had dropped to only four percent.⁴⁹⁹ Airlines who had previously been DAC customers were increasingly switching to Boeing and Airbus. Furthermore, DAC received no orders for its newly developed MD-95 aircraft. Three reasons accounted for DAC's weak position:⁵⁰⁰ First, the "lack of a full family of aircraft"; second, "customer and marketplace uncertainty as to the future of DAC"; and three, "investment in product development at levels significantly below competition": In sum, "[MDC] never really had a chance at survival. In an industry which increasingly favours consolidation, a niche player with inadequate new aircraft development plans was doomed for some time".^{501 502}

MDC considered several options to improve DAC's performance, including "strategic alliances" with non-US companies which could provide fresh capital and access to new markets; major internal investments (estimated cost: up to US\$15 billion)⁵⁰³ in DAC's infrastructure and product development enabling it to build a full family of aircraft which could then successfully compete against Boeing and Airbus; positioning DAC as a niche player in the commercial aircraft business; the sale of DAC; and, finally, shutting down DAC's development and production unit while keeping the spares business.⁵⁰⁴ On the defence side, MDC had also lost out in the early stages of the Pentagon's US\$200 billion Joint Strike Fighter (JSF) programme, the largest military acquisition programme in history.⁵⁰⁵ MDC's weak commercial and military aircraft market positions in 1996 cast serious doubts on the firm's longer-term ability to survive as an independent A&D company. While MDC considered the option of entering into "strategic alliances" with non-US partners to prop up its commercial aircraft division, there are no indications that the company contemplated a full-fledged *merger* with a European / foreign which would also include its sensitive defence operations.

Boeing and MDC had held exploratory talks about a potential strategic alliance and even a full-blown merger as early as 1994-1995.⁵⁰⁶ However, given the uncertain market outlook for both commercial and military aircraft at the time, the two firms failed to narrow their differences over

⁴⁹⁸ DAC = Douglas Aircraft Corporation

⁴⁹⁹ (Boeing & MDC, 1997) p. 35

⁵⁰⁰ *Ibid.*, p. 35

⁵⁰¹ Aboulafia (1998) p. 43

⁵⁰² From the US perspective, "European subsidies to Airbus had a direct impact on the exit of [MDC] from the market as an independent [large civil aircraft] manufacturer and its subsequent merger with Boeing." Commission on the Future of the United States Aerospace Industry (2002) p. 6-19

⁵⁰³ (Boeing & MDC, 1997) p. 35

⁵⁰⁴ *Ibid.*, pp. 35-36

⁵⁰⁵ For cynics "JSF" denotes "Jointly Spent Fortune". *The Economist* (July 2002)

⁵⁰⁶ For an account of the BMD merger talks, see (Boeing & MDC, 1997) pp. 25-29.

MDC's precise valuation. MDC forecast strong sales and earnings growth and therefore demanded that Boeing pay a 30-percent premium on its share price. Since Boeing offered only a 10-percent premium the talks were terminated in December 1995. In mid-September 1996 – following DAC's dismal performance in the commercial aircraft business – MDC CEO Stonecipher approached his Boeing counterpart Condit to see whether there was still interest in a full-scale merger. While Condit rejected new merger talks, the Boeing and MDC executives in charge of the commercial aircraft divisions started discussions on a collaborative agreement which would allow Boeing to utilise MDC engineers for the design and development of its planned future wide-body aircraft. The talks progressed very quickly and on 3 December 1996, the two companies announced their “strategic collaboration” on commercial aircraft to the public.⁵⁰⁷

Just three days later, Condit called Stonecipher to tell him that Boeing was interested in a merger with MDC after all. Apart from the “strategic collaboration” agreement, it was the on-going consolidation in the US A&D industrial base in the fall of 1996 which played an important role in reversing Boeing's initial rejection of a merger with MDC.⁵⁰⁸ Boeing offered a simple stock-for-merger deal with a 21-percent premium to MDC's closing share price on 13 December, the last trading day before the planned merger. This 21-percent premium compromise was roughly half-way between the 30-percent and 10-percent premiums demanded / offered by MDC and Boeing a year earlier. On 10 December, Condit and Stonecipher hammered out a preliminary merger agreement spelling out the key terms of their planned deal. Four days later, Boeing and MDC held special board meetings and approved the merger:⁵⁰⁹

“The Boeing board believes that the merger represents a unique opportunity to create a stronger company with a broader base of defence and space product programs and international businesses opportunities, and that in the current environment of declining defence spending and industry consolidation, the deal was deemed to be of critical strategic importance to Boeing's efforts to position itself as an effective competitor in the coming years. [...] In addition, the merger would enable Boeing to achieve its strategic goal of balancing its commercial aviation business (which now represents almost three-fourths of its overall business) with a larger defence and space business.”⁵¹⁰

⁵⁰⁷ Ibid., p. 27

⁵⁰⁸ Ibid., p. 27

⁵⁰⁹ For a description of the factors considered by Boeing and MDC in weighing the BMD merger's pros and cons, see Ibid., pp. 28-38.

⁵¹⁰ Ibid., p. 30

Furthermore, Boeing hoped to leverage MDC's military division for its JSF bid and anticipated synergies from the two companies' space units. Boeing (like MDC), also took a variety of "material factors" into account when weighing the pros and cons of the BMD merger, including the industry, economic and market dynamics at the time, the due diligence reviews regarding, the ability to obtain regulatory approval for the merger, etc.⁵¹¹

*"The [MDC] Board believes the merger offers [MDC] and its shareholders an opportunity to participate in the creation of a leading [A&D] company which can provide the critical mass and economies of scale necessary to compete effectively in the current global business environment. The [MDC] Board believes that the combined revenues of [MDC] and Boeing, the potential for significant cost savings, the complementary nature of their respective businesses, and the increased geographic presence and expanded contribution to the US industrial base that would result from the merger are compelling reason for the combination of [MDC] and Boeing."*⁵¹²

MDC recognised that it was under severe pressure to respond to recent M&A deals by two of its competitors (LMC and Raytheon) that, "within the past two years, [had] consummated or entered into agreements to consummate transactions significantly increasing their size"⁵¹³. On the commercial aircraft side, MDC reasoned that the BMD merger provided the best opportunity for its engineers to apply their know-how across the full range of the "new" Boeing's commercial aircraft family.

Following approval by the Boeing and MDC boards on 14 December 1996, the BMD merger was made public the following day. The only remaining obstacle to the creation of the world's largest A&D company was the necessary regulatory anti-trust approval by the FTC and the EC⁵¹⁴. As was already discussed in Chapter 1, the US and European governments have repeatedly accused each other of providing unfair direct and indirect government support (R&D launch aid in the case of Airbus, military to commercial spill-over benefits in the case of Boeing) to their respective commercial aerospace champions. While the EU-US Aircraft Agreement of July 1992 had provided a temporary fix and averted a transatlantic trade war, it became quite clear that the BMD merger reviews risked reviving the underlying tensions between Europe and America.

⁵¹¹ For the "material factors" considered by Boeing and MDC, see *Ibid.*, pp. 30-31 and pp. 36-38.

⁵¹² *Ibid.*, p. 35

⁵¹³ *Ibid.*, p. 35

⁵¹⁴ *Ibid.*, pp. 48-50

Boeing and MDC informed the FTC and the EC of their merger on 29 January and 18 February 1997, respectively.⁵¹⁵ The FTC – advised by DoD and DoJ – received millions of pages of documents from the two companies and conducted numerous interviews during its inquiry.⁵¹⁶ The EC reviewed thousands of pages of documents and only conducted a small number of interviews.⁵¹⁷ Throughout the anti-trust investigations, FTC and EC officials exchanged views and information to keep each other abreast of their deliberations. On 21 May 1997, the EC released a statement highlighting its objections to the BMD merger with regard to, *inter alia*, increased concentration in the international commercial aircraft market, the combination of patent portfolios as well as the potential technological spin-off effects from MDC’s government-funded R&D and space programs on Boeing’s commercial activities.⁵¹⁸ On 26 June, the EC informed the FTC about its concerns regarding the potential anti-competitive impact of the BMD merger on the large commercial aircraft market.

The FTC announced on 1 July after a 4-1 vote that “no further action is warranted [...] at this time” and that it would therefore approve the BMD merger without any conditions.⁵¹⁹ The four FTC Commissioners who voted for the BMD merger gave two reasons for their decision. First, they believed that MDC’s commercial aircraft division DAC was no longer “a meaningful competitive force” due to its inability to match either of its rivals Boeing and Airbus in terms of “new product lines, production facilities, company infrastructure, or research and development”.⁵²⁰ Second, the FTC concluded that the BMD merger “does not threaten competition in military programs” since “there are no current or future procurements of fighter aircraft by the [DoD] in which the two companies would likely compete”.^{521 522} The only dissenter was Commissioner Azcuenaga:

“The horizontal combination of two of the three firms in the [commercial aircraft] market appears to present a rather straightforward case for a challenge by the Commission. Absent action by the Commission, the merger will eliminate one of three firms in a highly concentrated market in which entry is difficult and unlikely.”^{523 524}

⁵¹⁵ For a chronological overview of the US/EU BMD merger review, see Kovacic (2001) p. 817.

⁵¹⁶ The BMD merger triggered “one of the most detailed and wide-ranging investigations in the history of merger enforcement”. FTC (24 July 1997)

⁵¹⁷ Kovacic (2001) p. 825

⁵¹⁸ For Boeing’s response to the Statement of Objections issued by the EC on 21 May 1997, see Boeing (1997).

⁵¹⁹ FTC letter (1997)

⁵²⁰ Kovacic (2001) p. 828

⁵²¹ *Ibid.*, p. 830

⁵²² “Boeing and [MDC] viewed the transaction from the outset as fundamentally a defence merger in which the parties had complementary strengths and few horizontal overlaps.” (Boeder & Dorman, 2000) p. 2

⁵²³ FTC (1 July 1997)

⁵²⁴ Market entry is easy if it is “timely, likely and sufficient in its magnitude, character and scope to deter or counteract the competitive effects of concern”. FTC / DoJ’s horizontal merger guidelines quoted in FTC (24 July 1997).

After the Americans realised in late June that the EC was seriously considering either blocking or requiring substantial changes to the proposed BMD merger (i.e., forcing Boeing to shed DAC) high-level Clinton administration officials turned the heat on Brussels and disputed the EC's legal basis for imposing certain anti-trust restrictions.⁵²⁵ ⁵²⁶ US anti-trust czar Joel Klein confirmed that he met with EC representatives (including Competition Commissioner Karel van Miert) during the final stages of the review process "during which we [American government officials] explained how an EU prohibition of the merger could harm important US interests".⁵²⁷ President Clinton threatened to retaliate against the EU through a formal WTO complaint or the imposition of unilateral US trade sanctions if Brussels were to block the merger.⁵²⁸ ⁵²⁹ Vice President Gore vowed that Washington would take "whatever action is appropriate" to prevent the EU from impeding the BMD merger⁵³⁰ and also warned of direct retaliation against European firms.⁵³¹ Finally, the House and Senate passed resolutions in July 1997 condemning the EU's "unwarranted and unprecedented interference" in the merger of two American firms. Congress went on to charge that the EU's potential blocking of the BMD merger was designed "to gain an unfair competitive advantage for Airbus" and that the related transatlantic tensions "could threaten to disrupt the overall relationship between the EU and the [US]".⁵³²

It was obvious that the BMD merger was not a "normal" business transaction, but that "EU and US government leaders [viewed it] as a sensitive adjustment in the political and economic order and were certain to follow its passage through the regulatory process attentively".⁵³³ ⁵³⁴ Boeing and MDC did recognise that they would need to comply with the EC's anti-trust review before consummating the proposed BMD merger.⁵³⁵ However, "it seem[ed] equally clear that underpinning Boeing's [EC] strategy was a wait-and-see approach in hopes that US government lobbying would win the day for the company without having to make more [anti-trust] concessions

⁵²⁵ Phil Condit refused to shed DAC, calling such a move "extremely disadvantageous". The Clinton administration backed Boeing's position, arguing that only the country with direct jurisdiction over the BMD merger (the US) could impose such important restrictions. Morocco (July 1997)

⁵²⁶ Some American anti-trust law experts believed that "Action by the EC to block the merger or interfere with existing contracts between Boeing and US customers [...] would be contrary to well-established principles of international comity". This narrow US-centric anti-trust approach is mistaken. "Although EU approval is not a formal part of the US merger process, under a 1991 agreement the US recognizes the [EC]'s right to review such mergers owing to their potential impact on the European marketplace." AWST (Aviation Week & Space Technology) (28 July 1997) p. 18

⁵²⁷ Kovacic (2001) p. 826

⁵²⁸ Coleman (1997)

⁵²⁹ Washington considered imposing punitive tariffs on European airplanes and limiting the number of flights between the US and France. (Pearlstein & Swardson, 1997)

⁵³⁰ (Skapinker & Tucker, 1997)

⁵³¹ Kovacic (2001) p. 826

⁵³² House (1997) and Senate (1997)

⁵³³ Kovacic (2001) pp. 816-817

⁵³⁴ "If the [FTC] says yes and the [EC] says no, or fines Boeing, it will no longer be a Boeing-EC issue. I think that would elevate it to a trade issue between the [US] and Europe." Boeing spokesperson quoted in AFP (1997).

⁵³⁵ (Boeing & MDC, 1997) p. 49

than were absolutely necessary.” The close ties and coordination between Boeing and the Clinton administration were not lost on the Europeans. As Commissioner Van Miert put it, “Boeing is a private company but it seems to behave as if it were a public one.”⁵³⁶ Airbus Managing Director Jean Pierson came out strongly against the BMD merger:

*“The proposed [BMD] merger agreement is a new attempt to force Europe, not only Airbus, to remain a marginal competitor and to monopolise the [commercial transport] market.” [...] “This is an undertaking whose aim it is to undo more than 25 years of joint European efforts against US hegemonic will, known as monopoly.”*⁵³⁷

On 30 July 1997, the EC approved the BMD merger under certain conditions, notably that Boeing abandon its existing 20-year exclusivity agreements with American, Delta, and Continental airlines.⁵³⁸ Key to the EC’s decision was the view that Boeing’s 60-plus-percent market share of the commercial aircraft business already constituted a “dominant market position”. An unrestricted BMD merger would have entrenched Boeing’s market dominance and threatened Airbus’s survival.⁵³⁹ While the FTC considered Boeing’s exclusivity deals “potentially troubling”, it argued that they concerned “only about 11 percent” of the world’s commercial aircraft market. Boeing agreed to comply with the EC’s anti-trust conditions.⁵⁴⁰ ⁵⁴¹ The EC acknowledged that it had taken into consideration concerns voiced by DoD and DoJ to the effect that a blocking of the BMD merger “could harm important US defence interests”.⁵⁴² The EC ultimately decided to focus on the commercial aircraft market and dropped its concerns about potential technological spin-off effects from MDC’s government-funded R&D and space programs on Boeing’s commercial activities. Even though a transatlantic trade war was ultimately averted, the massive threats and accusations by political leaders in America and Europe during the BMD merger’s anti-trust review certainly left a bitter aftertaste on both sides of the Atlantic.⁵⁴³ On the one hand, many Americans believed that the EC decision was driven by “naked economic nationalism”⁵⁴⁴ to shield Europe’s heavily subsidised Airbus consortium from international competition.⁵⁴⁵ On the other hand, many Europeans saw the

⁵³⁶ Morocco (July 1997)

⁵³⁷ Sparaco (June 1997) p. 20

⁵³⁸ EC (1997)

⁵³⁹ Kovacic (2001) pp. 832-833

⁵⁴⁰ If Boeing had ignored the EC ruling and proceeded with the BMD merger, Brussels could have imposed a fine equal to 10 percent of the merged company’s annual turnover.

⁵⁴¹ See Morocco (July 1997) for Boeing’s other concessions to comply with the EC ruling.

⁵⁴² EC (1997) paragraph 12

⁵⁴³ “This is not the first time that a foreign government has insisted upon adjustments in a merger involving US companies. It *is* the first time that you have so dramatic a difference in opinion about whether intervention was appropriate. That’s what made this one different.” Kovacic quoted in (Gavacs & Gee, 1997).

⁵⁴⁴ Kovacic (2001) p. 808

⁵⁴⁵ “Based on comments by [Commissioner Van Miert], it was clear from the outset that the [EU] viewed the proposed merger in a political as well as a competitive context. [...] At the centre of the controversy were the exclusive, long-term

FTC's unconditional approval of the BMD merger as clear proof of a political fix by the Clinton administration and a brazen assault on key European economic interests.⁵⁴⁶

contracts that Boeing signed with American, Continental, and Delta airlines. They had nothing to do with unfair competition or anti-trust issues. [Airbus] fought for the same block of business. [...] By forcing Boeing to compromise on the principle of tough but fair competition, the EU effectively penalised Boeing for the inability of Airbus to make greater inroads in the US market. Basically, the EU used anti-trust arguments as a blatant smoke screen for pursuing protectionist policies." AWST (28 July 1997) p. 78

⁵⁴⁶ President Chirac applauded the EC's intervention in the BMD merger review and expressed concern that the proposed transaction "could be extremely dangerous for [Europe's]" economic / strategic interests. (Ernsberger, Jr., Warner, & Theil, 1997). German Economics Minister Rexrodt also backed the EC. Reuters (1997)

Chapter 4: The EADS Merger

4.1 *Aerospace and defence industrial consolidation, collaboration, and competition in Europe*

The purpose of this chapter is three-fold. First, it puts the EADS merger in the wider historical context of A&D industrial consolidation, collaboration, and competition in Europe. Second, it provides an overview of EADS and its three founding companies at the time of the 1999 merger agreement. Finally, this chapter contrasts the different approaches adopted by Europe's major powers – France, Germany, and the UK – in dealing with their respective A&D companies and analyses how the interplay with each country's foreign and security policy has shaped this strategic industry sector. By the early 1990s, the A&D industries in France, Germany, and the UK had already gone through successive rounds of national consolidation in the 1960s, 1970s, and 1980s culminating in the creation of different “national champions”. These previous rounds of national consolidation as well as the various attempts at (European) cross-border mergers and collaborative schemes provide the relevant historical context for the EADS merger during the post-Cold War era. The shadow of the past was an important factor since those who occupied top positions in the aerospace sector in the 1990s had learned their jobs during the 1960s and 1970s.⁵⁴⁷

The earlier national consolidations and international collaboration efforts were driven by the increased technological sophistication and exponentially rising development costs of both civil and military aircraft. In addition, strong US competition also demonstrated the limits of the fragmented and dispersed European aerospace industry. Given the significant control and influence exerted by national governments over their respective domestic A&D companies – through direct shareholdings, defence procurement decisions, anti-trust policies, export controls, etc. – M&As in this important sector were often initiated and had to be approved by the relevant government authorities. However, the creation of national A&D champions also had its downsides:

“[T]he lack of competition between defence contractors, the cosy relationship between industrial managers, civil servants and military personnel, the weakness of cost control, and the inefficiency of much defence research and development and production”⁵⁴⁸.

Governments had to make careful decisions about whether they believed that either increases in scale (consolidation) or the intensification of competition among different (national) A&D groups would eventually result in greater production and R&D cost savings. Government and business leaders also had to weigh the potential costs and benefits of pursuing national vs. international /

⁵⁴⁷ “Efforts by the European governments to shape the structure of their aeronautics industries have been aimed at consolidation and international collaboration since the end of [WW] II.” GAO (1994) p. 4

⁵⁴⁸ (Walker & Gummett, 1989) p. 422

transnational R&D and production strategies. By the early 1990s, “the numerous aircraft and engine manufacturers that existed during the 1940s and 1950s in France, Germany, and the [UK] had been narrowed down to five major civil aircraft and engine manufacturers [...] through mergers, takeovers, and bankruptcies”⁵⁴⁹. The UK and Germany ultimately chose scale over competition. After successive rounds of consolidations following WWII, both countries had only one (privatised) national A&D champion (in terms of aircraft makers) left by the early 1990s: BAe and DASA. France’s situation was more complex as Paris decided to maintain two A&D groups (in terms of aircraft makers): the bigger, government-owned Aérospatiale and the smaller, partly government-owned but family-controlled Dassault Aviation. In the aircraft engine business, too, only two independent European manufacturers remained: France’s government-owned SNECMA⁵⁵⁰ and the UK’s Rolls Royce.

The following section highlights the national consolidation as well as the international collaboration of the A&D industries in France, Germany, and the UK up to the early 1990s. Despite certain differences between their industrial policies – France’s was more *dirigiste* – both the British and French governments essentially agreed on the same overall strategic objectives following WWII: first, the aerospace industry should be under governmental control; second, the government should provide R&D grants to boost the technological sophistication and innovation capacity of their respective national aerospace companies; finally, Paris and London recognised that they would need to consolidate their national aerospace industrial bases to gain competitiveness vis-à-vis the dominant US rivals.

After WWII, France’s aeronautics industry was highly fragmented, comprising several small, independent aircraft and engine manufacturers.⁵⁵¹ Following a first round of industry consolidation during the 1950s, Paris encouraged the emerging regional, partially state-owned champions to pursue a sectoral aerospace industrial specialisation during the 1960s, ranging from civil and military transport aircraft to helicopters, ballistic missiles as well as business and combat aircraft. France’s “big bang” occurred in 1970, when the French government initiated the merger of three (partially) state-owned aerospace companies⁵⁵² to create “national champion” Aérospatiale. While Paris subsequently made several attempts to merge Aérospatiale and Dassault, the latter has to this day maintained its corporate identity and managerial independence.⁵⁵³ In the aircraft engine business, France’s SNECMA, founded in 1945, did extremely well. By the 1990s, it had become a

⁵⁴⁹ GAO (1994) p. 4

⁵⁵⁰ SNECMA = Société Nationale d’Étude et de Construction de Moteurs d’Aviation

⁵⁵¹ GAO (1974) pp. 18-21

⁵⁵² Sud Aviation, Nord Aviation, SEREB

major player on that highly concentrated and competitive market, along with America's GE and P&W (Pratt & Whitney) as well as the UK's Rolls-Royce. In sum, "France has a far more vertically integrated aerospace industry than any other European country has, with market leaders in civil and military engines and avionics, weaponry, aerostructures, and other subcomponents."⁵⁵⁴

While Germany had the world's most advanced aeronautics industry at the end of WWII, West Germany was not allowed any aeronautics R&D and production capacities until 1955.⁵⁵⁵ Shortly afterwards, many of the often family-owned aeronautics companies re-entered the aircraft business. In the 1960s, the West German government pushed for aerospace industry consolidation, threatening to withhold any future federal defence procurement contracts from those companies opposed to industry consolidation. The strategy worked and by the end of the decade the number of major German aeronautics companies had been reduced to four: MBB (Messerschmitt-Boelkow-Blohm), Germany's dominant aircraft firm, VFW-Fokker, Dornier, and engine manufacturer MTU (Motoren und Turbinen Union). The "big bang" occurred in 1989, when Daimler-Benz AG, Germany's biggest industrial company, set out to form "national champion" DASA by combining the activities of MBB, Dornier, MTU, and electronics company TST. DASA was now both Germany's only large civil aircraft manufacturer, its only combat aircraft maker (in cooperation with international partners), as well as the country's biggest aircraft engine manufacturer.

In the UK, there existed about 70 different aircraft and aircraft engine manufacturers at the end of WWII.⁵⁵⁶ By the early 1960s, numerous M&As as well as bankruptcies had consolidated the UK aerospace industry into just two major players: Hawker Siddeley and BAC. The UK's "big bang" to create the country's national A&D champion occurred in 1977, when London nationalised Hawker Siddeley and BAC to create BAe. In 1981, the Thatcher government partially privatised BAe and sold a 51.57 percent stake in the company, before shedding its remaining shares in 1985. To this day, however, London retains a £1 "Golden Share" in BAE to retain control over the company's strategic decisions.⁵⁵⁷ On the aircraft engine side, Rolls-Royce was able to establish itself as the leading UK manufacturer by 1966.

The A&D industry's ethnocentric consolidation in France, Germany and the UK beginning in the 1950s and 1960s was accompanied by numerous attempts to foster international collaboration on

⁵⁵³ Paris transferred its 45.76 percent stake in Dassault to Aérospatiale in 1998 and subsequently to EADS.

⁵⁵⁴ Aboulafia (2001)

⁵⁵⁵ GAO (1994) pp. 29-31 and Milosch (2006) pp. 132-135

⁵⁵⁶ GAO (1994) pp. 40-41

civil and military aircraft manufacturing, involving both European countries and America, through NATO.⁵⁵⁸ At the time, US companies controlled 70 to 80 percent of the world's non-Communist civilian and military aircraft sector. Given the fragmented nature of Europe's aerospace markets and industries, European companies found it very hard to compete successfully against their bigger and more advanced US competitors. In civil aircraft manufacturing, international collaboration was largely driven by exponentially rising R&DP costs.⁵⁵⁹ The costs for launching a new large commercial aircraft (measured as the proportion between launching cost to the manufacturer's equity)⁵⁶⁰ and the "average aircraft manufacturing costs per seat" rose dramatically between 1936 and 1991, more than quadrupling from around US\$65,000 to US\$275,000 per seat between 1970 and 1991 alone.⁵⁶¹

In contrast to US aircraft manufacturers, which could rely on their vast, largely protected domestic market to offset rising R&DP costs, "the list of unsuccessful commercial aircraft built by individual [European] countries grew to be a long one"⁵⁶² (France's Languedoc, the Dutch-German VFW-Fokker 614, the UK's de Havilland Comet, etc.). The few (relatively) successful European commercial aircraft included the Dassault Falcon and Sud Caravelle (France), the Vickers Viscount, and the Dutch Fokker F27 and F28.⁵⁶³ The associated significant increase in market and survival risks impelled Europe's relatively weaker and more fragmented aerospace firms to (1) further consolidate nationally, and (2) to look for partners abroad to pool resources, lower R&DP costs, expand beyond protected (captive) national markets to increase exports, and to ultimately share / reduce risks.

To gain access to the American civil aviation market, European aerospace companies made several attempts to collaborate with US companies in the 1950s and 1960s. However, all of these planned collaborative projects were abandoned by the American side before they reached fruition.⁵⁶⁴ The Europeans tried repeatedly to enter into production agreements with US partners to jointly manufacture particular European aircraft. For instance, Britain's de Havilland Aircraft company attempted to convince Boeing to jointly manufacture the Trident, while France's Sud Aviation

⁵⁵⁷ The Golden Shares give the British government important rights, including "UK citizenship requirements for the companies' boards of directors; control over the percentage of foreign-owned shares [usually limited to 15 percent]; and approval requirements for the dissolution or disposal of any strategic assets." Bialos (2009) vol. II, p. 612

⁵⁵⁸ Hayward (1986)

⁵⁵⁹ "[T]echnological advances have extended developmental lead time, increased launch costs, complicated marketing, and lengthened the time between initial research and revenue earning". Golich (1992) p. 903

⁵⁶⁰ For additional information on this sharp rise in R&DP costs, see *Ibid.*, pp. 905-906

⁵⁶¹ Harold Shenton, AVMARK Inc., (Arlington, VA, 1991) cited in *Ibid.*, p. 907

⁵⁶² *Ibid.*, p. 915

⁵⁶³ Even those relatively successful European aircraft rarely reached three-digit sales figures. *Ibid.*, p. 915

⁵⁶⁴ *Ibid.*, pp. 914-918

reached out to Douglas to produce the Caravelle. However, Boeing and Douglas reasoned that they had more to gain from developing and manufacturing their own aircraft, thus allowing them to further consolidate their commercial and technological leadership position vis-à-vis Europe and the rest of the world. Cooperating with the Europeans was simply not in the interest of US companies, as such a move would not only have opened up America's hitherto captive aircraft market to foreign products but also risked boosting the rise of European competitors who were bound to benefit from transatlantic cooperation in the form of increased sales, economies of scale as well as (informal) technology transfers and learning effects.

This position of inferiority and weakness vis-à-vis America was very frustrating for the European aerospace companies. "[A]s US dominance of commercial-class manufacturing increased, Europeans sought to avoid a situation in which their manufacturers would be relegated to the production of components"⁵⁶⁵. European policymakers realised that it was high time to boost the relative competitiveness of their aerospace industries to take on "The American Challenge"⁵⁶⁶:

*"For high-cost, high-risk industries such as aircraft manufacturing, transnational [European] production was encouraged as the best way to reduce R&DP risks and to expand market access. Despite historical animosities among individual European states and lingering suspicions about joint ventures, officials in most states decided that intra-European collaboration was preferable to trans-Atlantic or Pacific Rim arrangements because they were less suspicious about one another than they were about the [US] or Pacific Rim countries."*⁵⁶⁷

Europeans were determined "to resist and to match American technological 'imperialism'"⁵⁶⁸. European officials also wanted to prevent "an American monopoly in a major sector"⁵⁶⁹. In 1965, France and the UK – joined one year later by West Germany – began negotiations about collaborating on the development and production of a short-to-medium range, wide-bodied commercial aircraft. In December 1970, Airbus was formed with significant political and financial backing from France, Germany and the UK. Over the next decades, Airbus would successfully challenge America's supremacy in commercial aircraft manufacturing.

⁵⁶⁵ Ibid, p. 915

⁵⁶⁶ The title of a European bestseller published in 1967 by Jean-Jacques Servan-Schreiber who argued in favour of transnational European cooperation to cope with "The American Challenge", notably in the realm of business and technology.

⁵⁶⁷ Golich (1992) pp. 915-916

⁵⁶⁸ Nau (1974) p. 12

⁵⁶⁹ Hayward (1986) p. 52

In the military aircraft domain, in contrast, America established the world's most powerful and technologically advanced A&D industry after the end of WWII. A global leadership position that the country has (so far) successfully defended against all challengers. During the early stages of the Cold War, the US shipped large amounts of surplus military hardware – including aircraft, tanks, etc. – to its Western European allies to deter any further potential Soviet (military) expansionism. These arms transfers – based on the Mutual Defence Assistance Act (1949) and the Mutual Security Acts of the early 1950s – were either for free or sold at steep discounts. Total US military and economic aid amounted to about US\$45 billion between 1946 and 1966. By 1958, according to one estimate, about half of the heavy military equipment used by European NATO members was either from the US or Canada.⁵⁷⁰ The US-led NATO alliance also tried to promote the rationalisation⁵⁷¹, standardisation, and inter-operability (RSI) of weapons systems among its members. For a long time, however, NATO's RSI efforts were essentially a “one-way street”, leading from America to Europe. Deteriorating US balance of payments deficits, Europe's resurgent economies, but also the Vietnam War and France's military withdrawal from NATO led Congress and various US administrations to repeatedly push for a more balanced “burden-sharing” within NATO. To put it differently, “the view that geopolitics was more important than mere trade and economics matters was increasingly challenged from within the US government”⁵⁷². In particular, Washington (Congress above all) sought to encourage the European alliance members to take on more responsibility for their own security by cutting back the generous US military and economic assistance provided to them during the early stages of the Cold War. “Congress, from the earliest year of the Atlantic Alliance, has attempted to control, where possible, the extent of the American commitment to the alliance while lobbying for increased European defence efforts.”⁵⁷³ Congress and US administrations were also the target of lobbying efforts by the US defence industry to exclusively reserve the country's continuing financial assistance for those nations that bought or produced American weapons systems.⁵⁷⁴ From the perspective of Europe's A&D industry, “the [US] changed its position from ‘patron saint’ in the 1950s to ‘most active competitor’ in the early 1960s”⁵⁷⁵.

⁵⁷⁰ Beer (1969) p. 148

⁵⁷¹ “‘Rationalisation’ [encompasses] all actions taken to use equipment and perform common tasks more efficiently and cost-effectively”. ‘Standardization’ involves the adoption of common equipment, doctrine, and procedures by all members of the alliance. ‘Inter-operability’ refers to compatibility of equipment and inter-changeability of parts, fuel, and ammunition.” Taylor (1982) p. 95

⁵⁷² Larres (2000) pp. 127-145

⁵⁷³ Sloan (1985) p. 397. Sloan analyses Congressional efforts to push for more European “burden sharing” and the resulting transatlantic tensions with various US administrations (as well as tensions between US administrations and Congress). US administrations were generally much more concerned about the negative geo-strategic consequences of a weakening NATO alliance than the Senators and Congressmen driven by constituent interests.

⁵⁷⁴ Taylor (1982) p. 99

By the 1960s, Western European countries began insisting on co-producing US military aircraft under licensing agreements, thus breaking with their habit of simply importing finished products from America. One of the most prominent programmes was the co-production of the Lockheed F-104G “star fighter” by a consortium of German, Italian, Belgian, and Dutch starting in the 1960s. Germany’s decision to order the Starfighter and not France’s competing Dassault aircraft was heavily influenced by the very attractive conditions proposed by F-104 manufacturer Lockheed, which offered “substantial technology transfers and, of course, joint production of the aircraft”⁵⁷⁶. Due to this aggressive US weapons sales campaign beginning in the early 1960s – aptly dubbed “Win the Game in Europe by Managing Problems, Organising Sales Effort” by then-US Defence Secretary McNamara – “US dominance in NATO weapons markets was maintained, even as the [US] was sharing technology and production techniques with potential competitors”⁵⁷⁷.

By the mid-1960s and early 1970s, however, Western Europe’s major industrial powers decided to design and manufacture their own military aircraft instead of importing or co-producing US hardware. The rise of Europe’s aeronautics industry from the ashes of WWII illustrates how France, the UK and Germany were gradually able to climb up the “ladder of production”⁵⁷⁸ of weapons systems, moving from 1) simple maintenance and overhaul of imported weapons; 2) licensed foreign weapons assembly; 3) co-production; to 4) co-development; and, finally, 5) independent R&DP of sophisticated weapons systems.⁵⁷⁹ “Each country [France and the UK] continued to have independent strategic interests outside the NATO orbit, and both viewed a vibrant defence industry as critical to overall technological and industrial development.”⁵⁸⁰ Germany, too, had strong incentives to choose European over transatlantic defence collaboration:

“Having cooperated with the [US] [throughout the 1950s and the early 1960s] to rebuild the German aircraft industry at a surprisingly high technical level, close to that of the French and British industries, [...] it was [now] in German interest to turn away from America to cooperate with France or Britain. With either of these countries Germany could cooperate in a nearly equal partnership, pooling resources and gaining know-how to produce military aircraft to be purchased by both countries.”⁵⁸¹

⁵⁷⁵ Ibid., p. 99

⁵⁷⁶ Kapstein (1991-1992) pp. 661-662

⁵⁷⁷ Ibid., p. 661

⁵⁷⁸ For an overview of different “ladders of production” models see Blitzinger (2003) pp. 16-17, 35.

⁵⁷⁹ Smaller countries like Belgium and the Netherlands preferred the (cheaper) co-production of US aircraft. (Lorell et al., 2003) pp. 50-55

⁵⁸⁰ Ibid., pp. 662-663

⁵⁸¹ Milosch (2006) p. 152

Most of the defence projects were based on intra-European collaboration, including the British / French Jaguar Jet (1965) and Lynx helicopter (1967), the British / German / Italian Tornado bomber (1968), and the Franco / German Alpha Jet (1969). France (to demonstrate its independence from America / NATO) and Sweden (to preserve its neutrality), each decided to manufacture indigenous military aircraft. Even in those instances where France participated in transnational defence projects it was important for Paris to be in the driver's seat (with regard to weapons design, etc.) to underline its political and military leadership role in Europe and because its leaders clung to the concept of sovereignty maintained through the subordinate assistance of others.⁵⁸² While de Gaulle was the driving force behind France's ambitions to take the technological lead in key strategic industries such as A&D or nuclear technology, the French President continued to put the main emphasis in those sectors on purely national programmes.⁵⁸³

“In the aviation and space sectors, French and British industries share the lead, with France holding the advantage in airframes and the [UK] in engines [...]. These [two] industries have developed a number of projects cooperatively, including the Concorde, Jaguar, Martel and three helicopter aircraft (Lynx, Puma, and Gazelle). In all but one (Lynx), France exercised design leadership [and sabotaged UK efforts in design leadership]. Although an even fifty-fifty division of workload has been observed in these projects, British industries have criticised the tendency to leave design leadership to [French] partner firms. Similarly, France sought to reduce dependency on British engine leadership by encouraging SNECMA [...] to collaborate with [GE] [...].”⁵⁸⁴

The cooperation between SNECMA and GE on aircraft engines is an interesting point in case.⁵⁸⁵ It clearly illustrates how Paris at times preferred being in a junior partnership with the Americans (GE) rather than agreeing to a collaborative venture with a European partner (in this instance Rolls-Royce) where France would not have been in the driver's seat. In general, the French engaged in European collaboration when they were the accepted project leader. If France had no other choice but to be a junior partner, Paris opted for the deal that seemed to offer the greatest technology

⁵⁸² “How could France hope to compete if scale and priority were critical in advanced technology? Many Europeans concluded that the appropriate response to the technology gap was more vigorous integration. Only by pooling their resources and talent might Europeans hope to forestall US hegemony. But this was not the Gaullist conception. France did not flee dependence on America only to become dependent on a European mélange. Rather, France's cooperative [European] programmes in nuclear technology, space, and aviation (e.g., the SST) were fashioned so as to draw on the resources of other in the interest of her national programmes rather than to donate French expertise in the interest of multilateral progress.” McDougall (1985) p. 187

⁵⁸³ “The wartime hero de Gaulle rose to power just eight months after Sputnik 1. His mission, brooded over for twelve years, was to save France. This meant military independence, without which no state was truly sovereign; economic independence, without which no state was master of its own house; and technological revolution, without which no modern society could maintain the first two conditions.” Ibid., p. 181

⁵⁸⁴ Nau (1975) p. 643

⁵⁸⁵ On the structure of the international aerospace engine sector, see (Skoens & Wulf, 1994) pp. 48-49

transfer. SNECMA started co-producing GE's CF6-50 engine beginning in 1969, before both companies agreed on the co-development of a turbofan engine. In 1974, SNECMA and GE launched their 50-50 joint venture CFM International. The CFM-56 aircraft engines became a real international bestseller, powering a wide range of commercial aircraft, including different Boeing 737 and various Airbus models. GE calls CFM "one of the great success stories in aviation history". However, the success of CFM is also a symbol of Europe's weakness:

"When a national industry [in Europe] is weak relative to its European counterparts (France in nuclear power or aircraft engines, Germany in aviation, Britain recently in launcher technology, and France and Germany in computers) it regularly chooses to make up this disadvantage through assistance from vastly superior American partners rather than from more advanced, but less dominant European partners. As one writer observes, European firms 'distrust each other more than they dislike being dependent on the USA.'⁵⁸⁶ When firms are roughly equal in capability (French and British aviation industries), cooperation is possible only on the basis of careful balance in financing, management and work load. The net result of such cooperation is little specialisation and little gain in efficiency or cost (the case with Concorde). In addition to this rivalry among major industrial partners, a serious and, for the foreseeable future, continuing gap remains between French, German and British industries on the one hand, and Italian and Benelux countries on the other. Vertical and horizontal rivalries thus combine to leave Europe vulnerable to American industrial initiatives."⁵⁸⁷

In 1968, the UK launched "Eurogroup" – an informal gathering of defence ministers from ten European NATO members – in an effort to further advance European defence industrial collaboration within the framework of the Alliance. The impact of this initiative was rather limited, especially since France had left NATO's integrated military command structure two years earlier and decided to keep out of Eurogroup. One of Eurogroup's early accomplishments was the "Tornado" started by the UK, Germany and Italy that same year. However, it was not until 1976 that France and the Eurogroup joined forces to create the Independent European Programme Group (IEPG), which was outside of NATO. Having just lost the "sale of the century" competition to the Americans a year earlier, the French recognised that they had to cooperate more. While Eurogroup "marked the real beginning of a European response to US dominance and the imbalance in transatlantic arms transfers [...]", it was only "French participation [in IEPG] since 1976 [that] [...]"

⁵⁸⁶ Pavitt (1972) p. 211

⁵⁸⁷ Nau (1975) p. 645

greatly extended the range and scope of [European] collaborative programs”⁵⁸⁸. From its inception, IEPG’s main focus was the promotion of European collaboration on defence R&DP, including equipment standardisation. IEPG also hoped to increase European defence exports to America – something that it largely failed to accomplish.

There were differing views within the US regarding Europe’s various attempts (Eurogroup, IEPG) to invest in its own weapons systems. On the one hand, there was an expectation that these European investments would expand NATO’s overall defence industrial base. On the other hand, however, there were also concerns that “the overlap in [US and European] weapon systems”⁵⁸⁹ and the lack of NATO standardisation resulted in a tremendous waste of financial resources and military inefficiency that could prove fatal on the battlefield”⁵⁹⁰. There are two main schools of NATO standardisation. The first camp, dubbed “the bigger-savings group”, made an economic case for NATO standardisation, arguing that it would “save vast sums of money by eliminating duplicative [R&D] and achieving economies of scale in weapons production”.⁵⁹¹ ⁵⁹² “Bigger-savings” advocates pushed for the creation of a transatlantic “two-way street”, something that would “entail [...] massive intra-alliance arms sales based on the economic concept of comparative advantage, meaning that each country would specialise in the manufacture of the item it produces best”.⁵⁹³ The second camp, called “the better defence school”⁵⁹⁴, made a military case for NATO standardisation, arguing that it reduces the Alliance’s vulnerabilities and improve its capabilities.⁵⁹⁵ “[N]on-standardised armies require unique and separate supply lines, making wide-ranging manoeuvres difficult”. “Such armies must stock different types of spare parts: their logistics are therefore complicated and the number of support troops they require is wastefully large.”⁵⁹⁶ ⁵⁹⁷ The “better-defence” advocates were pushing for “joint US-European development and co-production of weapons systems”⁵⁹⁸.

⁵⁸⁸ Kapstein (1991-1992) p. 663

⁵⁸⁹ By 1974, NATO already suffered from a high degree of duplication as the Alliance members operated 23 different fighter aircraft, seven different battle tanks, etc. Taylor (1982) p. 97

⁵⁹⁰ Kapstein (1991-1992) p. 664

⁵⁹¹ Cohen (1978) p. 75

⁵⁹² Callaghan (1975)

⁵⁹³ Cohen (1978) p. 75

⁵⁹⁴ Ibid., p. 75

⁵⁹⁵ “Even if the [US] has the best tank, the very best tank that we can buy, and even if that tank is produced at the very best price that anybody could envision, and even if we buy three times as many as they are talking about buying right now, and even if we put them all in NATO [...] we are not going to have a strong conventional defence in NATO because our flanks are going to be exposed.” Senator Nunn’s statement during a 1976 Senate hearing on the Army’s XM-1 tank, quoted in Ibid., pp. 74-75

⁵⁹⁶ Ibid., p. 75

⁵⁹⁷ “One must not draw too great a distinction between the two main schools of NATO standardisation, the better-defence people and the lower-costs group. They live symbiotically, and it is unclear which group has a greater influence on government policy.” Ibid., p. 75

⁵⁹⁸ Ibid., p. 75

Europe's resurgent defence industry also increasingly challenged US dominance in military exports to third (world) countries.⁵⁹⁹ Defence companies on both sides of the Atlantic had traditionally relied on exports to recoup rising R&DP costs, lengthen production runs, and drive down their systems' unit costs. In 1975, US Defense Secretary Schlesinger launched the "two-way street" initiative:

*"[T]o enhance NATO standardisation; encourage American and European technological and industrial strength; encourage independent, competitive, national weapons programs, increase US purchases of European military hardware; and increase European purchases of US hardware on the basis of co-production"*⁶⁰⁰.

However, while Schlesinger pushed for a "two-way street" in transatlantic defence procurement, US aerospace companies were eager to maintain and even expand the established "one-way street" by convincing the European allies to co-produce US weapons systems rather than support competing independent European defence projects.^{601 602} The biggest symbol of this American "divide and conquer" strategy was the 1975 "deal of the century", in which GD agreed with Belgium, Denmark, the Netherlands, and Norway on the co-production of F-16 fighters. To sweeten the deal, GD offered its European partners a technology-sharing programme, numerous offset arrangements, as well as the opening of two assembly lines in Belgium and the Netherlands. The F-16 deal effectively divided NATO's European fighter aircraft market into three distinct segments: 1) the F-16 (Belgium, Denmark, the Netherlands, Norway); 2) the Tornado (UK, Germany, Italy); and 3) the Mirage (France). As a result, "the F-16 came to be seen in the eyes of many European industrialists and public officials (particularly in France) as a Trojan horse wheeled in under the banner of the two-way street". One must recognise that GD was not part of the US administration, nor controlled by Washington. In fact, GD's actions in Europe cut across US administration policy. The Pentagon, however, could not control US aerospace companies, particularly given the support these firms had built in Congress. Schlesinger's "two-way street" turned out to be a one-way street at best and a dead-end at worst. Eliot Cohen bluntly dismissed the viability of a "two-way street" approach for NATO in 1978: "Historically, standardisation has occurred only in an emergency and on the basis of a one-way street."⁶⁰³

⁵⁹⁹ Between 1967 and 1976, UK defence exports tripled and French arms sales increased eightfold. In contrast, US arms exports "only" increased by about 40 percent (from a much higher baseline, of course). Taylor (1992) p. 99

⁶⁰⁰ Kapstein (1991-1992) pp. 664-665

⁶⁰¹ Washington refused to buy the French-designed ROLAND air defence missile system.

⁶⁰² "Many Europeans have merely sneered at standardisation, which they see as an American ploy to sell more weapons to Europe". Cohen (1978) p. 88

⁶⁰³ Cohen (1978) p. 85

In 1983, UK Defence Minister Heseltine became IEPG chairman and successfully pushed for joint technology programmes and harmonised European staff targets.⁶⁰⁴ In 1988, the IEPG launched an “Action Plan on a stepwise development of a European Armaments Market”, designed to open European defence markets to cross-border competition and to facilitate technology transfers. This initiative was again driven by the UK, where the Thatcher government tried a “commercial approach” to defence procurement, an ambitious goal that ultimately proved elusive given that defence procurement is “the most nationalistic of all economic activities”⁶⁰⁵. So why has there been so little success in NATO standardisation?

*“The fundamental explanation is that economic competition among the NATO member states, and related domestic economic concerns, have thwarted most RSI collaborative security initiatives. While weapons standardisation can improve military effectiveness in the [A]lliance and save billions of dollars in R&D costs and systems redundancy, it can also mean loss of sales (particularly in third-country transfers) and of control of military high technology for members of the [A]lliance. This is perceived frequently by government and business elites as causing balance of payments deficits, loss of commercial transactions between arms recipient and arms supplier, increases in unemployment in certain sectors of the defence industry, and higher unit-production costs”.*⁶⁰⁶

Cohen identified the following US obstacles to a “two-way street”:

“On the purely political level, the representative nature of American government and the geographic location of the defence industry guarantee opposition to the purchase of any major weapon abroad. Particularly in a period of high unemployment, congressmen and senators will protest vigorously against large defence procurements that help a foreign, rather than a domestic, industry. [...]

*The doctrine of comparative advantage is not valid for US arms procurement. In any event, the intrusion of politics will prevent free trade in weapons. Above all, it is unlikely that Congress and the defence establishment will consent to large-scale imports of foreign weaponry rather than co-production.”*⁶⁰⁷

⁶⁰⁴ (Walker & Gummett, 1989) p. 430

⁶⁰⁵ Ibid., p. 419

⁶⁰⁶ Taylor (1982) pp. 97-98

⁶⁰⁷ Cohen (1978) p. 78

“Any outright purchase [of foreign weapons] will have a dramatic effect on a nation’s balance of payments and its arms industry, with obvious domestic political consequences.”^{608 609 610}

After the end of the Cold War, the aggressive, and ultimately successful, lobbying efforts of US mega-primes to tie up the military aircraft markets of Central and Eastern Europe came to symbolise the enduring nature of the transatlantic “one-way street” as well as America’s dominant political position within NATO. With world-wide military spending in a dramatic post-Cold-War slump, Western defence firms (LMC, MDC, BAE / Saab, and Dassault) were eager to secure lucrative export deals with prospective NATO members like Poland, Hungary, the Czech Republic, Romania, and Slovenia. A February 1997 DoS report estimated the total cost of NATO enlargement (to new and existing NATO members alike) – based on the assumption that “a small group of non-specified Central European countries” would join NATO in the first tranche of enlargement [in 1999] – to be somewhere between US\$27-US\$35 billion during the 1997-2009 period.⁶¹¹ Of this sum, about US\$10–US\$13 billion would be spent on the future NATO member countries’ military modernization and restructuring.⁶¹² As one report critical of “this unnecessary and irresponsible militarization” put it:

*“NATO expansion has secured CEE⁶¹³ as a market for Western manufacturers by claiming that NATO standards of interoperability should be met.”*⁶¹⁴

*“Despite statements by NATO officials that a military build-up will not secure membership, [CEE] elites are being pressured into buying these weapons and weapons systems to improve their chances of [NATO] membership.”*⁶¹⁵

Most of these political pressures exerted on CEE countries have been tied to the aggressive lobbying efforts by LMC and MDC vis-à-vis political decision-makers in Europe and America. In particular, Bruce Jackson, LMC’s Director of Global and Corporate Development during 1993-2002, came under a lot of scrutiny for his role in setting up the “US Committee to Expand

⁶⁰⁸ Ibid., p. 76

⁶⁰⁹ Even when America cooperated with Europe, “the DoD often simultaneously funded a competing programme to meet the same military requirement. Moreover, the competing US national programme was typically in the [classified] part of the DoD budget, meaning that the allies were unaware of its existence”. Grant (1997) p. 118

⁶¹⁰ However, the failure of transatlantic “two-way street” / RSI efforts cannot be entirely blamed on Washington: “European countries used multinational projects as a means of obtaining access to new defence technologies; they simply added national requirements together rather than harmonising them, pre-selected ‘national champions’ for project participation rather than allowing any competition among contractors, and rigidly applied the principle of ‘juste retour’ [...]” Ibid., p. 118

⁶¹¹ DoS (1997) p. 17

⁶¹² Ibid., pp. 16-20

⁶¹³ CEE = Central and Eastern Europe

⁶¹⁴ Ruecker (1997) p. 2

NATO”⁶¹⁶, a not-for-profit organisation established in 1996. The Committee included a bipartisan board of prominent political and business leaders⁶¹⁷ and targeted most of its lobbying efforts at the US Senate, which ultimately had to approve any expansion of NATO. Critics charged that Jackson’s dual role at LMC and the Committee constituted a clear conflict of interest:

*Jackson’s advocacy work in the expansion of NATO and Lockheed’s arms deal with Poland highlight the political and corporate linkages that make the NATO expansion both a matter of strategic significance for the [US] and economic advantage for its arms manufacturers.*⁶¹⁸

Poland’s US\$3.8 billion acquisition of 48 F-16s, a deal which was not finalised until early 2003,⁶¹⁹ ⁶²⁰ proved to be particularly controversial as it pitted LMC against Dassault and the BAE-Saab consortium. One argument repeatedly made by LMC and the US government vis-à-vis Warsaw was that the F-16 acquisition would allow the Polish and US Air Force to develop common doctrine, tactics and training procedures. The Bush administration and Congress played a key role in securing the deal for Lockheed by providing Warsaw with an attractive US\$3.8 billion loan through the Foreign Military Financing fund. Poland’s F-16 purchase was sweetened with offset agreements totalling US\$6-US\$8 billion.⁶²¹ ⁶²² ⁶²³ Apparently, Washington and LMC also used Warsaw’s interest in the future acquisition of the JSF fighter as a “carrot” during the F-16 competition.⁶²⁴ LMC and Jackson strongly rejected any linkage between the F-16 sale and his Congressional lobbying for NATO. They claimed that LMC never funded the Committee and that Jackson never served as a registered LMC lobbyist.⁶²⁵ Unnamed US and Polish government officials indicated that Jackson “was always careful about avoiding conflicts of interests in his dual roles”.⁶²⁶ ⁶²⁷ ⁶²⁸

⁶¹⁵ Ibid., p. 1

⁶¹⁶ The US Committee to Expand NATO” was subsequently renamed “US Committee on NATO”.

⁶¹⁷ Robert Zoellick, Stephen Hadley, Peter Rodman, Sally Painter, etc.

⁶¹⁸ Sennott (2003)

⁶¹⁹ The F-16 deal coincided with the US-led Iraq War, which strongly opposed by France and Germany. When the F-16 accord was signed during a televised ceremony in April 2003, “top US and Polish officials described it as a precursor to a strategic partnership, spanning the political, military and economic spheres”. Khadige (2003)

⁶²⁰ The production facility for the Polish F-16s was located in President Bush’s home state of Texas.

⁶²¹ Poland required offsets covering at least 100 percent of the contract’s value. Wall (2003)

⁶²² “The smaller profit margins that manufacturers are accepting due to no-cost leasing and offset agreements are perceived as part of long-term strategies designed to secure product loyalty and establish market presence.” Ruecker (1997) p. 4

⁶²³ LMC offered 17 different offset programmes totalling US\$6 billion by 2013: 10 percent of the offsets were in technology transfers; 20 percent in investments, and 70 percent were linked to purchases of Polish-manufactured goods. IISS (2003) p. 246

⁶²⁴ According to a senior Pentagon official, US negotiators indicated that the F-16 acquisition would constitute “a perfect first step to [Poland] eventually becoming an owner and operator of the [JSF].” Also, LMC’s offset manager for the F-16 deal was quoted as follows: “What we told [Polish officials] is that it is not up to us to invite them to join JSF [but it’s the prerogative of the US government]. However, with the F-16 you have developed a relationship with the contractor and the industrial base building JSF.” Wall (2003)

⁶²⁵ Jackson (2009) and Sennott (2003)

⁶²⁶ Ibid.

France's political and defence industrial circles as well as EC President Romano Prodi strongly criticised Warsaw's F-16 acquisition.⁶²⁹ As Serge Dassault put it:

“Pourquoi chacun [en Europe] conserve-t-il le droit d’acheter n’importe quel matériel militaire américain? Pourquoi pas d’obligation de ‘préférence européenne’ pour les matériels d’armement? [...]”

En réalité, les Américains cherchent par tous les moyens à supprimer toute concurrence en matière d’armement et à affaiblir l’Europe. [...]

Ils ont des moyens de pression politiques, financiers, diplomatiques, militaires bien supérieurs aux nôtres et lorsque nos avions sont choisis par les états-majors, les Américains arrivent par des pressions politiques à faire basculer les décisions en leur faveur. A continuer ce jeu de division, l’industrie européenne d’armement tout entière va devenir un sous-traitant des Américains. [...] Seul tient encore tête le bastion français avec une industrie aéronautique remarquable mais pour combien de temps encore?

Il serait indispensable que les pays européens se ressaisissent et imposent aux nouveaux et aux anciens la préférence européenne.”⁶³⁰

Romano Prodi:

“Certainly it’s displeasing that the day after the EU integration ceremony Poland signs a mega-contract for the purchase of American fighters. [...] Let it be clear that if one enters the [EU] they enter a family. One cannot entrust his purse to Europe and his security to America.”⁶³¹

⁶²⁷ The DoS claims that “The [US] and NATO discouraged *most* of [the CEE] requests [for assistance in acquiring US combat aircraft] and counselled that [NATO] membership would depend more on political, military and economic reforms than military acquisitions [...]. DoS (1998) p. 20

⁶²⁸ One Hungarian official stated that „[Jackson] was never primarily a sales man but more of a strategic thinker”. Dragsdahl (1998) p. 1. This statement implies that Jackson *was* a sales man, but not “primarily.”

⁶²⁹ Jakubyszyn (2003) provides a French perspective criticising the US export offensive.

⁶³⁰ Dassault (2003)

⁶³¹ Prodi (2003)

4.2 *The failed EADC⁶³² and BAe / DASA consolidation talks*

Despite increased European collaboration in civil and military aircraft manufacturing starting in the 1960s and 1970s, Europe's A&D industry remained "a jumble of national champions" well into the 1990s.⁶³³ By moving from international cooperation to transnational integration, the EADS merger marked a historical breakthrough for Europe's A&D industry. In a way, EADS was the next logical step, both from a political and business perspective. At the political level, the 1998 Franco-British St. Malo summit's goal of creating a European security and defence policy independent from the US (and NATO) required the maintenance of a competitive defence industrial base. At the business level, declining European defence budgets and skyrocketing R&DP costs made it imperative to pool resources and achieve significant economies of scale.⁶³⁴ Commenting about this "twin movement toward greater Europeanisation of defence matters", Nicole Gnesotto sees a reversal of roles:

*"[I]t is no longer governments that are steering European cooperation on armaments but industry itself that is moving ahead of political constraints and adapting them, precipitating change and now acting as a driving force in the implementation of common defence."*⁶³⁵

To be sure, important sectoral differences continue to exist. Land systems manufacturers and shipbuilders remain predominantly organised along national borders. In contrast, the A&D industry (EADS in particular) and the defence electronics industry have really advanced the farthest in the drive towards European transnational integration. According to Gnesotto, "the creation of EADS heralds a revolution in European industrial affairs whose political repercussions are also potentially revolutionary".⁶³⁶ It should be noted, however, that EADS was just the "second-best" if not "third-best" solution in the effort to achieve transnational consolidation in the European A&D industry. EADS included only two of Europe's big three players (France and Germany), but not the UK. Initially, the "grand vision" was the creation of EADC comprising the four Airbus partners, Finmeccanica, and Saab.⁶³⁷

Since early 1997, Aérospatiale, DASA, BAe, and CASA had negotiated about the transformation of their loose Airbus consortium into AIC (Airbus Integrated Company). Two events, however, led these four companies to look beyond Airbus and consider not only merging their civilian but also

⁶³² EADC = European Aerospace and Defence Company

⁶³³ *The Economist* (1997)

⁶³⁴ "In Europe, [...] the major producers came to perceive intra-European cooperation as the only way to maintain national capabilities, as it became economically imperative to share the rocketing costs of defence R&D. Given these costs, intra-European cooperation gradually evolved into the only alternative to buying US equipment, and hence into the only means of resisting US defence industrial and technological domination." Grant (1997) p. 117

⁶³⁵ Gnesotto (July 2002) p. v

⁶³⁶ *Ibid.*, p. v

their military assets into one company. First, the announcement of the BMD merger posed a serious competitive threat to Airbus as it would enable Boeing to balance its highly cyclical civil aviation business with MDC's less cyclical defence operations. Second, on 9 December 1997, Prime Minister Blair, Chancellor Kohl, and Prime Minister Jospin issued a trilateral declaration stressing "the urgent need to restructure Europe's A&D electronics industries"⁶³⁸. This consolidation process, "expected to embrace major civil and military programs, should lead to European integration based on balanced partnership"⁶³⁹. Over time, the consolidation would "help to improve Europe's share in the global market, promote European security and ensure that Europe plays a full role in its own defence"⁶⁴⁰. The three leaders called on their respective "national champions" to develop "a clear plan and timetable for action" by 31 March 1998.

Four days before the end of this ambitious deadline, Aérospatiale, DASA, BAe, and CASA submitted a report outlining the founding principles for a potential future EADC. The report was also shared with the Italian and Swedish governments and their "national champions", Finmeccanica and Saab. While this first report was received quite positively, the ministers of industry from the six governments involved met in July 1998 and asked for a second, more detailed report to be submitted as soon as possible. In mid-November 1998, the four Airbus partners along with Finmeccanica and Saab put forward a second report and agreed on the following principles:⁶⁴¹

- First, the ultimate goal of the restructuring and consolidation process would be the creation of one, fully integrated A&D company: EADC;
- Second, EADC should have the following core business lines: civil and military transport aircraft; combat and military mission aircraft; helicopters; space launchers and orbital infrastructure; satellites and satellites operation; guided weapons and defence and aerospace systems;
- Third, EADC's corporate strategy should be guided, above all, by economic and financial objectives – i.e., the maximisation of shareholder value. With this provision, privatised companies such as BAe and DASA sought to limit potential political interference by European governments through their respective (state-controlled) national champions;⁶⁴²
- Fourth, EADC should be run as one entity by one management structure responsible for all of the company's operations;

⁶³⁷ For an analysis of the EADC discussions, see Schmitt (2000) pp. 29-32

⁶³⁸ Sparaco (December 1997)

⁶³⁹ Ibid., p. 22

⁶⁴⁰ Ibid., p. 22

⁶⁴¹ Schmitt (2000) pp. 30-32

⁶⁴² Decisions concerning EADC's allocation of R&DP facilities were to be made according to objective, competition-based performance criteria rather than the "principle of just return".

- Finally, EADC's shareholder interests were to be protected by three principles. (1) No single EADC shareholder should be able to gain control over the entire company; (2) EADC should be protected against hostile takeovers (by third parties); (3) EADC's dispersed shareholders should not be at a disadvantage compared to the company's large so-called "block shareholders", be they institutional or sovereign.

Ultimately, "the [EADC] discussions never reached the stage of real negotiations. They were essentially an exchange of ideas and a general discussion of possible avenues to explore"⁶⁴³. While the outlined points of agreement seemed pretty comprehensive, the six companies failed to come to a consensus in three crucial areas. First and foremost, there was disagreement over how to merge these six companies into one corporate entity, that is, through the "Airbus plus" option, an EADC empty shell / holding company or via a "big bang" / "come as you are" merger.⁶⁴⁴ Second, there were differences over the potential EADC shareholder structure, pitting the fully privatised firms BAe, DASA, and Saab against Aérospatiale, CASA, and Finmeccanica who were on track for privatisation but, at the time of the EADC discussions, were still fully or at least partly state-owned. In particular, there was no agreement over what, if any, equity stake the French, Spanish, or Italian government would have in EADC.⁶⁴⁵ Third, there were differences over whether or not to integrate ballistic missiles (manufactured only by Aérospatiale) or regional aircraft (a business completely abandoned earlier by DASA and Saab) into EADC. Finally, it was not clear how to potentially include France's Dassault into this consolidation process.⁶⁴⁶

Despite all professions about the necessity of a comprehensive consolidation of Europe's A&D industry – and even the broad agreement on the basic structure and operating principles of the future EADC outlined above – the "big bang" EADC consolidation & restructuring project proved to be far too complex to implement to be more than just the subject of relatively theoretic corporate strategy discussions in board rooms across Europe.

*"The real question was who would get married first, and to whom. The stakes were very high: for the small companies it was a matter of not being sidelined by a merger of the large. For each of the large companies, it was essential not to allow itself to be isolated by a merger of two of the others."*⁶⁴⁷

⁶⁴³ Schmitt (2000) p. 30

⁶⁴⁴ For a detailed discussion of these merger options, see Ibid., p. 31

⁶⁴⁵ Ibid., p. 31

⁶⁴⁶ Ibid., p. 31. Dassault followed the EADC discussions but did not actively participate.

⁶⁴⁷ Ibid., p. 32

After the failure of EADC, France's A&D industry was most at risk of being marginalized in the European consolidation end game ahead. A bilateral link-up involving Germany's DASA and the UK's BAe seemed now even more plausible, given that both defence groups were fully privatised whereas France's AM remained under partial state control. BAe and DASA had already been in merger talks since early 1998, in parallel to the EADC discussions.⁶⁴⁸ Both companies participated in the Airbus and Eurofighter and also shared "the same business philosophy: shareholder value as the absolute priority, and no state participation in the firm's capital".⁶⁴⁹ However, BAe and DASA also faced considerable obstacles in their efforts to join forces. First, with an annual turnover of \$11.6 billion in 1998, BAe was a third bigger than DASA, which had revenues of EUR8.7 billion. Nonetheless, DASA firmly insisted on a "merger of equals" with BAe.⁶⁵⁰ Second, there were differences in the two companies' shareholder structure. While BAe had a very fragmented shareholder base, DASA was controlled by a single block shareholder (DCX). Many BAe shareholders therefore feared that DCX would dominate a merged BAe/DASA company.

While the BAe/DASA negotiations reached an advanced stage and seemed to be close to a successful conclusion in late 1998, the UK-German merger failed at the last minute when BAe got the opportunity to become Britain's undisputed "national champion" through the acquisition of the UK defence electronics firm GEC-Marconi. Several factors explain this decision. First, the acquisition of GEC-Marconi made BAe Systems the dominant player in the domestic UK defence market, allowing it to capture 60 to 80 percent of the nation's procurement business. Second, BAe also hoped that by consolidating at the national level – as opposed to the European level – it would increase or at least preserve its potential chance for a transatlantic merger with a US mega-prime. Finally, given the pronounced disparities in size between the two companies, "DASA turned out to be too powerful to be absorbed but also too weak for a merger as an equal partner with BAe."⁶⁵¹ For DASA, BAe's last-minute change of heart came as a big surprise and permanently damaged the trust between the senior management of the two companies.⁶⁵² ⁶⁵³ While BAe thought that the acquisition of Marconi would just temporarily delay its merger talks with DASA, the Germans expressed their strong opposition to the BAe-Marconi deal, which had resulted in vertical rather than horizontal integration.

⁶⁴⁸ Ibid., p. 35

⁶⁴⁹ Ibid., pp. 34-35

⁶⁵⁰ The equity in the merged company would have been split 60-40 percent in favour of BAe. *The Independent* (1998)

⁶⁵¹ Vlachos-Dengler (2004) p. 13

⁶⁵² BAe chairman Evans called DCX CEO Schrempp to convince him to abandon the 1999 EADS merger, Evans was reportedly told "We're not interested. You have had your chance." Industry watchers dubbed the EADS deal "Schrempp's revenge". (Lorenz & Woodhead, 1999)

⁶⁵³ DASA knew that BAe wanted to acquire Marconi, but believed that such a deal would happen *after* the planned DASA-BAe merger. Willcock (1998)

With combined annual revenues in 1998 of about EUR17.4 billion, the “New BAe” as it was first called before being re-branded “BAE Systems” in December 1999, was far bigger than either DASA (EUR8.7 billion) or AM (EUR11.6 billion). A transnational European merger between or among equals involving BAe was therefore no longer politically feasible as it would have amounted to a UK takeover of Germany’s and / or France’s “national champions”.⁶⁵⁴ DASA wanted to be an “equal partner” even though it was a smaller company. The Marconi purchase made BAe a significantly bigger company, so DASA would clearly have been the junior in a merger. In deciding to become the UK’s “national champion”, BAe had foregone the possibility to become a co-founder of the first “European champion” in the A&D industry. However, the creation of BAE did raise the spectre of privileged access to the American defence market and a potential merger with a US mega-prime.⁶⁵⁵ ⁶⁵⁶ With the failure of the “second best” BAe-DASA merger solution, the way was now paved for the “third best” solution in Europe’s desire to restructure and consolidate its A&D industry: the Franco-German-led EADS.

⁶⁵⁴ In January 1999, DASA declared that the BAe-Marconi link-up “will make balanced European horizontal mergers such as DASA-BAe impossible and create an obstacle to European integration”. Jones (1999)

⁶⁵⁵ Deputy Defense Secretary Hamre apparently told BAE CEO Weston in the fall of 1999 that the Pentagon would treat his company like an American firm and that it would like to see large-scale transatlantic aerospace industrial consolidation to boost competition in the highly oligopolistic US defence sector. Gow (1999)

⁶⁵⁶ LMC was best positioned to be part of a potential transatlantic merger deal because unlike Boeing, it was not competing with the Europeans in commercial aircraft: “In essence, the key focus of LMC’s corporate strategy discussions in the mid-to-late 1990s was about how we could potentially join forces with a major European firm in a full-fledged transatlantic merger deal.” Jackson (1999). DASA also approached LMC for informal merger talks. However, LMC refused to give DCX a 50-percent stake in the merged company. LMC (1999 revenues: USD25.5 billion) was far bigger than DASA, making a “merger between equals” impossible. (Lorenz & Woodhead, 1999)

4.3 EADS and its founding companies: *Aérospatiale Matra, DASA, and CASA*

The EADS merger, announced in mid-October 1999, marks a historic breakthrough. For the first time, three sovereign countries – France, Germany, and later Spain – decided to allow their leading A&D companies – AM, DASA, and CASA, respectively – to merge into one fully integrated company: EADS.⁶⁵⁷ For sure, international cooperation on select defence projects was already quite common during the Cold War. But prior to the EADS link-up, this cooperation had never taken the form of full-scale transnational mergers involving core elements of the countries' national defence industrial base.⁶⁵⁸ On 14 October 1999, Chancellor Schroeder and Prime Minister Jospin – flanked by DASA CEO Bischoff and AM Chairman Lagardère – declared in Strasbourg that DASA and AM would merge their operations to form EADS, the first pan-European A&D company. The EADS merger “is good for France, good for Germany, and good for Europe”, argued Schroeder. Prime Minister Jospin echoed the Chancellor and said that EADS would be “a powerful tool for building a strong and unifying Europe who is the master of its own future”.^{659 660}

On December 2, 1999, Spain's state-owned CASA decided to join forces with EADS. For one thing, DASA had already been in advanced take-over talks with CASA for several months when the Franco-German EADS merger was announced in October. Furthermore, AM, DASA, and CASA were long-standing collaborators on several major A&D projects, including Airbus, Eurocopter, Eurofighter, and Arianespace, which together accounted for 70 percent of EADS revenues.⁶⁶¹ Most importantly, AM and DASA each held a 37.9 percent stake in the highly profitable Airbus consortium. With the addition of CASA (4.2 percent stake), EADS controlled 80 percent of Airbus.

In 1999, EADS had pro-forma combined annual revenues of about EUR22.5 billion, making it Europe's biggest A&D group. Globally, EADS was the third largest A&D company, after Boeing (US\$55.4 billion) and LMC (US\$26 billion), but before Raytheon (US\$17.5 billion). In terms of market share, EADS ranked among the world's top two A&D companies in all of the following business lines: commercial aircraft (#2), civil helicopters (#1), commercial space launch vehicles

⁶⁵⁷ The 1992 creation of Eurocopter, involving the merger of *Aérospatiale's* and *DASA's* helicopter activities, had already resulted in a smaller and limited case of pan-European defence consolidation. Nevertheless, “Eurocopter represents the first time that aeronautics companies from different European countries combined R&D and production capabilities”. GAO (1994) p. 6

⁶⁵⁸ “[T]he essential security interests of member states referred to in [Art. 296 (ex Art. 223) of the EC Treaty] have often been broadly interpreted in order to override the disciplines of Community policies”. Schmitt (April 2003) p. 10

⁶⁵⁹ *China Business Information Network* (1999)

⁶⁶⁰ The EADS press conference “was peppered with references to ‘our British friends’, although given the political spin put on the deal it was unclear if that meant BAE or Blair's government. In any case, the phrase hung in the air halfway between a threat and an invitation.” French finance minister Dominique Strauss-Kahn declared: “This [EADS merger] shows that Europe does not stop with a currency project. [...] This is a day our British friends should take note of.” (Lorenz & Woodhead, 1999)

⁶⁶¹ EADS (2000) p. 9

(#1), and missiles (#2). Furthermore, EADS was one of the leading manufacturers of military aircraft as well as of satellites and defence electronics. 76 percent of EADS revenues in 1999 derived from the civil sector, with 24 percent coming from military sales.⁶⁶² At the time of the merger, EADS decided to divide its far-flung operations into five business lines: (1) Airbus, (2) Military Transport Aircraft, (3) Aeronautics (other than Airbus and Military Transport Aircraft), (4) Space, and (5) Defence and Civil Systems.

In 1999, Airbus accounted for pro-forma revenues of EUR12.6 billion, approximately 54 percent of EADS's EUR22.5 billion total turnover. At the time of the EADS merger, Airbus had already taken off commercially and was on the verge of a major boost that would propel it ahead of Boeing, the dominant force on the global market for large commercial aircraft. Between 1999 and 2004, Airbus outsold Boeing in five out of six years. And in 2003, Airbus outperformed Boeing for the first time in terms of actual deliveries. EADS's Military Transport Aircraft Division (MTA Division) manufactures light and medium military transport aircraft and is also responsible for the A400M project designed to give European countries much-needed heavy strategic airlift capabilities. In terms of revenue, MTA ranked as the smallest EADS division, with pro forma sales of about EUR200 million in 1999. With the A400M, EADS hoped to be able to compete across the full range of military transport aircraft, including the rapidly growing market for heavy transport aircraft.⁶⁶³ US competitors like Boeing's C-17 Globemaster III or LMC's C-5 Galaxy Starlifter already play a crucial role in allowing a quick response to military crises or humanitarian disasters world-wide.⁶⁶⁴ The A400M has long been dogged by cost overruns and production delays, thus raising serious political and financial questions about the overall viability of this defence contract.⁶⁶⁵ British scepticism over the A400M has risen as its costs have spiralled and delays lengthened, while Germany, Spain, and Italy leased Ukrainian Antonov planes to transport troops outside Europe. As for the UK RAF, it flies C-17s.

The EADS Aeronautics Division includes all of the company's aeronautics activities outside of Airbus and MTA, such as Eurocopter, Eurofighter⁶⁶⁶, military aircraft, regional aircraft, general aviation aircraft, and aircraft maintenance and conversion. In total, the Aeronautics Division had

⁶⁶² *Ibid.*, pp. 7-8

⁶⁶³ "No single country, other than the US and the former Soviet Union, has ever built its own strategic military transports or wide-body jetliners. Essentially, France has succeeded in creating this capability for itself by giving programme shares to the rest of Europe." Aboulafia (2001)

⁶⁶⁴ In principle, the A400M will also be equipped to serve as a tactical tanker aircraft, allowing its customers to significantly increase the effective combat range of their bomber and fighter aircraft within a given theatre of operations.

⁶⁶⁵ Most of the A400M's problems are due to the fact that the plane is overweight and that the turboprop engines do not provide sufficient thrust.

⁶⁶⁶ EADS has a 46 percent share of Eurofighter (BAE: 33 percent; Finmeccanica: 21 percent).

pro-forma sales of EUR4.3 billion in 1999, equivalent to 18.2 percent of total EADS revenues.⁶⁶⁷ Eurocopter was created in 1992, when Aérospatiale and DASA merged their helicopter divisions.⁶⁶⁸ With sales of EUR1.8 billion, Eurocopter ranked as the world's #1 producer of commercial helicopters and Europe's #1 manufacturer of military helicopters.⁶⁶⁹ Apart from Eurocopter, the Eurofighter⁶⁷⁰ is the other major part of the EADS Aeronautics Division. Launched in 1988 by Germany, Italy, Spain, and the UK, the Eurofighter was designed to deliver a high performance multi-role aircraft optimised for air superiority in complex air combat scenarios. Eurofighter production began in 1998 and was scheduled to end by 2015.⁶⁷¹ According to EADS estimates in 1999, the Eurofighter consortium was expected (yet subsequently failed) to capture about 50 percent of the world's total export market for fighter aircraft, then valued at 800 units worth more than EUR50 billion over the next 30 years.⁶⁷²

The EADS Space Division is the world's #3 producer of space systems – such as satellites, space launchers, and orbital infrastructures – after Boeing and LMC. In 1999, revenues of the EADS Space Division were EUR2.5 billion (11 percent of total turnover).⁶⁷³ At the time of the 1999 merger, EADS forecast substantial growth in the commercial satellite market as a result of projected increased future demand for telecommunications services.⁶⁷⁴ EADS also expected growing demand for military communications and observations satellites in the wake of the Kosovo War, which exposed Europe's serious reconnaissance shortcomings. In navigation satellites, too, EADS forecast substantial future growth, especially with regard to the "Galileo" navigation system. The AML⁶⁷⁵ unit of EADS's Space Division manufactures commercial space launchers and ballistic missiles.⁶⁷⁶

677 678

⁶⁶⁷ EADS (2000) pp. 80-92

⁶⁶⁸ *Ibid.*, pp. 81-84

⁶⁶⁹ During 1995-1999, 60 percent of Eurocopter's revenues were generated by exports outside of France and Germany. *Ibid.*, p. 83

⁶⁷⁰ For more information on the Eurofighter, see EADS (2000) pp. 84-87.

⁶⁷¹ By the time of the EADS merger, the Eurofighter consortium had already received 620 order commitments from the four founding countries as well as Greece. Due to budgetary constraints, Eurofighter orders (and their weapons equipment) would be scaled down significantly in subsequent years.

⁶⁷² EADS (2000) p. 86

⁶⁷³ *Ibid.*, pp. 93-99

⁶⁷⁴ *Ibid.*, pp. 95-96

⁶⁷⁵ AML = Aérospatiale Matra Lanceurs

⁶⁷⁶ Through its stake in Arianespace, EADS is the lead architect of ESA's Ariane space launcher programme. With a 50 percent market share of commercial space launches worldwide, Arianespace occupied the global top spot in 1999, with a total of over 120 commercial launches since 1984. EADS (2000) p. 97

⁶⁷⁷ In general, the commercial space launch business is characterised by very high financial and technological "barriers of entry", which explains why the number of corporate players is limited to a small group of "national champions" such as EADS in Europe, Boeing and LMC in the US, as well as select Russian and Chinese companies. The development and production of space launchers require considerable technological expertise and up-front investments that are usually conditional upon public funding, either from civilian or military sources.

Finally, EADS's Defence and Civil Systems (DCS) Division comprises missiles and missile systems, defence electronics, telecommunications, and services.⁶⁷⁹ In 1999, the DCS had revenues of EUR3.8 billion (16.3 percent of EADS turnover), making EADS Europe's biggest missile manufacturer and the #2 globally after Raytheon.⁶⁸⁰ In terms of defence electronics, the DCS division focuses on C4I capabilities, which provide military commanders with accurate, reliable, real-time information about the positions and actions of enemy forces, both at the tactical and strategic level.⁶⁸¹ ⁶⁸² Looking at DCS's cutting-edge product portfolio and economic weight, it is clear that this unit (along with Airbus) was critical to the future success of EADS.⁶⁸³

EADS aimed to achieve cost savings of US\$428 million a year by 2004 and to boost its operating margin to 8 percent, up from 6.4 percent in 1999.⁶⁸⁴ ⁶⁸⁵ "Half of this will come from lower purchasing costs, 30 percent will come from a reduction in the overall cost base – [R&DP] and so on – 15 percent from new sales opportunities, and 5 percent from better financial engineering."⁶⁸⁶ In this context, one must not forget that European aerospace companies made significant gains vis-à-vis their US competitors in terms of operating efficiency, labour costs, and productivity during the second half of the 1990s.⁶⁸⁷ ⁶⁸⁸ Furthermore, the sharp weakening of the Euro against the US dollar in 1999 / 2000 provided European companies with additional competitive benefits over American companies.⁶⁸⁹ ⁶⁹⁰ On the downside, aerospace experts pointed to costly long-term dollar hedging as

⁶⁷⁸ AML manufactures France's nuclear tipped, submarine-based M4/M45 missiles.

⁶⁷⁹ EADS combined the missile activities of Aérospatiale Matra Missiles, Matra Défense, Matra BAe Dynamics (a 50-50 joint venture BAE-EADS), and DASA's LFK-Lenkflugkörpersysteme division.

⁶⁸⁰ In 1999, EADS forecast the global market for missiles and missile systems to grow from EUR12 billion in 2000 to EUR14.5 billion in 2005 (20 percent growth rate). EADS (2000) p. 101

⁶⁸¹ C4I capabilities are also crucial for maximising interoperability among allied and coalition forces through the exchange of real-time data.

⁶⁸² Major defence electronics competitors are: Thomson-CSF, BAE, Raytheon, LMC.

⁶⁸³ Prior to EADS, many of the missile activities of AMM, MD, MBD, and LFK were organized in various JVs, thus promising future synergies derived from successful post-merger integration. *Ibid.*, p. 103

⁶⁸⁴ Butterworth-Hayes (2000)

⁶⁸⁵ In 1999, Europe's A&D companies averaged a 7-percent operating margin (like their US rivals). In 1998, the European score was significantly lower (5 percent). AECMA statistics cited in Dowell (2000).

⁶⁸⁶ EADS spokesman quoted in Butterworth-Hayes (2000). The annual savings of US\$428 million were to be broken down as follows: Airbus: 50 percent; DCS: 15 percent; Space: 12 percent; EADS headquarters: 11 percent; Aeronautics: 10 percent; Military Transport Aircraft: 2 percent. See *Ibid.*

⁶⁸⁷ By the third quarter 2000, unit labour costs in the US relative to the 11 Euro members were 38.5 percent above their 1987-99 average. Between the launch of Euro in January 1999 and the third quarter 2000, the depreciation of the common currency alone had boosted the competitiveness of Euro zone producers vis-à-vis their international rivals by 18 percent (other factors include relatively moderate price and cost increases in the Eurozone, etc.). EC (2000)

⁶⁸⁸ "A closer analysis of the figures suggests that there have been three main reasons for the strong growth figures: a dramatic improvement in overall productivity levels, the success of Airbus, and the start of the production phase of large European military programs such as Eurofighter, EH101, Rafale, NH90, and Tiger." Dowell (2000)

⁶⁸⁹ In 1999, the Euro depreciated 26 percent against the US dollar.

⁶⁹⁰ "The rapid recent decline in the value of the euro and the pound against the [US] dollar creates an opportunity for the European aerospace industry to improve its competitiveness in the marketplace. [...] If this currency exchange advantage can be combined with a fast, cost-effective integration of the partners into EADS, the results could cause real problems for its US competitors." Butterworth-Hayes (2000)

well as “the expense and sheer complexity of integration” involved in the EADS and BAE mergers as factors playing against the Europeans.^{691 692}

⁶⁹¹ European A&D companies usually “hedge” against euro-dollar currency swings for an extended period of time (1-2 years) and do not fully benefit from a strong dollar until these hedging arrangements have expired. Ibid.

⁶⁹² Analysts point to the poor stock market performance of EADS and BAE shortly after their respective mergers as proof that “these integration complexities are proving tough to overcome”. Ibid.

4.3.1 *Aérospatiale Matra (AM)*

AM was created on June 14, 1999, when two French A&D companies – state-owned Aérospatiale and privately-controlled Matra Hautes Technologies (MHT)⁶⁹³ – decided to join forces. On the one hand, the AM link-up was driven by the desire to create an internationally competitive French “national champion”. On the other hand, in the words of AM Chairman Lagardère, the AM merger was also designed to “signal a start to the restructuring of the European A&D industry – a development in which we were determined to play the leading role.”⁶⁹⁴ The French government’s decision in December 1998 to transfer its 45.76 percent stake in Dassault – the highly profitable manufacturer of the Rafale and Mirage fighters – to Aérospatiale had already led to a significant “*rapprochement*” between the country’s leading aircraft manufacturers.⁶⁹⁵ With the addition of MHT, AM became a horizontally integrated company active in civilian and military aircraft, helicopters, space, and telecommunications. By bringing its national A&D industry consolidation to a logical conclusion, France wanted to make sure that AM would be a crucial player in any possible European consolidation end-game: “*un acteur incontournable sur la scene européenne*”.⁶⁹⁶

With 1999 sales of EUR12.9 billion, AM was the largest French A&D company and the biggest EADS founder. Globally, AM ranked as the fifth largest A&D company, after Boeing, LMC, Raytheon, and BAE. With an operating income of only EUR480 million, however, AM’s profitability and operating margin of 3.7 percent (4 percent in 1998) was disappointing and clearly lagged behind DASA and CASA. AM’s bloated workforce of more than 52,000 – most of it unionised – accounted for the company’s high cost structure and its difficulties in adapting to the post-Cold War slash in defence spending and weapons procurement. AM’s 1999 sales broke down as follows: Airbus: EUR5.5 billion (42 percent of revenues); Other Aviation Operations: EUR0.85 billion (7 percent),⁶⁹⁷ Dassault Aviation (AM held a 45.76 percent stake): EUR1.4 billion (10 percent); Eurocopter: EUR1.8 billion (14 percent)⁶⁹⁸; Space: EUR1.5 billion (11 percent); Missile systems: EUR1.2 billion (9 percent); and the Systems, Services, and Telecoms division: EUR0.86 billion (7 percent). The weight of civil and military sales in AM’s 1999 turnover was 76 percent and 24 percent, respectively.

⁶⁹³ MHT had three business lines: space, defence, telecommunications

⁶⁹⁴ AM (2000) p. 2

⁶⁹⁵ Dassault’s strategic decisions require a two-thirds majority vote by a steering committee where AM and Dassault have equal representation.

⁶⁹⁶ Cambon (1997)

⁶⁹⁷ This division included the ATR regional aircraft JV with Finmeccanica.

⁶⁹⁸ Since AM held a 60-percent majority stake in Eurocopter, it was able to count the subsidiary’s full turnover towards its annual revenues. DASA only counted 40 percent of Eurocopter’s sales towards its turnover.

On 13 January 1999, the French government issued a decree allowing for the privatisation of Aérospatiale. Just two days later, the government signed an agreement with Jean-Luc Lagardère to merge Aérospatiale with MHT to create AM.⁶⁹⁹ AM's official date of birth is 14 June 1999, ten days after the company's listing on the Paris stock exchange. While the French state's stake in AM was below 50 percent, the government retained a final say over AM's strategic decisions like potential M&As, spin-offs, etc.⁷⁰⁰ ⁷⁰¹ In principle, AM was well positioned for the coming phase of European A&D industrial consolidation, especially given its size and strong track record of successfully participating in collaborative projects like Airbus, Eurocopter, and Ariane. That being said, the French government's 48 percent stake in AM would prove to be a major obstacle in future merger talks with privately-controlled European companies such as DASA or BAE whose management feared that political pressure from Paris could unduly interfere with AM's corporate strategy.⁷⁰² The close links between AM and the French government, particularly through the DGA, meant that AM was likely to behave as a vehicle for French state and political interests as much as or more than a profit-seeking corporation.

⁶⁹⁹ AM's shareholder structure was as follows: French government: 48 percent; Lagardère Group: 33 percent; AM employees: two percent; the remaining 17 percent of AM shares was distributed among institutional and retail investors.

⁷⁰⁰ "The [AM] Golden Share gave the government the right to: name a non-voting member to the board; approve any new shareholding of 10 percent or more; approve any increase in an existing stake by 10 percent or more of the total capital; and block the sale of any part of the shares if it would threaten [AM]'s control in ballistic missiles, laser, nuclear, and armaments units." Bialos (2009) vol. II, p. 344

⁷⁰¹ "France must know on whom it can rely (both strategic and economic) and refuses to risk its national security by allowing firms motivated solely by financial considerations, or foreign firms with different security interests, to steward its major defence companies." Ibid., p. 308

⁷⁰² From an economic perspective, AM's bloated workforce and low profitability made rationalisation / job cuts inevitable. However, from a political perspective – especially against the backdrop of a newly elected Socialist government – the implementation of such reforms seemed far too costly.

4.3.2 DaimlerChrysler Aerospace AG (DASA)

Prior to the EADS merger, DASA was the 100-percent-owned A&D subsidiary of DCX – itself the creation of a major transatlantic merger between Daimler-Benz AG and Chrysler Corporation in 1999. DASA was founded in 1989, when Daimler-Benz took the lead in creating a German “national champion” by consolidating the country’s key A&D firms into one single company, DASA. The Cartel Office initially opposed the DASA merger plans, but dropped its most serious anti-trust objections after Chancellor Kohl’s government provided strong political backing for the deal.⁷⁰³ The German government, along with key state governments such as Bavaria, facilitated the creation of DASA by selling their remaining major A&D assets to Daimler-Benz AG. As early as 1990, then-DASA Chairman Juergen E. Schrempp – who would become CEO of Daimler-Benz AG in 1995 and play a key role in the 1999 EADS merger – made it clear that his strategy was to make the company “an equal partner in Europe, not a junior partner”⁷⁰⁴. When asked about DASA’s longer-term future beyond Europe, Schrempp also expressed his desire to enter into “extended partnerships”⁷⁰⁵.

1999 was the most successful year in DASA’s history. Revenues increased by five percent from EUR8.7 billion to EUR9.2 billion, primarily driven by booming Airbus deliveries and a favourable US dollar exchange rate. At the same time, DASA’s operating income rose by EUR107 million to EUR730 million, an increase of more than 17 percent due to continuing efficiency and productivity gains.⁷⁰⁶ In 1999, DASA’s operating margin stood at 7.9 percent, more than twice as high as AM’s comparatively low 3.7 percent margin. That year, DASA’s annual sales broke down as follows: Commercial Aircraft (essentially Airbus): EUR3.3 billion (36 percent of total turnover);⁷⁰⁷ Eurocopter: EUR705 million (8 percent);⁷⁰⁸ Military Aircraft (Eurofighter, Tornado): EUR1.1 billion (12 percent); Space Infrastructure: EUR592 million (7 percent); Satellites: EUR458 million (5 percent); Defence and Civil Systems: EUR1.7 billion (19 percent); and Aero Engines: EUR1.7 billion (19 percent). With annual R&D expenses of EUR2 billion (21.8 percent of turnover), DASA ranked as one of the world’s most technology-intensive A&D companies. DASA had 46,000 employees in 1999.

⁷⁰³ Taylor (1990) p. 60

⁷⁰⁴ Mecham (1999)

⁷⁰⁵ Ibid.

⁷⁰⁶ DASA (2000) p. 4

⁷⁰⁷ Airbus accounted for more than 90 percent of DASA’s total commercial aircraft turnover prior to the EADS merger. The remaining ten percent derived primarily from aircraft conversion (i.e., turning used passenger jets into freighters).

⁷⁰⁸ This figure reflects the consolidated DASA turnover figure according to its 40 percent stake in Eurocopter.

4.3.3 *Construcciones Aeronáuticas SA (CASA)*

While CASA was by far the smallest EADS co-founder, Spain's state-owned aerospace company was more profitable and efficient than DASA or AM. Like in the case of DASA, 1999 marked the most successful year in CASA history.⁷⁰⁹ Turnover rose to EUR1.2 billion (+ 20 percent), and CASA's operating income increased by 24 percent to EUR130 million in 1999, delivering a margin of 10.7 percent. 90 percent of CASA's 1999 revenues derived from aircraft sales; three percent from its space activities; and seven percent from maintenance services. 70 percent of CASA's sales came from commercial clients; 30 percent from military customers. Prior to EADS, much of CASA's turnover derived from its stake in the Airbus (4.2 percent) and Eurofighter (14 percent) consortia. CASA had 7,500 employees in 1999.

⁷⁰⁹ CASA (2000)

4.4 The Galileo Global Navigation Satellite System

The Galileo GNSS⁷¹⁰ marks an important milestone in Europe's growing space ambitions and clearly illustrates the French-led desire to cut its dependence on the existing American GPS system.⁷¹¹⁷¹² While Galileo's origins date back to 1998-1999, it was not until November 2001 and March 2002, respectively, that ESA and the EU joined forces and decided to each provide EUR550 million in funding for the development phase of the 30-satellite navigation system – now scheduled to be operational in 2013.⁷¹³ While two-thirds of Galileo's deployment costs (EUR2.4 billion)⁷¹⁴ were supposed to come from the European Galileo Industries consortium⁷¹⁵, these plans fell through in 2007, when the aerospace companies pulled out of the project, thus prompting the EC to step in and save the struggling navigation system. Galileo is the largest technology project funded and managed by the EU.⁷¹⁶

The motivations behind Galileo include a mix of political, economic, and technological factors. Officially, the EC has described Galileo as “the first [GNSS] designed specifically for civilian use worldwide”.^{717 718} And for sure, given the rapid growth in GNSS-related (commercial) applications,⁷¹⁹ Galileo's business case appeared to be rather strong.^{720 721} The UK, in particular, insisted that all official Galileo-related publications stress the system's commercial focus.⁷²² However, it is clear that military / geostrategic and technological motives loomed large when the EU – pushed by France – decided to go ahead with Galileo. The EC compared Galileo to Airbus

⁷¹⁰ GNSS = Global Navigation Satellite System

⁷¹¹ GPS = Global Positioning System

⁷¹² For up-to-date information about Galileo: http://ec.europa.eu/enterprise/policies/space/galileo/index_en.htm and <http://www.esa.int/esaNA/galileo.html>

⁷¹³ Initially, Galileo was set to be operational by 2008. However, the start date was subsequently postponed to 2013.

⁷¹⁴ Galileo's total cost of EUR3.5 billion breaks down as follows: EUR1.1 billion for the development phase + EUR 2.4 billion for the deployment phase. The original plan was for the EU to pay for the first four satellites, and industry to pay for two thirds of the costs for the next 26 satellites.

⁷¹⁵ Galileo Industries involved Alcatel Alenia Space, Thales, Finmeccanica, EADS Astrium (UK / Germany), and several Spanish companies. After Galileo Industries pulled out in mid-2007, France lobbied hard to keep the satellite system alive and managed to convince its fellow EU members to cover the EUR2.4 billion shortfall by using EUR1.6 billion from unused EU farm subsidies and funds from the EC's technology budget. Taverna (2001)

⁷¹⁶ Ibid.

⁷¹⁷ EC (Space Cooperation EU-Russia)

⁷¹⁸ This statement implied that Galileo would not be shut down during military crises.

⁷¹⁹ Potential Galileo applications include public transport, aviation, energy, fishery, environment / science, law enforcement, border patrol, etc.

⁷²⁰ According to a 2001 study by PriceWaterhouseCoopers, Galileo is expected to generate direct revenues of EUR 515 million per year (EC estimated annual operating costs of EUR 200 million). Together with Galileo's broader economic gains and positive externalities, the cost-benefit ratio reached 4.6 – an impressive benchmark for a public-private partnership. *The Economist* (June 2002)

⁷²¹ Galileo is not only attractive because it provides greater accuracy than GPS, but also because it features an integrity signal that constantly informs users of Galileo's continuity and reliability, making new commercial applications possible. Taverna (2003)

⁷²² London was trying to allay US fears about Galileo's potential military / security applications and the challenge it could pose to the US-controlled system – and thus to America's GNSS hegemony. The Blair government was divided

and Ariane, both of which successfully broke US dominance in the commercial airliner and space launch businesses. In that sense, Galileo is about organizing an effective EU-wide effort to allow Europe to compete with the American hegemon in a crucial technology sector.⁷²³ From the start, Paris has been the key driving force behind Galileo, with most of the funding coming from Germany. This has been precisely the French method for European collaboration since de Gaulle and the 1960s: the French lead, and the Germans pay. In 2001 President Chirac sternly warned that the abandonment of Galileo “would lead our country inevitably to a vassal status [vis-à-vis America], first scientific and technical and then industrial and economic.”⁷²⁴ France argued that the Europeans should no longer rely on GPS as that navigation network was controlled by the Pentagon and provided the foreign / non-military GPS users only with less accurate positioning data than those used by the US military.⁷²⁵ Furthermore, Paris was concerned that Washington could jam or shut down certain parts of the publicly accessible GPS system during a military crisis in an effort to deny its adversaries GNSS benefits.⁷²⁶ Such a crisis-related GPS disruption could also have a serious economic impact on legitimate third-party users in Europe and elsewhere. American officials “have denied that the US government has ever turned off civilian GPS signals during any conflict and underline that they do not intend to do so in the future”.⁷²⁷ These assurances have done little to allay European concerns. “The fundamental reason for creating Galileo was political and, at some level, a distrust of the [US].”⁷²⁸ France along with Italy, the third key Galileo backer, therefore demanded that the system have an encrypted PRS⁷²⁹ signal for use by European law enforcement and security services.^{730 731}

over Galileo. The defence and finance ministries were skeptical whereas the industry ministry backed Galileo. *The Economist* (June 2002)

⁷²³ “In technological terms: Galileo will enable Europe to acquire the technological independence that it wants in this area, as it did with other initiatives such as Ariane and Airbus. It is vital that it should not be excluded from what is already looking like being one of the main industrial sectors of the 21st century, which is how the Americans consider it. Without Galileo, the development and even the survival of European new technology sectors would be under very serious threat; with Galileo, the technological advance that the participating European industries will obtain will give them a considerable competitive advantage in this sector [...]” EC (2002) p. 4

⁷²⁴ James (2001)

⁷²⁵ “Select Availability” (SA) limited the public GPS signal’s accuracy to 300 feet. In 2000, Washington decided to increase the public GPS system’s accuracy to 40 feet. The military GPS is much more precise, with a margin of error of only several centimetres. “This decision was part of a larger effort to make GPS more responsive to civil and commercial users around the globe. In good measure, this decision was driven by a fear that continuation of [SA] created doubts about the willingness of the US to provide what had become a critical global infrastructure and acted as an incentive for other nations to build their own satellite navigation systems.” Lewis (2004) p. 1

⁷²⁶ European media claim that Washington jammed the public GPS signal on a regional basis during the 1999 Kosovo War. The denial of GPS to the enemy is an “asymmetric use” of GNSS. Giegerich (2007) p. 495. In recent years, the US military had to strengthen its GPS signals to prevent enemy jamming.

⁷²⁷ Ibid., p. 495. “While this may perhaps be true, a distinction has to be made between turning off the civilian GPS signals, on the one hand, and degrading them, on the other. The former is highly unlikely given that such a decision would incur enormous costs to the US economy and would – at this stage of GPS’s development – also undermine US military operations. The latter, however, is more likely, especially since improvements in GPS will offer a better separation between military and civilian signals, thereby reducing the impact on US operations further.” Ibid., p. 495

⁷²⁸ Lewis (2004) p. 1

⁷²⁹ PRS = Public Regulated Service

⁷³⁰ *The Economist* (June 2002)

[T]he military implications of Galileo bring out significant divisions among EU member states. France and the [UK] represent the opposite poles of the spectrum, with the former strongly pushing for a military role for Galileo and the latter resisting such moves [...]. Reports have suggested that France, with tacit support of the other main bankroller of Galileo, Germany, has adopted a strategy for gradually expanding military use of Galileo beginning in 2010 [...].⁷³²

Despite its commercial applications, Galileo has been driven from the outset by strategic and military motivations; i.e., the desire to provide Europe with strategic independence and greater flexibility / autonomy from Washington in security and defence matters:

“It is crucial for Europe and the world as a whole to have a choice and not remain dependent on the current monopoly of the American GPS system which is less advanced, less efficient and less reliable. [...]

[T]he EU wishes to develop, with Galileo, a system over which it has control and which meets the need for accuracy, reliability and security. [...]

Galileo will underpin the common European defence policy [...]. There is no question of coming into conflict with the [US], which is and will remain our ally, but simply a question of putting an end to a situation of dependence. If the EU finds it necessary to undertake a security mission that the US does not consider in its interest, it [the EU] will be impotent unless it has satellite navigation that is now indispensable. Although designed primarily for civilian applications, Galileo will also give the EU a military capability.”⁷³³

America viewed Europe’s efforts to launch Galileo “with something between contempt and outright hostility”⁷³⁴. For starters, Washington had serious doubts as to whether the EU would be able to marshal the political will and financial resources necessary to implement such an ambitious technological project. Furthermore, US officials saw no compelling need for Galileo given that GPS system was free and would be modernised in the near future.⁷³⁵ It was not until 2003 that US

⁷³¹ Galileo will have 10 navigation signal channels: six will be open and free to the public; two are fee-based and reserved for commercial users in need of more accurate signals; two PRS channels are encrypted and reserved for EU governments.

⁷³² Giegerich (2007) pp. 497-498. Giegerich also references Beidleman (2005) p. 130 and EUPolitix.com (2004).

⁷³³ EC (2002) pp. 1, 2, 4

⁷³⁴ John Pike from GlobalSecurity.org quoted in *The Economist* (June 2002).

⁷³⁵ Washington viewed Galileo as an unnecessary, wasteful duplication of GPS that would only divert already scarce resources from Europe’s pressing military modernisation needs.

policymakers recognised that they could no longer prevent Galileo even if they wanted to do so.⁷³⁶ At that stage, “Galileo seemed to US observers to combine the commercial competition seen in earlier European initiatives, like Airbus or [Ariane], with an unexpected risk to a key US military resource [GNSS].”⁷³⁷ Washington had serious concerns that Galileo could fundamentally challenge America’s GPS monopoly⁷³⁸, making it easier for potential adversaries like China to gain access to advanced GNSS technology.⁷³⁹ Above all, the Pentagon worried about the so-called M-code overlay; i.e., the fact that Galileo’s encrypted PRS signal as well as parts of the open channels had been assigned a frequency similar to the restricted M-code GPS III signal planned by the Pentagon for future use by the US military and during NATO operations. This spectrum overlay would make potential US jamming of Galileo’s signal much more difficult and even risked interfering with the GPS M-code.

Washington regarded Galileo’s M-code overlay as a major national security threat and exerted significant political pressure on its EU allies to make them back down and change their GNSS frequency. In late 2001, then-Deputy US Defence Secretary Paul Wolfowitz sent a letter to all EU defence ministers who were also part of NATO warning that Galileo’s M-code overlay with GPS “will significantly complicate our ability to ensure availability of critical GPS services in time of crisis or conflict and at the same time assure that adversary forces are denied similar capabilities”. Wolfowitz went on to state that “it is in the interest of NATO to preclude future Galileo signal development in spectrum to be used by the GPS M-code” and asked his European counterparts to find out whether the EU intended to integrate “military features” into Galileo. “[I]f so, we must examine [...] the security implications [...]”⁷⁴⁰ Wolfowitz assumed that he could leverage Europe’s top military establishment (many of which had long-standing ties to NATO and were part of the same security community) to influence Galileo through the backdoor. However, rather than forcing the EU to back down, the letter backfired and gave a boost to those countries which, like France, had argued all along that Galileo was indispensable to guarantee Europe’s strategic independence vis-à-vis America.⁷⁴¹ In 2003, a senior DoS official declared that “Overlay of M-code signals is not

⁷³⁶ Lewis (2004) p. 1. Prior to 2003, Washington proved “unwilling to accept the changes occurring in its European partners” and failed to recognise that voices within the EU were calling “for an increasingly competitive transatlantic relationship”. Ibid., p. 2

⁷³⁷ Ibid., p. 1

⁷³⁸ Russia’s GLONASS is a military GNSS which is currently not fully operational due to funding problems.

⁷³⁹ China’s EUR200 million investment agreed in 2003 proved particularly worrisome to Washington as Beijing could potentially use Galileo to improve the accuracy of its ballistic missiles. Beijing is currently trying to build its own “Compass” GNSS.

⁷⁴⁰ AFP (2001) referenced in Lewis (2004) p. 5

⁷⁴¹ (Braunschvig, Garwin, & Marwell, 2003)

compatible with national security, weakens NATO capability, and is unacceptable to the [US].”⁷⁴²
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In June 2004, following months of tough negotiations taking place in the wake of the divisive 2003 Iraq War, the US and the EU finally reached a compromise agreement to resolve their differences.^{744 745} Most importantly, the EU agreed to switch Galileo’s open signals to a different frequency – known as BOC (1,1) – which would also be shared with the civilian part of the future GPS III. Earlier on, Brussels and Washington had already struck an informal agreement on the separation of the M-code and Galileo PRS signal frequencies.⁷⁴⁶ The EU also pledged to allow US companies to build GNSS receivers that are compatible with Galileo. The US agreed not to jam Galileo’s signals unilaterally, to share classified information⁷⁴⁷ about the lessons learned from its GPS programme so far, and to allow the EU to continue to optimise Galileo’s signals moving forward. “The fundamental compromise behind the US-EU agreement is US acceptance of Galileo as an independent satellite navigation system in exchange for EU acceptance of US security and commercial concerns.”⁷⁴⁸

While the compromise was hailed by both sides as a win-win outcome, it is fair to say that Washington obtained more important concessions from Brussels than the other way around. The EC did accommodate Washington’s key concern about the potential M-code overlap by changing Galileo’s open signal frequency and, in return, received little more than conditional US blessings for a project that Washington was no longer able unilaterally to prevent from going ahead anyway.⁷⁴⁹ Of course, the fact that the EC was legally empowered to negotiate with the US on behalf of all EU members “severely limited [Washington’s] ability [...] to rely on tested negotiation techniques such as divide and rule and venue-shifting (i.e., conducting negotiations through [NATO])”.^{750 751} However, for the EC to maintain support for Galileo among Atlanticist members

⁷⁴² Giegerich (2007) p. 501

⁷⁴³ For an analysis of the key Galileo issues that threatened US interests (i.e., spectrum overlap, mandatory use requirements / market access, potential military use, and European defence spending priorities), see Lewis (2004) pp. 4-7.

⁷⁴⁴ (Wall & Taverna, 2004) and “Agreement on the Promotion, Provision and Use of Galileo and GPS Satellite-based Navigation Systems and Related Applications”:
http://ec.europa.eu/transport/galileo/doc/2004/2004_06_21_eu_us_agreement.pdf

⁷⁴⁵ Giegerich (2007)

⁷⁴⁶ (Wall & Taverna, 2004)

⁷⁴⁷ “The specific areas of American knowledge that were open to Europeans included the hardening of satellites to make them resistant to high levels of radiation in space, software and operating procedures relating to ground control of satellite constellation, as well as the lessons learnt over the operation of atomic clocks in space. The carrot, in short, was that European time and money could be saved through learning from the US experience.” Giegerich (2007) p. 502

⁷⁴⁸ Lewis (2004) p. 8

⁷⁴⁹ A technological breakthrough by German and French scientists in late 2003 made it possible to keep Galileo’s original encrypted PRS frequency while avoiding any M-code interference.

⁷⁵⁰ Giegerich (2007) p. 492

like the UK it was important to avoid a full-fledged clash with Washington and to make a good-faith effort to find a compromise solution acceptable to everyone:

*“Europe and the US are at a decision point for activity in space. The evolution of a common European security and defence identity creates both challenges and opportunities. Absent a clear vision on how to move ahead, a diminution in transatlantic cooperation is possible. This outcome would not serve the interest of either Europe or the US. It is still unclear if the agreement on Galileo / GPS compatibility was a last gesture of a declining transatlantic partnership or the beginning of a new model for cooperation [...].”*⁷⁵²

According to Michael Gleason, “the Galileo programme has survived because of subtle changes of emphasis among the motives driving it”.⁷⁵³ Accordingly, the 1999 EU decision to back Galileo’s “definition phase” was primarily driven by “liberal factors at the international level”.⁷⁵⁴ In particular, Gleason identifies the anticipated GNSS benefits for EU communications and transportation networks as the primary motivating factors behind Galileo. In contrast, the EU’s 2002 decision to approve Galileo’s “development phase” was above all driven by realist motivations. ESDP, the Euro, and the 9/11 attacks are important factors explaining “that European decision-makers were beginning to see the EU as responsible for independently protecting its self-interest in the anarchic global environment”.⁷⁵⁵ ⁷⁵⁶ The June 2004 EU-US accord was again primarily motivated by “liberal factors at the international level”.⁷⁵⁷ Specifically, European and US decision-makers decided that international cooperation, leading to better for efficiency for both GNSS projects, was the best strategy for all actors involved. Finally, the all-important June 2007 EU decision to keep Galileo alive by funding it exclusively through EU public funds was again dominated by realist factors:

“Growing insecurity in the world, as a weakened [US] became bogged down in Iraq, NATO

⁷⁵¹ Washington treated the Pentagon-run GPS network as a vital national security matter. In Brussels, Galileo was “handled by transport ministers and [EC] bureaucrats with no mandate for, or experience of, dealing with the life-or-death issues of geopolitics and war”. *The Economist* (June 2002)

⁷⁵² Lewis (2004) p. 11

⁷⁵³ Gleason (2009)

⁷⁵⁴ *Ibid.*, p. 13

⁷⁵⁵ *Ibid.*, p. 14

⁷⁵⁶ “Between 1999 and 2002, the EU took a number of steps which make it more valid to consider the EU analytically “as if” it were a state actor in the international arena. The development of [ESDP] along with the development of an [ERRF], the Lisbon Strategy to make the EU the most competitive knowledge-based information economy in the world, and the economic integration of Europe with the euro are some of the factors which indicate that European decision-makers were beginning to see the EU as responsible for independently protecting its self-interest in the anarchic global environment. The terrorist attacks on America on September 11, 2001 and European discomfort with the unilateralist Bush administration also contributed to European decision-makers’ desire to develop independent PNT [Positioning, Navigation, and Timing] capabilities in order to bolster Europe’s political autonomy, security, and economic competitiveness.” *Ibid.*, pp. 14-15

⁷⁵⁷ *Ibid.*, p. 15

lost ground in Afghanistan, Russia demonstrated the ability to squeeze European energy supplies, and the Chinese successfully tested an anti-satellite weapon, insured that European decision-makers' assessments of the need for Galileo were heavily influenced by realist factors."^{758 759}

The fact that France was (again) the decisive force behind Galileo at its most critical decision point in June 2007 thus lends credence to the notion that Paris, more than any other European government, pursued a strongly realist and national-interest based foreign and security as well as aerospace industrial policy. The Galileo / GPS episode strongly supports the realist approach and interpretation embraced by this thesis. For Washington, GPS was a national security issue: US control over the only operating GNSS reinforced American hegemony in NATO. The French, in contrast, who at the time still remained outside of the Alliance's IMS, were determined not to accept this position of strategic dependency long-term.⁷⁶⁰ While Gleason argues that during the 1999 "definition phase" Galileo was primarily driven by commercial motivations, there can be no doubt that for France, military and strategic considerations topped the Galileo agenda – though the civilian GNSS applications were used to get Germany and the UK on board as both countries were concerned about Galileo's impact on relations with Washington.

⁷⁵⁸ Ibid., p. 15

⁷⁵⁹ "Indicators that realist factors were exerting strong influence in European decision-makers' assessment of the global environment include the EU adoption of the "European Security Strategy in 2003, the founding of the [EDA] in 2004, the announcement that two 60,000 strong EU Battle Groups had become fully operational in January 2007, the activation of the EU Operations Center in June 2007, and the conduct of ten EU operations outside of Europe ranging from purely military missions, to policing, to security institution building, and involving roughly 10,000 EU personnel in 2006 alone." Ibid. p. 16

⁷⁶⁰ There is anecdotal evidence that a US intelligence team went to brief French President Mitterand on Saddam Hussein's WMD programmes and handed him satellite photos of suspected sites. At the end of the briefing, the US team asked for them all back, packed them away and left. Mitterand was said to have been furious at this kind of humiliating treatment by the Americans.

4.5 France's unique approach to the aerospace and defence industry

“More than any other country, France has a holistic view of its national identity. The government, the people, the language, and even the wine are inextricably linked. The country's aerospace industries are part of that holistic image. They represent an investment by the state, on behalf of the people, designed to enhance their national security, economic gain, and national prestige.”⁷⁶¹

This section contrasts the different approaches adopted by Europe's major powers – France, Germany, and the UK – in dealing with their respective A&D companies and analyses how the interplay with each country's foreign and security policy has shaped this strategic industry sector. Paris, driven by Gaullist and neo-Gaullist ambitions, made it a priority throughout the Cold War to maximise its national autonomy in military and security matters. Therefore, France pulled out of NATO's integrated command structure in 1966, a highly symbolic move that would not be reversed until the Alliance's 60th anniversary summit in 2009. France also refused to succumb to the “American temptation” and simply import or co-produce (generally cheaper) US-made aircraft and other advanced weapons systems for fear of becoming militarily and politically dependent on the American hegemon. Paris was ready to commit considerable resources to develop and maintain an advanced, autonomous indigenous defence industrial base backed by strong export promotion policies supporting France's foreign and security policy objectives.^{762 763 764} And even when France did engage in cross-border defence cooperation with countries like Germany or the UK to share costs and benefit from an enlarged home market base, etc. it was clear from that Paris would insist on overall design leadership. While exponentially rising R&DP costs of advanced weapons systems pushed France towards closer collaboration with its European neighbours, Paris nonetheless did not want to give up its long-standing claim to a leadership role in the creation of “*Europe puissance*”: a politically strong Europe capable of autonomously defining and protecting its interests vis-à-vis other relevant players in the international system, including the US.

⁷⁶¹ Aboulafia (2001)

⁷⁶² To defray the skyrocketing R&DP costs for advanced French-made weapons systems, Paris has pursued an aggressive export promotion and political lobbying campaign vis-à-vis potential foreign customers. “In France, [...] export revenues are far higher than domestic sales [...] [and] the military has expressed concern that export demand, rather than the needs of the armed forces, drives arms production.” Neuman (2006), p. 431

⁷⁶³ “[I]t becomes clear that few activities permeate and penetrate French political and economic life more than the sale of military technology and arms – and few are more important. Distinguishing between foreign and domestic policy as the primary source of French [defence sales] conduct, therefore, has little or no relevance. Moreover, the guns *or* butter dichotomy normally used by analyst to explain or condemn arms sales has been transformed in the French context into an imperative of guns *and* butter. For most French within the government and bureaucracy concerned with arms sales, and many within the opposition, the security and foreign-policy functions of the government, on the one hand, and popular expectations of its responsibilities for welfare, on the other, are more joined than at odds. Kolodziej (1980) pp. 54-55

France – backed by German financing and technological know-how – also played a decisive role in the launch of Airbus, which occurred not long after “*Le défi américain*” had alarmed Europe’s political leaders about the growing economic, political, military, and technological power imbalances between America and its allies on the Old Continent. However, France could also be quite selective when it came to promoting defence industrial collaboration in Europe. Paris refused to join Eurogroup / IEPG until 1976; eight years after the launch of this UK-led initiative. Once France had joined IEPG, European cross-border defence industrial collaboration did receive a major boost. For the strategically minded French government, GD’s 1975 F-16 “sale of the century” certainly served as an important reminder that closer intra-European collaboration was the only answer to confront the American hegemon and its aggressive defence export offensive.

While France has traditionally put a premium on pursuing an independent security and defence policy and tried to foster European autonomy in strategic affairs, Paris was eager to avoid being isolated within the EU, specifically in relation to the possibility of a potential German-British defence industrial “axis” emerging in the mid-1990s.⁷⁶⁵ BAe and DASA were known for following an “Anglo-American business model [...] putting profit ahead of market share and business volume”.⁷⁶⁶ “From the standpoint of France, countries and companies that followed the Anglo-American way of thinking were encircling France, trying to convince them of the error of their French ways.”⁷⁶⁷ When the planned DASA-BAe merger risked leaving the French A&D industry out in the cold, Paris dropped its opposition to the privatisation of Aérospatiale, engineered a merger with MHT to build AM, and agreed to limit the government’s stake in EADS to 15 percent in a concession to the Germans. Once France realised that its “maximising-national-autonomy” approach was no longer viable, the government changed course and adapted to the new defence industrial realities and necessities.⁷⁶⁸ This adjustment in France’s A&D industrial strategy was

⁷⁶⁴ “Since France relies on arms exports not only to sustain its domestic industrial base but also as an instrument of foreign policy, it also seeks to maintain export flexibility and avoid the need to get permission from another nation to modify, deploy or export systems and / or technologies.” Bialos (2009) vol. II, p. 308

⁷⁶⁵ “We would regret [the impact] of a bilateral [BAe-DASA] consolidation move. France’s political leaders and industrialists clearly have a preference for a 3-company [Aérospatiale-BAe-DASA] merger. [...] The current discord is injurious but the latent situation is worse. Exclusive of combat aircraft, we share most of our businesses [with the UK and Germany] and I don’t understand the logic that could lead to a 2-player-only merger. [...] If it happened, we would react. The turmoil of the last 6 months impedes sound decision making.” Aérospatiale executive quoted in Sparaco (December 1998)

⁷⁶⁶ Aboulafia (2001)

⁷⁶⁷ Ibid.

⁷⁶⁸ France’s defence-industrial establishment had already realised in mid-1997 that the country’s A&D electronics players risked falling behind their European and US competitors unless Paris abandoned its goal of creating a super national champion by merging Aérospatiale, Dassault, and Thomson-CSF. First, Dassault rejected such a big-bang merger. Second, Paris recognised that a French state-controlled super national champion would scare away other European partners and push Germany and the UK towards a BAe-DASA merger. French A&D industrial leaders feared the country’s encirclement at the hands of rapidly-consolidating foreign competitors. Ultimately, Paris decided to

initiated by Socialist Prime Minister Jospin after his election in 1997. Unlike their conservative predecessors, Jospin and finance minister Strauss-Kahn were willing to go beyond the confines of Paris' long-standing neo-Gaullist approach and opted for the (partial) privatisation of key state-controlled assets like AM to pave the way for pan-European A&D industrial consolidation.

“Ironically, the left-wing coalition of French Prime Minister Lionel Jospin, which came to power in 1997, rapidly formulated a more realistic industrial policy than its right-wing predecessors. Jospin and then-Finance Minister Dominique Strauss-Kahn devised pragmatic guidelines including subtle compromises such as the partial privatisation of state-controlled companies. In July 1998, they readily endorsed the surprise Aérospatiale / [MHT] merger set to combine the state-owned aerospace company and the Lagardère group’s defence arm into a shareholder-value-driven enterprise. This milestone, which reconciled market forces with the ‘new left’, radically changed the course of events and installed new actors on the aerospace stage.”⁷⁶⁹

“In short, France’s aerospace policy consists of preserving industrial assets from the ravages of market capitalism. But globalisation, the end of the Cold War, and numerous other factors have forced the country to retrench and reconsider the extent of its aviation industry commitments.”⁷⁷⁰

France’s goal to avoid a bilateral German-British link-up and its decision to throw its weight behind a Franco-German AM-DASA merger instead stands in stark contrast to the strategic industrial policies – or weakness thereof – pursued by either London or Berlin. Prime Minister Blair was furious about the BAe-Marconi link-up as he feared that this “UK first” deal could antagonise DASA and permanently dash Britain’s prospects of being part of any future pan-European defence industrial consolidation.^{771 772} Blair’s preference for a cross-border European A&D merger was part of his desire to keep the UK actively engaged in EU affairs – in spite of London’s refusal to adopt the “Euro”. At the same time, however, a government pursuing a realist, national-interest based A&D industrial strategy would probably have opposed the BAe-DASA merger and pushed for the creation of a BAe-Marconi British “national champion” instead. After all, the “UK first” deal brought Britain’s “two prime contractors together in an alliance spanning both military platforms

pursue a dual-track strategy by promoting AM and Thomson-CSF / Thales as separate French A&D champions. Le Boucher (1997)

⁷⁶⁹ Sparaco (July 2000)

⁷⁷⁰ Aboulafia (2001)

⁷⁷¹ Harrison (January 1999)

⁷⁷² London made it very clear to BAe and Marconi that their merger would not escape a thorough anti-trust review. Walters (1999)

and the combat systems that go on them”⁷⁷³. BAe strongly emphasised that the Marconi merger served Britain’s national interests: “Up until now, foreign defence contractors have been able to play BAe off against GEC [Marconi] to their advantage. This [merger] stops that game.”⁷⁷⁴

Ultimately, the UK government did accept the BAe-Marconi deal as none of the other potential alternatives under consideration at the time – i.e., a BAe-DASA link-up or a Marconi merger with Thomson-CSF, LMC or NGC – came to fruition.⁷⁷⁵ While Paris failed to secure a Thomson-CSF merger with Marconi, London allowed the French to take over UK defence electronics company Racal in a GBP1.3 billion all-cash deal.⁷⁷⁶ The Blair government had actively encouraged Thomson-CSF to bid for Racal to boost competition in the UK defence procurement market. Furthermore, in a move that sparked a domestic political backlash, the Blair government even seconded the deputy head of the UK defence procurement agency to Thomson-CSF to help integrate Racal, boost the French firm’s competitive position vis-à-vis BAE, and increase the company’s profile in the US.⁷⁷⁷ These examples clearly demonstrate the lack of French-style realist, national-interest-based strategic thinking in London’s A&D policy. The UK government adopted a hands-off, laissez-faire approach which deliberately minimised state interventions in the A&D industry based on the belief that the private sector and competitive market forces were ultimately the most effective drivers of technological innovation and economic dynamism. For sure, the British MoD imposed security restrictions to protect Racal’s classified information and retain a say over the company’s future strategic orientation.⁷⁷⁸ However, it is doubtful that Paris – unlike London – would have ever authorised a foreign firm to take-over of a cutting-edge, Racal-type French defence company. The Racal take-over was a major boost for Thomson-CSF / Thales as it bolstered France’s attempt to create a global player in defence electronics.^{779 780 781} That being said,

⁷⁷³ Harrison, “‘UK first’ deal that could set Europe at war; News Analysis: France doesn’t like it, and Germany is simply livid” (January 1999)

⁷⁷⁴ BAe Vice-Chairman Laphorne quoted in Ibid.

⁷⁷⁵ For more details on the merger options (BAe, Thomson-CSF, LMC, NGC) considered by Marconi, see Fluendy (1999) and Jones (1998).

⁷⁷⁶ Gow (2000)

⁷⁷⁷ Little (2000) and Abrams (2000)

⁷⁷⁸ *The Independent* (2000)

⁷⁷⁹ France’s realist, national-interest-based A&D industrial approach is illustrated by the fact that Thomson-CSF, rebranded “Thales” in 2000, has in recent years pursued a “multi-domestic” defence market strategy focusing first on Europe and later on expanding into South Africa, Australia, South Korea, and Singapore. This strategy involves acquiring full control of A&D subsidiaries abroad initially held through JVs.

⁷⁸⁰ One of the reasons that Paris picked Denis Ranque as Thomson-CSF CEO in 1997 was that he had previously managed a Franco-British JV with Marconi. As “Le Monde” put it: “Qualité supplémentaire [de Denis Ranque]: il dirige une société franco-britannique, ce qui constitue un signal positif en direction de l’Europe. Cette dimension internationale paraît particulièrement importante alors que l’une des missions du nouveau patron de Thomson-CSF sera de participer à la restructuration des industries de défense en Europe.” (Le Coeur & Rocco, 2000)

⁷⁸¹ For France, the Racal deal had the added benefit of preventing the company from being acquired by an American competitor. The take-over also served as a tangible example of the new post-St. Malo “rapprochement” in Anglo-French relations.

British A&D companies (BAE in particular) have benefited from London's "special relationship" with Washington and gained privileged access to the US defence market.

As for the German A&D industrial approach, Europe's biggest economy was somehow caught between France and the UK. On the one hand, DASA pursued a corporate strategy focused on maximising profits and eliminating inefficiencies. While it recognised the importance of political leadership to create the appropriate pro-merger regulatory framework, DASA firmly believed that the process of European A&D industrial consolidation process should be driven by private sector executives, not by government bureaucrats.^{782 783} This shared Anglo-Saxon free-market mentality was also the main reason why DASA and its parent DCX were so eager to pursue a merger with fully privatised BAe. It was only after BAe had abandoned their bilateral merger talks in favour of Marconi and after Paris signalled its willingness to reduce its stake in EADS to an absolute minimum that the German executives' deep-seated fears and distrust of French state interference in the A&D sector were (at least partially) overcome. France's policy of claiming design and project leadership in joint Franco-German / European A&D programmes (treating DASA as a junior partner) also explains why DASA preferred to merge with BAe.⁷⁸⁴

The German government "aggressively promoted pan-European mergers and the need to achieve major economies of scale [...] but it firmly rejected dogmas such as state ownership⁷⁸⁵ that prevailed in France, Italy and Spain."⁷⁸⁶ As the world's export champion, Germany was a strong proponent of free trade and displayed an instinctive scepticism about government interference in the economy through direct shareholdings in "strategic" companies or the pursuit of a mercantilist trade and industrial policy. At the same time, there can be no doubt that the historic symbolism of Franco-German reconciliation served as a powerful backdrop for the EADS merger. Since the signing of the 1963 "German-French Friendship Treaty", the two countries had continuously intensified their A&D industrial collaboration (Alpha Jet, Transall, etc.). While – during the second half of the 1990s – political differences over the pace and desired end state of pan-European

⁷⁸² A DASA board member expressed his company's frustration at the lack of political backing by Europe's governments for large-scale pan-European industry consolidation: "We have had hardly any progress in the past three years, just a lot of lip service. [...] As industrialists, we could move as fast as the Americans. We could merge industries, but we cannot merge markets and government policies." Morrocco (October 1997)

⁷⁸³ An unnamed senior DASA executive responded to the Franco-British-German trilateral declaration of 9 December 1997 on "the urgent need to restructure Europe's A&D electronics industries" as follows: "[DASA] welcomes [the governments'] statement. Although we think the European industry's restructuring is an assignment for the companies involved, it is the politicians' task to create the right framework." Sparaco (December 1997)

⁷⁸⁴ "French government officials today regret the German aerospace industry's inclination to favour stronger links with the UK. 'Maybe France went wrong in not forging more opportunities for German leadership in industrial programs,' a French [aerospace] executive acknowledged." Sparaco (December 1998)

⁷⁸⁵ "Länder" governments like Bavaria and Hamburg initially owned important stakes in key A&D companies like MBB but decided to privatise their holdings to help build German "national champion" DASA in 1989.

industry restructuring caused certain tensions between Paris and Berlin, the French government was eager to leverage its “special relationship” with Germany to prevent a BAe-DASA link-up and to foster, at a minimum, a bilateral Franco-German merger instead.

Unlike Paris, the German government did not own controlling stakes or Golden Shares in the country’s A&D base and was therefore not in a position to directly shape the corporate strategy of companies such as DASA.^{787 788} Even if Berlin had pushed for a bilateral DASA-Aérospatiale link-up from the beginning, it is fair to say that DCX CEO Schrempp would have pursued a BAe-DASA merger anyways. The British government was in a similar position as it failed to engineer the desired BAe-DASA merger and had to put up with the creation of BAE instead. Paris, however, considered itself as the ultimate arbiter of the French A&D industry and saw it as a means to enhance France’s “national security, economic gain, and national prestige”.⁷⁸⁹ According to defence minister Alain Richard, the A&D industry’s restructuring remains “the sole way to preserve Europe’s independence and ensure it does not become the US industry’s subcontractor.”⁷⁹⁰ Paris would not approve alliances or mergers that fail to give French companies a prominent role:⁷⁹¹ “We consider France’s position, due to its vast technological expertise, should be the top ranked in Europe.”⁷⁹² This statement demonstrates France’s ambition to vigorously defend its A&D industrial leadership role during the anticipated European consolidation end game and, ultimately, to challenge the US mega-primes.⁷⁹³

⁷⁸⁶ Sparaco (July 2000)

⁷⁸⁷ Paris negotiated a “Golden Share” arrangement and additional French national security-related safeguards with the principal private shareholders of EADS, primarily Germany’s DCX: “[L]’accord d’actionnaires accorde de nombreux privilèges à l’actionnaire français. Outre le droit de veto en matière d’acquisition, d’alliance stratégique, et d’augmentation de capital, la France, puissance nucléaire, gardera un droit de contrôle sur les opérations concernant la capacité de maîtrise d’oeuvre, de conception et d’intégration des missiles balistiques du groupe ainsi que sur quatre filiales au coeur du dispositif nucléaire militaire français.” Jakubyszyn (1999)

⁷⁸⁸ Paris has a veto over EADS investments above EUR500 million and capital injections affecting the voting rights distribution.

⁷⁸⁹ Aboulafia (2001)

⁷⁹⁰ Sparaco (December 1998)

⁷⁹¹ Ibid.

⁷⁹² Ibid.

⁷⁹³ “In recent years, France has shifted from its traditional Gaullist policy of ‘National Autonomy’ to a neo-Gaullist policy of ‘Strategic Autonomy’ centred on building a stronger European defence capability. Under ‘Strategic Autonomy’, France seeks to ensure its ability to choose where and when to operate militarily and its ability to operate independently if necessary. But this policy does not mean that all industry sources must be French; only a few select areas must remain national (e.g., nuclear weapons capability). Strategic Autonomy is supported by an industrial policy of ‘Competitive Autonomy’ wherein France establishes formal agreements of mutual interdependence and supply security with European partner states for certain defence capabilities, and will allow competitive bidding by other European firms within this framework. Consistent with this Euro-strategic thrust, French officials assert that it is time for the EU to strengthen its own technology and industrial base in order to stand on a more equal footing with the US. To implement this goal, France will increasingly share its armaments acquisition resources, programmes, and industrial base with European partners.” Bialos (2009) vol. II, pp. 307-308

Minister Richard's statement is indicative of how Paris has tried to leverage Europe's collective technological and financial capabilities in pursuit of policy objectives that France could no longer achieve acting purely on its own: Airbus, Ariane, and Galileo are prime examples. The Galileo case is particularly instructive as it demonstrates how French political manoeuvring managed to transfer Galileo's control and budgeting authority from ESA – which operates on the principle of “just return” – to the EU: an institution which has a much bigger and politically more opaque financing mechanism, provides multi-billion euro subsidies to France's highly protected agricultural sector and counts Germany as the biggest financial contributor.⁷⁹⁴ While France was generally hostile to the idea of sharing design and technology leadership with its Western neighbour and deliberately tried to keep German industry in a junior role, Paris was eager to get German financial backing for joint bilateral / European A&D projects like Galileo.⁷⁹⁵

After a multinational industry consortium (including EADS, Deutsche Telekom, etc.) pulled out of Galileo in mid-2007, France lobbied hard to keep the project alive and ultimately managed to convince its fellow EU members to cover the EUR2.4 billion shortfall by using EUR 1.6 billion from unused EU farm subsidies and by taking the remainder from the EC's technology budget.⁷⁹⁶ While Germany failed in its attempt to implement Galileo (partly) within ESA, Berlin nonetheless managed to extract concessions improving the participation of German industry in this project.⁷⁹⁷ “What sounds like a petty bureaucratic matter in fact decides on who will be the paymaster and who will be the beneficiary of Galileo.”⁷⁹⁸ Germany served again as the paymaster for a French-designed plan to develop an ambitious European A&D project designed to benefit France's national security and economic interests on the global stage. As a result of this successful French power-play to shift Galileo on to the EC budget, the entire project has suffered from much less effective management and cost-control. This chapter has also demonstrated that for the US and French governments, security considerations (framed in realist terms) shaped aerospace decisions, whereas British and German decision-makers were more confused and ambivalent. The French have arguably been the most realist / mercantilist / sovereignty / security-oriented of these four states. The larger size of the US economy and federal budget have allowed American policy-makers not to define their (A&D) choices so explicitly.

⁷⁹⁴ French senior EU civil servant François Lamoureux – who served at the Transport Directorate-General during 1999-2005 – played an important role in the EC's taking control of Galileo.

⁷⁹⁵ BBC (2007)

⁷⁹⁶ Taverna (2007)

⁷⁹⁷ The EC “[divided the Galileo] purchases into a half dozen work packages, no more than two of which could be led by the same company, and to mandate that at least 40 percent of each work package be allocated for subcontractors – an arrangement designed to favour German suppliers”. See Ibid.

⁷⁹⁸ BBC (2007)

Chapter 5: Going American: Explaining the Boeing / McDonnell Douglas Merger

5.1 *The A&D industry: caught between two worlds*

This thesis seeks to demonstrate that realist arguments about international relations, even among allies, were crucial in motivating governments to support the BMD and EADS mergers. It is important to emphasise that realism is not only a prominent school of IR theory but also a set of core policy assumptions and recommendations designed to help government leaders navigate the treacherous waters of international relations.⁷⁹⁹ Chapter 5 details how America's attempt to preserve and advance its international hegemonic position – or, to put it differently, to try to prevent the country's (relative) decline during the post-Cold War period – explains why the US consolidated its aerospace industry at a purely national level with virtually no involvement from their Western allies. In addition, Chapter 5 will also examine several transatlantic corporate mergers that *did* take place after the end of the Cold War and which were not blocked by the US government. By contrasting big transatlantic mergers in three industries – automotive, banking, and telecommunications – with the striking absence of major transatlantic M&A activities (at the prime contractor level) in the A&D industry, this chapter provides further insights into what separates the EADS and BMD mergers from M&A transactions in “normal” industries.

The A&D industry is caught between two worlds. In the realist world, national security concerns dictate that a country should strive to attain maximum autonomy and independence for its own A&D sector. To [realist] national security analysts, “*where* [critical A&D] production takes place and *who* controls the process are of crucial importance.”⁸⁰⁰ In a globalised world economy, in contrast, many goods and services are often traded (almost) freely across borders, FDI and capital flow from one country into the other, and key goods, services, and technologies are sourced in the “global marketplace”.

*“[This aerospace industry] debate has revealed two camps: one that draws on the standard liberal prescriptions of easy access and free choice as a means of bringing efficiency and dynamism to the industry; and a second that draws on so-called neo-mercantilist recommendations, entailing use of the state to strengthen national firms and keep control over the industry.”*⁸⁰¹

⁷⁹⁹ Realism addresses the key question of how political leaders can maximise the relative power position of their respective state while, at a minimum, ensuring its survival as an independent entity in the context of an anarchic international self-help system.

⁸⁰⁰ Moran (1990) p. 58

⁸⁰¹ (Moran & Mowery, 1991) p. 135

In essence, this thesis argues that, when it comes to the BMD and EADS mergers, realist arguments won against liberal institutionalist arguments, both in Washington and in Paris. For reasons of realism / national security, neither the US nor the French government were willing to simply “retreat” after the end of the Cold War and to allow their respective A&D champions to pursue laissez-faire corporate strategies based on the principles of liberalism, international cooperation, unbridled globalisation, and open markets. While, during the 1990s, Washington responded to the new post-Cold War realities by promoting greater economic efficiency and economies of scale through massive *national* A&D industrial consolidation, the American hegemon continued to have serious reservations about full-fledged transatlantic M&A deals – especially at the prime contractor level – for fear of losing control over sensitive US technologies and of fostering foreign dependence in the “strategic, high-technology, high value-added industr[y]”⁸⁰² par excellence, with enormous implications for international military *and* economic competition.⁸⁰³ From a mercantilist perspective, large-scale transatlantic M&A deals risked the gradual erosion of America’s aerospace industrial base and a further deterioration in the yawning US trade deficit as well as the national balance of payments. As two neo-mercantilist analysts observed in 2007:

*“[The A&D] industry has been the top US export sector for more than 50 years and many of the advanced engineering procedures have been successfully adopted by other US industries, e.g., automotive, electronics, and metal fabricating. For more than four decades, aerospace products and parts have accounted for 7-10 percent of US merchandise exports.”*⁸⁰⁴

For Washington, the health and success of the nation’s aerospace industry was thus of vital strategic importance, especially since America was losing export share in many other sectors.⁸⁰⁵ The growing competitive threat posed by Europe’s Airbus consortium became a particular concern to US policymakers, who feared that an increasing loss of export markets and the growth of import penetration could seriously weaken the American A&D sector. From a mercantilist perspective,

⁸⁰² OTA (1991) p. 9

⁸⁰³ In general, neo-mercantilists attach much more economic / strategic importance to the manufacturing sector than to the service industry: “Manufacturing matters for three key reasons: 1. Manufacturing jobs generally provide better wages than equivalent service jobs because worker productivity is generally leveraged by more capital and more proprietary know-how. 2. Manufacturing provides an abundance of jobs for people of ordinary ability as opposed to the PhD types who get many of the jobs at, say, Microsoft. It thus closely matches the job-creation needs of society. 3. Manufacturing companies are big exporters.” In my book, ‘In Praise of Hard Industries’, I calculated that per unit of output American manufacturing businesses export about eleven times as much as service businesses. Few manufacturing businesses score better on these three criteria than the airliner industry. Even if it were not so closely intertwined with America’s national defence, the industry would still be of pivotal geopolitical importance. The point is that it has long been America’s biggest export earner.” Fingleton (2005) p. 9

⁸⁰⁴ (MacPherson & Pritchard, 2007) pp. 552-553

Washington embraced the ethnocentric industry consolidation approach underpinning the BMD merger because the creation of US-based “national champions” was seen as the best way of keeping the rising European / foreign competitors at bay while trying to make sure that the aerospace industry’s unique positive strategic / economic externalities continued to benefit Washington and the US economy.⁸⁰⁶ If US policymakers had viewed the aerospace sector as just another “normal” industry, one would have expected the same large-scale transatlantic M&A deals that became so prominent in many other businesses during the 1990s.

Washington’s opposition to transatlantic M&A deals involving prime contractors is particularly important as this was the last area where policymakers still felt that the A&D companies had a distinct “nationality”. By the 1990s, however, even “national” prime contractors – due to the ever-increasing complexities of state-of-the-art military and commercial aircraft – required millions of sub-components manufactured by thousands of sub-contractors both at home and abroad:

“[B]ecause military and commercial aircraft involve the integration of so many complex sub-systems, and because many of them are sourced internationally, the ‘nationality’ of the final product has been increasingly difficult to establish, creating complex implications for policy.”⁸⁰⁷

“In 1960, [US] imports of aircraft and parts amounted only to 5 percent of [US] aircraft exports by value. Today [2007], that figure is 44 percent. The foreign content of a Boeing 727 in the 1960s was only 2 percent. For the 777 in the 1990s, foreign content was nearly 30 percent. In the case of the 787 ‘Dreamliner’, [...] foreign content might run as high as 70 percent.”⁸⁰⁸

Given the unprecedented internationalisation of the aerospace industry’s supplier base, realist and / or mercantilist-inspired demands that *all* of the relevant sub-components and sub-contractors for “American” aircraft should come from the US would be virtually impossible to satisfy.⁸⁰⁹ Since the 1970s, American A&D companies have entered into offset agreements with foreign suppliers to help secure major military and commercial aircraft exports. To seal the F-16 “sale of the century” in

⁸⁰⁵ “It is difficult to exaggerate [Boeing’s]’s importance [...]. [A]t a time when the US trade deficit reached a record [US]\$489 billion in 2003, [Boeing] is one of the country’s most reliable export machines, accounting for close to [US]\$20 billion in overseas sales.” Gantenbein (2004) p. 58

⁸⁰⁶ “Advanced capitalist states promote and regulate production globalisation using state-created international organisations and trade agreements and intra-national policies and legislation that assist indigenous economic actors to execute transactions with competitive advantage over foreign counterparts.” Gritsch (2005) p. 8

⁸⁰⁷ (Moran & Mowery, 1991) p. 144

⁸⁰⁸ (MacPherson & Pritchard, 2007) pp. 552-553

⁸⁰⁹ In 2006, Congressman Duncan Hunter tried to pass a law requiring that all specialty metals used in US military hardware be smelted domestically (including all bolts, nuts, etc.). This initiative – opposed by the Bush administration and the AIA (Aerospace Industries Association) – failed. Anselmo (2006)

1975, GD offered its prospective European customer countries not only a 40-percent stake in the sourcing / production of components for “their” F-16s, but also a 10-percent sourcing / production share for those fighters delivered to the USAF. GD’s far-ranging and unprecedented concessions involving strategically important American military *matériel* clearly required Washington’s consent.⁸¹⁰

“For the US government and aerospace industry, offset agreements have always evoked a mixed reaction. Their desire to penetrate foreign markets for both political and economic reasons has struggled with a desire to limit foreign access to some of the technologies contained in military and civilian high-technology products like aircraft. Before 1978, offset agreements in military aircraft sales were largely negotiated on a government-to-government basis, indicating the mix of political and economic motives underpinning them. By the 1990s, they had become a mainstay in sales of both military and commercial aircraft to foreign governments and foreign firms and in sales to both industrialised and industrialising countries. As foreign producers have improved their technological capabilities, the products and technologies subject to offset agreements have increasingly involved highly advanced US technologies in both military and civil applications.”⁸¹¹

The rise of A&D offset agreements reflects the sector’s technological sophistication and the internationalisation of its supplier base. In the highly competitive commercial aircraft sector, exploding R&DP costs have prompted Airbus and Boeing to increasingly rely on multi-national networks of sub-contractors / suppliers located in key export markets abroad (Japan, China⁸¹², India, etc.).⁸¹³ The two rivals have embraced this outsourcing / offshoring strategy not only to obtain the best technology at the best price, but also to help secure lucrative export contracts in the countries concerned. “In the manufacture of the A300, for example, Airbus procured over 50 percent of the plane’s components from US manufacturers, thereby capturing both their technology and their political support.”⁸¹⁴ In contrast, “the participation of Japanese firms in the manufacture of the 767⁸¹⁵ has helped Boeing to maintain its domination of the Japanese commercial aircraft market”,^{816 817} a situation which endures until today.⁸¹⁸

⁸¹⁰ Washington and GD also agreed to the F-16 offsets to discourage European governments from developing a rival European fighter aircraft.

⁸¹¹ (Moran & Mowery, 1991) p. 142

⁸¹² In 2008, Airbus agreed on an offset deal with China involving an A319/A320 assembly line and a composite materials and components JV. Stumbaum (2003) pp. 27-30

⁸¹³ “[Boeing] has become the nation’s largest corporation in terms of offset-related commitments.” (MacPherson & Pritchard, 2007) p. 554

⁸¹⁴ (Moran & Mowery, 1991) p. 142

⁸¹⁵ “The Boeing 767 was the first US aircraft programme that entailed substantial international cooperation in developing commercial transport. It can be inferred that there were four major reasons for cooperation between Boeing

More recently, EADS / Airbus teamed up with NGC to compete for the Pentagon's KC-X tanker. To stand any chance of beating out Boeing for the first US\$40 billion tranche of this contract – valued at US\$100 billion over 40 years – the NGC-EADS consortium offered huge sub-contracting opportunities to suppliers across the US. In its lobbying and PR campaign focusing on Congress and the US media, the transatlantic consortium always emphasised the associated employment and investment benefits for the US economy. The tanker deal would also provide Airbus with its first assembly and manufacturing presence in America – an important move boosting the company's competitiveness by providing a natural hedge against Euro-Dollar exchange rate fluctuations.

There is another important driver of international cooperation and multi-national teaming arrangements in the global aerospace industry, especially when it comes to launching ultra-expensive next generation aircraft like the A380 or the Dreamliner:

“Prime contractors in civil airframes and engines have been driven not only by a desire to penetrate foreign markets but also by an interest in expanding the array of suppliers that compete for contracts and in sharing the development costs and risks. Higher development costs create higher incentives for risk-sharing; broad corporate alliances reduce the need to ‘bet the company’ on each generation of new products.”⁸¹⁹

Boeing has in recent years adopted a “systems-integration mode of production” in which “key components and sub-assemblies are designed and manufactured by external suppliers”.^{820 821} As the

and companies in Japan at this time, including risk-sharing, enhanced capabilities through cooperation, participation in development and market entry, and mutual profit-taking.” (MacPherson & Pritchard, 2007) p. 556

⁸¹⁶ (Moran & Mowery, 1991) p. 143

⁸¹⁷ In 1974, Boeing gave Mitsubishi a small early offset contract for the 747. Subsequently, Boeing was able to score “major sales” of jumbo jets to Japan. (MacPherson & Pritchard, 2007) p. 554

⁸¹⁸ Boeing was able to leverage Tokyo's dependence on strong military and security ties with the US to establish a dominant position on the Japanese commercial aircraft market, the world's second largest. Bilateral A&D industrial cooperation was also given a boost by the joint development of the FSX fighter. However, neo-mercantilists concerned about Boeing's outsourcing of advanced aerospace components to Japan argue that the US giant “has often wasted the considerable geopolitical leverage it enjoys”. [...] “Boeing has rarely needed to give away jobs to secure orders from Japan. Quite the contrary, Japan has been more or less a captive market. [...] US-Japan trade imbalances have long been so large that Tokyo has felt obligated to find ways to boost its purchases of American goods. In the absence of compelling technical reasons to buy European, therefore, Japan's highly regulated airlines surely had little choice but to buy American. After all, by dint of scale economies, Boeing enjoyed a commercial edge over Airbus well into the 1990s. Certainly, while the transfer of jobs to secure orders has been merely lamentable, the transfer of advanced technology has been utterly inexcusable. Given that Boeing was safe from under-cutting by Airbus, it could easily have resisted the more outrageous technology requests, particularly those from Japan.” Fingleton (2005) pp. 10-11

⁸¹⁹ (Moran & Mowery, 1991) p. 144

⁸²⁰ (MacPherson & Pritchard, 2007) p. 553

⁸²¹ “To those who can't see through business jargon, a ‘systems integrator’ may sound more impressive than a mere manufacturer. In reality, it is a cop-out, as a glance at some of the industry's other systems integrators makes clear. Embraer of Brazil is a systems integrator. So is Aviation Industries of China. Like the new Boeing, these companies lack the advanced know-how and machinery to make key components in a modern first-world plane. Instead they must

787 Dreamliner illustrates, Japan's aerospace companies have been the prime beneficiaries of a rapidly expanding US outsourcing strategy, which allows them to build the entire wing of America's principal next-generation commercial aircraft.^{822 823}

"The Japanese heavy firms Mitsubishi, Fuji, and Kawasaki are slated to build 35 percent of the 787 aircraft structure, which will include the design and manufacturing specifications in comparison to a build-to-print relationship on previous Boeing programmes."^{824 825} [...]

*"[The] three Japanese companies are slated to create the manufacturing processes for final assembly of the wing. Boeing has never considered subcontracting wing production to external suppliers before."*⁸²⁶

"For the first time in US commercial aviation history, a new aircraft launch has been structured so that foreign partners have full control over sub-assembly design, manufacturing, sub-tier supplier selection and, ultimately, the financial muscle to challenge what little remains of the US commercial aircraft industry."^{827 828 829}

Neo-mercantilists are greatly concerned about Boeing's "orgy of indiscriminate outsourcing"⁸³⁰ and the decision to hand the 787's wing production⁸³¹ to Japan, a move that entails the transfer of

import such components from more advanced manufacturers in Japan and Europe." [...] "The key to the new Boeing is a Faustian bargain with Japan. In a rerun of earlier American industrial implosions, Boeing has come to rely more and more on Japanese contractors for its most advanced engineering and manufacturing." Fingleton (2005) pp. 10; 7

⁸²² In 2004, Boeing and the Japanese Aircraft Development Corporation – Japan's state-sponsored aerospace consortium involving Mitsubishi Heavy Industries (40 percent), Kawasaki Heavy Industries (30 percent), Fuji Heavy Industries (20 percent), Nippi (5 percent), and ShinMaywa Industries (5 percent) and is in charge of coordinating the country's participation in international collaborative aerospace projects supported by the Ministry of International Trade and Industry – agreed to jointly develop the 787 "Dreamliner". See (MacPherson & Pritchard, 2007) p. 555

⁸²³ See Annex I, "Outsourcing trends for Boeing airframes", Ibid., p. 556

⁸²⁴ Ibid., p. 556

⁸²⁵ The Japanese government, through its "International Aircraft Development Fund, has provided a US\$3 billion low-interest loan to heavy firms Mitsubishi, Kawasaki, and Fuji to allow their participation in the 787 project. Ibid., p. 555

⁸²⁶ Ibid., p. 554

⁸²⁷ Ibid., p. 557

⁸²⁸ The selection of second-tier and third-tier suppliers for the "Dreamliner" is important as it determines which companies will benefit from the anticipated economic "multiplier effects". "The economic impact for the Japanese aircraft industry will include major multiplier effects, with the three Japanese 'heavies' in control of second- and third-tier supplier selection. The spread of subcontracts for the Japanese airframe manufacturers might add as many as 75 Japanese sub-tier suppliers. This does not include the estimated 60 second-tier Japanese engine, equipment, and material suppliers, which could add a further 100 third-tier Japanese suppliers. Prior to the 777, almost all of these multiplier effects rippled through the US economy." Ibid., p. 560. See also interview with Bill Lewandowski "on the future of the US aerospace supplier base" referenced in Ibid., p. 557

⁸²⁹ "Powered by a complex mix of political expediency, logistical need, and commercial self-interest, important strands of US aerospace technology have been transferred to Japan since the early 1950s. [...] Historically speaking, then, there is nothing intrinsically new about Boeing's evolving technological relationship with its Japanese risk-sharing partners." Ibid., p. 555

⁸³⁰ Fingleton (2005) p. 7

⁸³¹ "Wing-making is one of the most advanced sub-sectors of one of the world's most advanced manufacturing industries. [...] It is [...] hardly overstating things to say that the wings are to a plane what the sound box is to a violin – its defining feature. Just as a violin is not a Stradivarius without a sound box made in Cremona by Antonio Stradivari, a plane can hardly be considered a Boeing without wings made in the [US] by the Boeing company. [...] Perhaps the best indicator of the challenges involved in making wings for large passenger jets is that, apart from the [US], only one

sensitive US technologies⁸³² and eventually gives Tokyo “total production competence”⁸³³ in commercial airframes. Mercantilists / realists are not only worried that Boeing “has become so hollowed out that the impact is clearly visible in America’s rapidly worsening trade deficits”,⁸³⁴ but also that the proliferation of cutting-edge US technology will help Japan to “soon create its own standalone [commercial] aircraft program while simultaneously developing a low-cost Asian supplier network”.^{835 836} Charles Wessner, Director of Technology and Innovation at the National Academy Sciences, has warned that the outsourcing of the 787 wing technology and larger composite structures to Japan could ultimately curtail US innovation capability and compromise US security interests.⁸³⁷

Even mercantilists acknowledge that Boeing’s “launch of the 787 programme based on systems-integration makes good sense in terms of risk reduction, the containment of development costs, the acquisition of advanced composites, and the maximization of shareholder value”.⁸³⁸ This statement is a clear indication of how the industry’s changing economic and technological dynamics are undermining mercantilist / realist arguments (in the US and elsewhere) by strongly pushing aerospace companies towards cross-border collaboration / cooperation / integration in an effort to remain competitive and cope with growing business risks. This new pattern of cross-border aerospace collaboration highlighted by the Boeing 787 reflects the enormous difficulties of relying on private finance to develop major next-generation aircraft projects. Boeing hesitated to “bet the company” on new airplane developments – so risk-sharing (indirectly with the Japanese government) was a form of insurance.

Yet while a systems-integrator approach may well be attractive for an individual company like Boeing for a certain period of time, mercantilists / realists are by definition focused on *“broader economic and strategic concerns, including the rapid erosion of the US supplier base, the possibility that Japan might eventually become a global competitor [...], and the*

nation, Britain, boasts a serious record in the field. [BAE’s] wing-making capability is one of Britain’s few remaining world-class manufacturing businesses. Its technology, in turn, has been a key driver of the success of Airbus [...].” Ibid., p. 560

⁸³² “Japanese risk-sharing partners must receive infusions of tacit scientific knowledge from Boeing – otherwise the strategy would not be effective. This technology transfer raises an important question for trade policy analysts who are concerned with national industrial competitiveness. Specifically, does technology transfer to Japanese companies portend a long-run threat to the commercial prospects of US aerospace firms?” (MacPherson & Pritchard, 2007) p. 553

⁸³³ Ibid., p. 554

⁸³⁴ Fingleton (2005) p. 7

⁸³⁵ (MacPherson & Pritchard, 2007) pp. 553-554

⁸³⁶ “The current Boeing/Airbus duopoly may soon give way to a triopoly (add Japan to the mix), largely as a result of Boeing’s industrial offset and technology transfer relationships with Japan’s aerospace companies.” Ibid., p. 564. China and India are the two other key countries with the ambition to become major global A&D industry players.

⁸³⁷ Interview with Charles Wessner “on the leakage of US commercial aircraft technology to overseas sources” referenced in Ibid., p. 559.

⁸³⁸ Ibid., p. 564

fact that rising levels of foreign content ultimately contravene the interests of US workers in skilled occupations”.^{839 840}

Some mercantilists even believe that these outsourcing / offshoring trends – coupled with the continuing rise of Airbus – could force Boeing to completely abandon the manufacturing side of the aerospace business within the next decade. Instead, the US “national champion” would focus on final aircraft assembly, sales and marketing, and aviation-related services.⁸⁴¹ Given the significant overlap and synergies between the civilian and military aircraft sector, Boeing’s abandoning of crucial aircraft manufacturing competencies “would [inevitably] undermine its defence business, with distinctly ominous implications for America’s long-term security”.⁸⁴² Finally, while decrying Europe’s government subsidies for Airbus, US mercantilists argue that Boeing should emulate the European aerospace company by relying more on “indirect offsets” and keeping foreign subcontractors at arms length.^{843 844}

⁸³⁹ Ibid., p. 564

⁸⁴⁰ Mercantilists believe globalisation’s financial and competitive pressures make (aerospace) companies pursue corporate strategies like outsourcing and offshoring that – while delivering certain short-term financial / operational benefits – ultimately put longer-term national economic / strategic / industrial base interests at serious risk.

⁸⁴¹ “Looking to the future, Boeing will likely exit the manufacturing side of the commercial aircraft industry by the time a post-787 program is conceived (probably less than 10 years). If the 787 series is financially successful, there is a strong possibility that a 797 might be developed under total systems integration (i.e., design, develop, and build abroad – but assemble at home).” (MacPherson & Pritchard, 2007) pp. 564-565

⁸⁴² Fingleton (2007) p. 7

⁸⁴³ “Although Airbus also employs offset agreements to secure international orders, Airbus differs from Boeing in that the former more typically operates with “indirect offsets” (e.g., granting landing rights to major EU airports such as Heathrow or Gatwick). In addition, Airbus tends to subcontract internationally on an arms-length basis (build-to-print) – rarely allocating full design responsibilities to foreign subcontractors [...]” (MacPherson & Pritchard, 2007) pp. 554

⁸⁴⁴ “[...] Airbus has generally sourced components for each new model initially from within Europe. Only at a later stage in the cycle does it contemplate sourcing from non-European suppliers. By that time, Airbus’s European suppliers will have moved on to more advanced work on newer Airbus models. To be sure, in resisting offset requests, Airbus has enjoyed powerful support from European governments. Rather than countenance the transfer abroad of advanced manufacturing jobs, Airbus’s government backers have often dangled landing rights at key European airports. They have also used geopolitics to their advantage, particularly in the Middle East, where they capitalize on anti-American feeling.” Fingleton (2005) p. 10

5.2 *Growing foreign dependence of the US aerospace and defence industrial base*

In the case of the US, foreign sourcing is “the use of supply, manufacture, or technology that are located outside the United States or Canada”⁸⁴⁵. There are several reasons why realist / neo-mercantilist proponents – from a national security perspective – consider suppliers located outside North America⁸⁴⁶ as less reliable: these factors include geographical distance from the US, proximity to potential combat theatres abroad, and / or political or economic instability in the foreign supplier’s respective home country.^{847 848} In contrast, when business leaders decide where to source goods, services, and technology, they are also taking into account factors other than geographical location, such as cost, quality, performance, and delivery time.⁸⁴⁹ As a result, a domestic A&D manufacturer may well determine that foreign suppliers offer the best “deal” compared to domestic competitors. The national origin / geographical location of a supplier is therefore not necessarily of decisive importance, and may only become relevant with regard to its impact on the anticipated transaction costs, that is, both in terms of transportation costs as well as the level of “trust” involved. Business leaders and liberal economists are focused on the financial / efficiency gains that can be derived from leveraging existing “international comparative advantages”. Realists / “defence industrial strategist”⁸⁵⁰ are concerned about “foreign dependence” and its impact on a country’s “capacity to build or to replace critical force structures independently of economic and political decisions of other sovereign powers”^{851 852}. Globalisation is perceived as a potential threat which raises the spectre of “foreign influence, foreign control, and foreign domination”⁸⁵³ of America’s A&D industrial base. While the US had already been dependent on foreign imports of key raw materials for both civilian and military applications (oil, titanium, etc.)

⁸⁴⁵ GAO (1991) p. 3

⁸⁴⁶ Washington considers Canadian A&D companies as part of the US national defence industrial base. This assumption indicates two things. First, the US government views Canada as a rock-solid ally that will never become an adversary; second, even if Canada were to turn hostile vis-à-vis the US, to the extent that the lack of access to Canadian suppliers constitutes a US national security threat, the US could easily invade Canada as virtually all of the country’s industrial assets and about 50 percent of the population are located within a 100-kilometre stretch north of the US-Canadian border.

⁸⁴⁷ GAO (1991) p. 14

⁸⁴⁸ Technology transfers from the outsourcing country to third countries also risk having a negative impact on America’s national security and defence industrial base. Cable (1995) p. 318

⁸⁴⁹ GAO (1991) p. 4

⁸⁵⁰ “Defence industrial strategists are trained in both economics and defence analysis [...] to define exactly what is the nature of the peacetime threat from globalisation, and to confront exactly what does, and what does not, help to meet that threat.” Moran (1990) pp. 58-59

⁸⁵¹ *Ibid.*, p. 58

⁸⁵² Advocates of free trade / cooperation / globalisation / open markets are much more risk-prone than proponents of realism who believe in the paramount importance of national security: “In a liberal international economic system, vulnerability to external economic events and dependence on foreigners are a necessary consequence of immersion in global markets. They are the source of opportunities for improved living standards, not threats to be avoided. [...] Indeed, one of the defining characteristics of liberal capitalism is uncertainty and risk. That is the basis for economic freedom and choice. One necessary corollary is a sense of insecurity for individuals, firms, and nations. Yet the idea that economic policy should have a security dimension will not go away. It repeatedly surfaces whenever defence procurement involves dependence on foreign suppliers [...]” Cable (1995) pp. 305-306

for quite some time, the new foreign dependence that began to emerge in the 1970s / 1980s was qualitatively very different since it also extended to manufactured (high-tech) goods where Washington had enjoyed a high degree of autonomy since WWII.⁸⁵⁴

Realists fear that foreign source procurement could result in 1) dependencies on foreign suppliers that are less reliable (supply interruptions due to foreign sanctions, transportation problems, etc.) than domestic companies;⁸⁵⁵ 2) reduced domestic production capacities of certain goods as manufacturers at home do not have enough demand to keep production lines “hot”; and 3) questionable (future) access to state-of-the-art technologies as domestic R&D capabilities are increasingly ramped down along with production sites.⁸⁵⁶ It is important to note, however, that not all forms of foreign defence sourcing result in foreign dependence, and that not all forms of foreign dependence create a national security threat or vulnerability. US dependence on “multiple, open foreign sources that possess multinational perspectives”⁸⁵⁷ is far less worrisome than American dependence on a “single, closed, and centralised foreign source that maintains a national perspective”⁸⁵⁸. The crucial variable to determine if a certain level of foreign dependence creates a threat / vulnerability or not is “whether the lack of available alternatives jeopardises national security by significantly reducing the capability of a critical weapon system”⁸⁵⁹.⁸⁶⁰ “[D]ependence becomes vulnerability and affects a relationship when the opportunity costs of foregoing the relationship are high or intolerable”⁸⁶¹.

The national security implications of foreign sourcing can be analysed from two perspectives:⁸⁶² ⁸⁶³ first, the impact on the surge and mobilisation capacity of America’s defence industrial base; second, the impact on the country’s technology base. “Surge” and “mobilisation” refer to “production of [increased] quantities under time constraints”⁸⁶⁴. While “surge”⁸⁶⁵ capacities usually

⁸⁵³ Moran (1990) p. 58

⁸⁵⁴ Pages (1996) p. 11

⁸⁵⁵ “In practice, the ‘security of supply’ issue involves two separate problems, though they are often confused (and often exist together). The first is that interruptions in import supply – caused by war, revolution, foreign sanctions or accident – could severely disrupt the national economy, or parts of it. The second is that overseas suppliers could acquire a monopoly position through unique ownership or cartel action, turning the terms of trade against the importer. This latter concern is exemplified by the price of oil but is also relevant to new technologies (a major element in strategic trade theory is the advantage in terms of monopoly ‘rent’ which accrues to a technological leader). These two preoccupations may coincide but are analytically different and have different policy implications.” Cable (1995) p. 313

⁸⁵⁶ GAO (1991) p. 4

⁸⁵⁷ Ibid., p. 14

⁸⁵⁸ Ibid., p. 14

⁸⁵⁹ Ibid., p. 3

⁸⁶⁰ [W]here alternative suppliers are few, and the difficulties of developing substitutes great, the potential for delay, denial, manipulation, or blackmail on the part of outsiders is ever-present.” Moran (1993) p. 214

⁸⁶¹ Pages (1996) p. 8

⁸⁶² NDU (1987)

⁸⁶³ Ibid., pp. 12-15

⁸⁶⁴ GAO (1991) p. 12

need to be achieved during a relatively short time frame (that is, up to a few weeks or months), “mobilisation” is a much more comprehensive process that can take up to several years. The key question is how quickly defence material imported from foreign suppliers can be replaced or augmented by deliveries from domestic companies.⁸⁶⁶ However, one can also argue that the concept of “surge capacity” is no longer relevant in today’s security and defence industrial environment. After all, it is virtually impossible to double the production of modern military aircraft in, let’s say, six months. Furthermore, Western governments do not really hope or expect to conduct high-intensity military operations for more than 2-3 months any longer.⁸⁶⁷

Potential threats and vulnerabilities to the (US) technology base are more diffuse and long-term in nature and can in turn be assessed from two perspectives. The first national security concern is to ensure US access to state-of-the art technologies for the continued research, development, production, and maintenance of crucial A&D systems during times of peace and war. The second concern is to ensure that America remains the world’s technology leader and to control or prevent the transfer / diffusion of sensitive technological innovations and secrets to other countries. The availability or denial of technology access is often a function of the level of market concentration in a given industry. The higher the market share of foreign companies that provide America with access to crucial goods, services, or technologies, the higher the risk that “a tight network of foreign industries and supporting institutions that dominates key technologies could exercise global power by setting the terms on which technology [as well as related goods and services] are traded”⁸⁶⁸. American export controls are designed to manage or prevent the spread of sensitive US technologies to other countries.

⁸⁶⁵ “Surge is the accelerated production, maintenance, and repair of selected items and the expansion of logistics support services to meet contingencies short of a declared national emergency utilising existing facilities and equipment”. Mobilisation is the act of preparing for war or other emergencies through assembling and organising national resources, and the process by which the Armed Forces, or part of them, are brought to a state of readiness for war or other national emergency.” US Joint Chiefs of Staff quoted in *Ibid.*, p. 12

⁸⁶⁶ If substitution problems do occur, they are generally the result of a lack of alternative, qualified suppliers, a lack of suitable substitutes, insufficient production capacities from domestic suppliers, or the need for rather long production lead times which make it impossible to quickly replace foreign-sourced supplies.

⁸⁶⁷ “Barring the now unlikely resurgence of major conventional war between great powers, the need for the defence industry to be able to surge production to accommodate large-scale mobilization will probably remain remote. [...] Moreover, given the far greater complexity of modern weaponry, surge would be considerably slower today than it was during [WWII].” Watts (2008) p. 75. However, that being said, US industry analysts have also defined the issue of “surge capacity” more broadly (including the development of new systems, etc.) and continue to describe it as a “salient concern” to this very day. “In the case of surge capacity, changes in the defence industry since the early 1990s have accentuated earlier concerns that the industry lacks the capacity to develop new systems very quickly, or to surge production in response to high levels of combat attrition or sudden shifts in the international security environment. Studies indicate that this surge problem has existed for decades. Maintaining excess production capacity is expensive, and the government has generally been unwilling to bear the cost of doing so (with the notable exception of shipbuilding). [...] Absent government support, both modern management practices and shareholder demands for profitability dictate that firms should eliminate excess capacity and avoid stockpiling.” Watts (2008) pp. 54-55

“Buy American” restrictions “focus on protecting segments of the DoD contract market from foreign-source competition to address trade and structural problems of certain industries”⁸⁶⁹. These restrictions may block access of foreign suppliers to certain DoD programmes or, alternatively, may only allow access based on certain requirements. “Each Buy American restriction is different in terms of its impact and effectiveness and the particular industrial sector, class, or commodity it affects.”⁸⁷⁰ There are several reasons why Buy American restrictions have not proven to be very effective when it comes to reducing the foreign dependence of the US defence industrial base. First, the “Buy American Act” applies only to final products and does not generally cover components or subcontracted items.⁸⁷¹ This exemption is important as the number and complexity of aerospace components and subcontracted items have increased exponentially with each generation of new aircraft over the past 30-50 years. The assembly of modern commercial and military aircraft generally requires millions of sub-components supplied by thousands of sub-contractors. Realist / mercantilist demands that *all* of these sub-contractors should be American would therefore be very demanding, cumbersome, and extremely expensive. Furthermore, the question which sub-assemblies represent “critical” technologies is not always easy to answer. Second, existing restrictions are frequently waived to pursue other US policy goals (NATO rationalisation, standardisation, and interoperability, etc.).^{872 873} Third, the (partial) sourcing of US A&D products from abroad increasingly occurs through offset agreements already discussed above. Fourth, “in many instances, even when the total demand for a given item is reserved for domestic sources, the demand is insufficient to stabilise a failing domestic industry or to preserve a healthy one”.⁸⁷⁴ Fifth, there are also instances – like the M1 Abrams tank – where DoD procurement officials give preference to foreign suppliers due to availability, quality, and cost factors.⁸⁷⁵ Finally, the R&DP of advanced weapons systems is increasingly dependent on technological innovations taking place in the civilian / commercial sector, which, over the past two decades, has pushed ahead to become the true technology leader vis-à-vis the military / defence sector.

The US Congressional Office of Technology Assessments (OTA) already recognised this trend early on and published a report titled “Arming Our Allies: Cooperation and Competition in Defence

⁸⁶⁸ Ibid., p. 14

⁸⁶⁹ GAO (1991) p. 6

⁸⁷⁰ Ibid., p. 6

⁸⁷¹ Ibid., p. 3

⁸⁷² “‘Rationalisation’ is a term used to encompass all actions taken to use equipment and perform common tasks more efficiently and cost-effectively”. ‘Standardization’ involves the adoption of common equipment, doctrine, and procedures by all members of the alliance. ‘Inter-operability’ refers to compatibility of equipment and interchangeability of parts, fuel, and ammunition.” Taylor (1982) p. 95

⁸⁷³ Most NATO members enjoy exemptions from the “Buy America” restrictions, which were first waived back in the 1970s through a number of bilateral MoUs to promote a two-way street in transatlantic defence procurement.

⁸⁷⁴ GAO (1991) p. 6

Technology” in 1990 to analyse “the changes in the environment of defence technology and reduced East-West tensions will exert on defence industrial cooperation and associated alliance relations”:

In view of the rising “spin-on” effects from commercial to military applications, OTA came to the conclusion that [...] *“defence developments and production will depend increasingly on the health of the domestic civilian sector and the ability of DoD and its contractors to develop and gain access to the products and technologies needed for both our defence and the civilian sector.”*⁸⁷⁶

Concerns about the increased foreign dependence of the US defence industrial base were first raised in the early 1980s. Previously, in contrast to its European and Asian allies, America had relied almost exclusively on domestic military technologies and production assets to meet the Cold War’s defence needs. “This period of military self-sufficiency ended in the 1980s, as rising dependence triggered a major outcry both within and outside the US government”⁸⁷⁷:

*“There has been a serious decline in the nation’s defence industrial capability that places our national security in jeopardy. An alarming erosion of crucial industrial elements, coupled with mushrooming dependence on foreign sources for critical materials is endangering our defence posture at its very foundation.”*⁸⁷⁸

In 1984, the Pentagon concluded that it was necessary to launch “an investigation into the nature and scope of foreign dependency”. A report titled “A Study of the Effect of Foreign Dependency” – was issued in 1986 and made “recommendations on how DoD could reduce the damage to the US defence industrial base due to existing foreign dependencies and help identify and prevent future foreign dependencies”.⁸⁷⁹ The report recommended that 1) the Pentagon develop an information system to track foreign dependencies throughout the entire defence procurement process, including lower-tier suppliers; and 2) that weapons programme and procurement officers constantly evaluate the potential impact of foreign dependencies on critical US weapons systems.⁸⁸⁰ Ultimately, however, “this report received limited attention [...] its contents and recommendations, therefore, were not fully considered or addressed”⁸⁸¹. The Pentagon’s 1988 report “Bolstering Defence Industrial Competitiveness” also warned against the consequences of foreign dependence:

⁸⁷⁵ Ibid., pp. 1-2

⁸⁷⁶ Ibid., pp. 13-14. See OTA (1989) and OTA (1990)

⁸⁷⁷ Pages (1996) p. 2

⁸⁷⁸ House (1980)

⁸⁷⁹ GAO (1991) p. 3

⁸⁸⁰ Ibid., p. 5

⁸⁸¹ Ibid., p. 5

*“From the national security perspective, foreign dependencies in technologies essential to defence production are inherently risky, and minimizing them should be a [DoD] and national priority. [...] In a national emergency, the consequences of extensive dependence on foreign sources could be extreme.”*⁸⁸²

Potential national security implications of foreign dependence in the US A&D sector have proven difficult to assess. DoD efforts to identify and minimise current and future foreign dependencies have been hampered by insufficient data, especially at the subcontractor levels. During the 1980s and 1990s the Pentagon was criticised by the GAO for its inability to keep track of comprehensive data on existing foreign dependencies – information deemed indispensable “to take appropriate action regarding the domestic industrial base, including the economic, trade, and technology security implications of procuring major weapons systems from foreign sources”^{883 884}.

“Technology denial” to the US due to foreign dependence and technology proliferation / technology exodus (to hostile third countries) are seen as the greatest risks to American national security in connection with transatlantic / transnational defence mergers. Even during the Cold War, when America and Western Europe were confronting the Warsaw Pact, foreign economic dependence and technology denial tactics were leveraged by the US to exert pressure on France, Germany, and the UK. In the 1956 Suez crisis, Washington threatened to order American oil companies to cut off deliveries unless French and UK forces withdraw from the Canal. During 1964-1966, Washington refused to sell US “supercomputers” to France, a move that delayed the French hydrogen bomb programme and contributed to Paris leaving NATO’s IMS in June 1966.⁸⁸⁵

During the 1982 Soviet pipeline dispute, Washington tried to force German, French, British, and Italian licensees of relevant US technologies and European subsidiaries of US companies to refrain from selling oil and gas equipment to Moscow.⁸⁸⁶ President Reagan’s unilateral, extraterritorial, retroactive sanctions to protest martial law in Poland were designed to block the delivery of European compressors for the Urengoy pipeline from Siberia to Ukraine. European governments rejected Reagan’s actions and decided to fulfil their pre-existing contractual obligations vis-à-vis the USSR, mainly because they were eager to diversify their energy supplies after the 1973 and 1979 oil shocks. The UK, Germany, and Italy – “who saw US sanctions as a challenge not only to

⁸⁸² DoD (1988) p. 47

⁸⁸³ GAO (1991) p. 24

⁸⁸⁴ GAO (1989)

⁸⁸⁵ *The Economist* (1966)

⁸⁸⁶ (Hufbauer & Schott, 1985) chapter 11

their sovereignty but also to vital national interests, such as domestic employment, energy security, and détente”⁸⁸⁷ – instructed their “own” companies operating under US licenses to deliver the turbines to Moscow while France ordered the French subsidiaries of a US company to do the same. The companies “were quite literally caught in the middle, facing severe sanctions no matter whose directive they followed”⁸⁸⁸. In the end, Reagan backed down and lifted the sanctions.^{889 890 891} Technology proliferation concerns again rose to prominence with the 1991 Iraq War, as Baghdad was equipped with European weapons imported during the 1980-1988 Gulf War. These examples of technology denial / economic coercion and technology proliferation / technology exodus to hostile third countries did involve NATO members during the Cold War, at a time when close relations between the Western allies were of paramount importance to confront the Soviet threat.

The Soviet pipeline dispute taught “European authorities [...] the hard way [...] that a strong bargaining position and ultimate protection [against extra-territorial interference] came not from some legal capability to exercise sovereign jurisdiction over activity within their own borders [home soil requirements], but rather from arranging alternative suppliers [...], diversifying purchasers, becoming [in the words of a German company] ‘very cautious about any new contracts that would bind us so totally to a single source of technology and equipment’”⁸⁹².

The end of the Cold War rendered relations between Europe and America even more complex. Without a common enemy, the relationship between Europe and America within NATO has increasingly been shaped by diverging political and military interests, and growing economic competition. The Suez crisis, the US supercomputer embargo, and the Soviet pipeline dispute have highlighted the political, economic, and military vulnerabilities of Europe resulting from “foreign dependence” in strategic industries, even among allies.

The threat of globalisation to America’s A&D industry began to emerge in the 1980s. The conventional neo-mercantilist response advocated by national security strategists to deal with the A&D industry’s globalisation has framed the threat in terms of the nationality of the firm and the location of critical R&DP sites. Technologically advanced, autarkic “national champions” and the

⁸⁸⁷ Rodman (1995) p. 136

⁸⁸⁸ Moran (1990) p. 65

⁸⁸⁹ Reagan’s decision to back down and Washington’s inability to get even all US companies to support the extraterritorial sanctions imposed on their foreign subsidiaries is a direct consequence of America’s declining “structural hegemony” and “ideological hegemony”. Rodman (1995) p. 110

⁸⁹⁰ “The ensuing crisis in the [A]lliance dissuaded the Reagan administration from applying extraterritorial controls to subsequent sanctions, although it continued to claim broad extraterritorial discretion in principle.” Ibid., p. 111

⁸⁹¹ “[S]anctions are futile in an environment where US business is global and other states do not share US preferences.” Ibid., p. 106

requirement that foreign suppliers establish R&DP facilities on US soil are viewed as the best hedge against foreign manipulation and coercion. Strategic Trade Policy (STP) also calls for the creation of “national champions” through import restrictions and export subsidies:

The ultimate goal is to “*propel a country’s own entrants into a leading position, bolstering their prospects for world predominance while denying the opportunity to rivals. This might eliminate or drastically cut back the problem of foreign control, replacing dependency with supremacy*”⁸⁹³.

FDI in America’s A&D industry is often referred to as “penetration”, while acquisitions of US companies by foreigners – regardless of the required “special security arrangements”⁸⁹⁴ – viewed as a “loss” to the US defence industrial base. The 1988 Exon-Florio amendment has given the American president the authority to block foreign take-overs if they endanger “national security, essential commerce and economic welfare”.⁸⁹⁵ The provision also revitalised CFIUS, the government’s screening mechanism to approve or block potentially sensitive foreign investments in US companies. During the twelve years preceding Exon-Florio, CFIUS reviewed less than 30 cases; in the first year after the amendment’s passage, CFIUS reviewed more than 50 cases.⁸⁹⁶ President Reagan publicly opposed the Exon-Florio amendment, but did not veto the 1988 trade bill to which it was attached. Just three years earlier, Reagan had declared that “A world with strong foreign investment flows is the opposite of a zero-sum game. [...] We believe there are only winners, no losers, and all participants gain from it.”⁸⁹⁷ This episode betrays a deep underlying confusion within US elites about the costs and benefits of open markets / globalisation vs. protectionism / neo-mercantilism.⁸⁹⁸ Traditionally, Washington has championed laissez-faire policy to promote an open post-WWII international trade and investment regime:

“*[FDI] has been considered a major instrument through which the [US] could maintain its relative position in world markets, and the overseas expansion of [MNCs] has been regarded as a means to maintain America’s dominant world economic position in other expanding economies.*”⁸⁹⁹

⁸⁹² Moran (1990) pp. 65-66 and (Hufbauer & Schott, 1985) p. 238

⁸⁹³ Moran (1990) p. 92

⁸⁹⁴ SSA include the creation of a separate US trust for the foreign parent company, where the top management and the board of directors of the American subsidiary must all be US citizens, as well as restrictions on the access of foreigners to classified information held by the US subsidiary.

⁸⁹⁵ Quote from Exon-Florio amendment in Omestad (1989) p. 130

⁸⁹⁶ Moran (1990) p. 95; Tolchin (1989)

⁸⁹⁷ Omestad (1989) p. 121

⁸⁹⁸ Earlier assumptions were that the US would remain the dominant economic player and technology leader, so such contradictions would not arise.

⁸⁹⁹ Quote from Gilpin, “The Political Economy of International Relations”, in Omestad (1989) p. 122

However, with the deterioration of America's macro-economic situation starting in the 1970s – marked by high inflation, a weak dollar, rising unemployment, growing trade deficits, etc. – Washington changed course and embraced neo-mercantilist policies to protect certain industries such as semiconductors or automotive from foreign competitors through a combination of import restrictions, public subsidies, etc. As the US consumed more than it produced – making up the difference by borrowing money from abroad – American mercantilists decried the “continuing erosion of [US] control over decision-making and technologies that are crucial to the creation of national wealth and power”⁹⁰⁰.⁹⁰¹ While President George H.W. Bush pursued very internationalist, pro-market policies, US public opinion data were already pointing towards the strong appeal of protectionist / neo-mercantilist policies.⁹⁰²

“The gulf between current policy and public attitudes means that the Bush administration will come under intensifying pressure to consider controls on foreign ownership, particularly as foreign takeovers continue or even accelerate in the 1990s.”⁹⁰³

From a national security perspective, the “Gaullist nightmare of total foreign dependency”⁹⁰⁴ in A&D matters is clearly not desirable as it would make the country vulnerable to foreign manipulation and coercion. However, there are also major potential pitfalls associated with the government-supported creation of autarkic “national champions” called for by protectionist-minded STP advocates; namely economic inefficiencies, a lack of competition and technological innovation, as well as reduced economies of scale. The first problem is that the government-supported creation of “national champions” makes it necessary to pick winners and losers, champions and non-champions. Having political leaders and governments decide which companies or technologies are worthy of a country's targeted financial and political support raises the spectre of costly misallocations of public funds that could result in “national champions” that are, in essence, nothing else than “monopolists whose principal impact will be to collect rents from the country's own citizens”⁹⁰⁵.⁹⁰⁶ The second problem is that protectionist measures to prevent foreign

⁹⁰⁰ Ibid., p. 119

⁹⁰¹ “The debate on foreign investment may not bring out the best in the American people. Politicising foreign investment appeals to the insular, nativist streak in US politics. Foreign purchases offer highly visible signs of America's declining position in the world economy and of the increasing penetration of its economic and political system by foreign interests.” Ibid., pp. 119-120

⁹⁰² “A 1988 opinion survey [...] revealed that 74 per cent of Americans believe foreign investment has lessened US economic independence, 78 per cent favour a law restricting foreign ownership of businesses and real estate, and 89 per cent want foreign investors to register with the government.” Ibid., p. 119

⁹⁰³ Ibid., p. 119

⁹⁰⁴ Moran (1990) pp. 70-71

⁹⁰⁵ Ibid., p. 92

⁹⁰⁶ “[T]hose in the [US] who resist the idea of formulating an industrial policy for the industry will point to what they regard as a costly and dismal record of the governments that have attempted it. They will emphasise that government

A&D companies from competing in the domestic market often backfire. “For any given level of defence spending there is less sophisticated, deliverable, reliable bang for the buck with protection[ism] than without.”⁹⁰⁷ While total foreign dependency (the “Gaullist nightmare”) is scary, the opposite situation (total autarky) can also be frightening if a country is “being tied to a product of such high price, long delays, and inferior technological performance that the user finds his own security compromised”⁹⁰⁸.

“It is precisely for this reason that defence procurement controversies can pitch service chiefs – who are employed to be good judges of security in the narrow sense – on the side of foreign suppliers against coalitions of politicians and domestic industrialists. Rational considerations of cost, quality, and technological superiority may well lead to a sourcing of defence-related equipments, systems, or components with foreign suppliers or foreign-owned companies.”^{909 910}

STP advocates argue that countries should pay a “national security premium” to prevent their strategic industries from getting wiped out by foreign competition. Moran counters that such protectionist measures should only be used when the foreign-based competitors / suppliers are so heavily concentrated that they can use “coordinated denial” and manipulation tactics to hurt key national interests. After all, there is always the possibility of a protectionist / STP backlash from abroad. “Strategic trade logic has an inherent beggar-thy-neighbour dynamic that can only lead to provocation, escalation, and retaliation among the major industrial nations.”⁹¹¹ The “threat of globalisation” to America’s A&D industry should therefore be understood not as a function of “the extent of dependence on foreign suppliers” but rather “the concentration of dependence on foreign suppliers”⁹¹². Finally, international A&D collaboration allows the countries involved to draw on a wider technology base and makes it possible to cement political and commercial alliances that, in turn, reduce the risk of neo-mercantilist backlashes.⁹¹³

interventions for economic and national security reasons in other industries, including steel, machine tools, and semiconductors, has burdened the US aerospace industry with much heavier costs than those borne by European and Japanese competitors.” (Moran & Mowery, 1991) p. 141

⁹⁰⁷ Moran (1990) p. 84

⁹⁰⁸ Ibid., p.67

⁹⁰⁹ Cable (1995) p. 318

⁹¹⁰ The massive political protests sparked by the Pentagon’s February 2008 decision to award the KC-X tanker competition to NGC-EADS is the example *par excellence* of a situation where the relevant service (USAF) selected a foreign bidder / platform (Airbus) only to encounter the fierce resistance by Boeing and its allies in Congress, who disparaged Airbus as “the French tanker”.

⁹¹¹ Moran (1993) p. 214

⁹¹² Moran (1990) p. 85

⁹¹³ The Nimrod vs. AWACS competition highlights the risks of a neo-mercantilist “national champion” approach and the benefits of a transnational production strategy providing “insurance against a wider outbreak of economic nationalism that could inhibit overseas sales”. Kraar (1990). While Boeing’s AWACS offered subcontracting opportunities to European allies, the UK-only Nimrod consortium was a technological and financial disaster.

5.3 *The rise of economic rivalries among Western allies in the post-Cold War world*

A government's response to defence dependence is shaped by its military and economic threat perceptions and its position in the international system.⁹¹⁴ During the Cold War, America had a vital interest in promoting the indigenous defence industrial capabilities of its European and Asian allies to create a counterweight to the Warsaw Pact. Military and economic aid, the co-production / licensing of American weapons, Boeing's AWACS programme and other US-led joint NATO procurement initiatives illustrate Washington's commitment in that regard. Apart from the unifying Soviet threat, it was America's hegemonic power position in the West that made the country "especially immune to relative gains concerns"⁹¹⁵. The roots of America's growing foreign (inter)dependence in economic and military affairs vis-à-vis its allies can be traced back to the early 1970s and first appeared on the radar screen of national security strategists in the early 1980s. However, it was not until the late 1980s that Paul Kennedy's "The Rise and Fall of the Great Powers"⁹¹⁶ – against the backdrop of record US budget deficits and the 1987 stock market crash – sparked a wider debate about the consequences of American "imperial overstretch"⁹¹⁷. Kennedy and his fellow "declinists"⁹¹⁸ were criticised by those who predicted that only America – despite its undeniable decline in relative economic – had the necessary military, economic, political, social resources in terms of both "hard" and "soft" power to remain a global superpower.⁹¹⁹

The sudden demise of the Soviet Union, which revealed the US to be the world's only superpower, dramatically improved America's security situation and seemed to prove the "declinists" wrong. However, analysts also began to debate how long America's "unipolar moment"⁹²⁰ would last and what strategies should be employed to defend the country's hegemonic role in the world against potential challengers like Europe, Japan, China, and Russia.⁹²¹ According to Huntington, international primacy – defined as a government's ability "to exercise more influence on the behaviour of more actors on more issues than any other government can" – does "matter" and remains of "central importance" in post-Cold War international politics, both for the United States and the other (major) powers.⁹²² From a realist perspective, America's alliance with Western

⁹¹⁴ "The level of threat facing a state is a function not only of the distribution of power but also of the geographic proximity, offensive capabilities, and, in particular, the perceived intentions of others." Snyder (1991) p. 126

⁹¹⁵ Pages (1996) p. 7

⁹¹⁶ Kennedy (1987)

⁹¹⁷ Kupchan (1989)

⁹¹⁸ Calleo (1987)

⁹¹⁹ Nye (1990); Huntington (1988/89)

⁹²⁰ Krauthammer (1990/91)

⁹²¹ An internal 1992 Pentagon document defined America's post-Cold War grand strategy in very clear terms: "Our first objective is to prevent the re-emergence of a new rival [...] that poses a threat on the order of that previously posed by the Soviet Union. [...] Our strategy must now focus on precluding the emergence of any potential future global competitor." Quoted in Mearsheimer (2001) p. 46

⁹²² Huntington (1993) p. 68

Europe during the Cold War (institutionalised through NATO) can be interpreted as a direct response to the military threat posed by Soviet expansionism.⁹²³ Huntington and other realists predicted that the absence of this unifying threat would lead to the re-emergence of conflicting (transatlantic) interests which then trigger “intense conflicts” and struggles for political and economic primacy between America and its former European allies.⁹²⁴ ⁹²⁵ “The end of a significant war or conflict, whether among individuals, groups, or states, creates the basis for the generation of new conflicts”⁹²⁶.

Huntington argued that future clashes of interests among America and other major powers would be “over the distribution of the benefits and costs of economic growth and the distribution of the costs of economic stagnation or decline”⁹²⁷.⁹²⁸ He rejects the notion that international economic competition is a positive-sum game where the (governmental) actors involved are concerned about maximising absolute rather than relative gains.⁹²⁹ ⁹³⁰ Huntington derives classic mercantilist arguments and policy prescriptions from his background as a hard-core IR realist. Economic power and technological prowess are the ultimate source and foundation of military might. “All of the major shifts in the world’s *military-power* balances have followed alterations in the *productive* balances.”⁹³¹

“Economists are blind to the fact that economic activity is a source of power as well as well-being. It is, indeed, probably the most important source of power, and in a world in

⁹²³ “[T]he [Cold War] partnership between Europe and the [US] was held together by three unifying forces. The first and most important was the Soviet threat. The second was America’s economic stake in Europe, which reinforced its strategic interest in European prosperity. The third was the existence of a generation of European and American elites whose personal backgrounds and life experiences left them strongly committed to the idea of an Atlantic community. All three unifying forces are now gone or eroding, and there is little hope of resurrecting them. Walt (1998) pp. 3-11

⁹²⁴ Huntington (1993) p. 71

⁹²⁵ “There is considerable evidence [...] that the [US] and its Cold War allies are drifting apart. This trend is most apparent in Europe, where NATO’s 1999 war against Serbia and its messy aftermath have damaged transatlantic relations and prompted the [EU] to begin building a force that can operate independently of NATO – meaning the [US]. [...] The [UK], France, Germany, and Italy are slowly but inexorable realising that they want to provide for their own security and control their own destiny. They are less willing to take orders from the [US] than they were during the Cold War. Japan, too, is showing signs of independent behaviour.” Mearsheimer (2001) pp. 48-49

⁹²⁶ Huntington, (1993) p. 71

⁹²⁷ Ibid., p. 71

⁹²⁸ “American realists simply see the emerging threat of a new economic hegemon, either Germany alone or France and Germany together [...]”(Wallace & Zielonka, 1998) p. 67

⁹²⁹ Mastanduno (1991) pp. 73-74

⁹³⁰ “Drawing upon historical and empirical evidence, and employing a realist conceptualisation of states as rational power-maximisers in zero-sum pursuit of their individual interests, [this neo-marxist essay] interprets economic globalisation as competitive international relations, wherein states employ economic means to attain international geo-political power. [...] ‘Soft’ geo-politics represents states’ competitive and coercive interactions, using political-economic tactics to exercise and increase their political clout and maximise their individual economic gain. Economic globalisation constitutes a foremost example.” Gritsch (2005) p. 2

⁹³¹ Kennedy (1987) p. 439

which military conflict between major states is unlikely, economic power will be increasingly important in determining the primacy or subordination of states”⁹³².

This emphasis on preserving and advancing America’s economic power and technological prowess conforms to a neo-realist approach, which argues that Washington should respond to the post-Cold War era – characterised by reduced military threats, growing “foreign dependence” on potential challengers like Europe, Japan, or China, and the corresponding (relative) decline in US economic might – by pursuing industrial / economic policies designed to defend America’s international hegemonic position. Edward Luttwak defined “the pursuit of adversarial goals through economic means” as “geo-economics”⁹³³. “As the power of the hegemonic state [i.e., America] declines and the importance of military threats recedes, [neo-]realists expect the [hegemon] to become more attuned to relative gains considerations and begin to act more like a “normal” country”⁹³⁴.⁹³⁵ The transition from the Cold War to the post-Cold War era is thus marked by a shift from military competition to economic competition as the primary theatre of great-power rivalry.

“In the realm of military competition, the instruments of power are missiles, planes, warships, bombs, tanks, divisions”. In the realm of economic competition, the instruments of power are productive efficiency, market control, trade surplus, strong currency, foreign exchange reserves, ownership of foreign companies, factories and technology.”⁹³⁶

However, great-power rivalries are never exclusively driven by either military or economic competition. In theory, one might be able to draw a clear distinction between these two dimensions of a country’s national power base. In reality though, military and economic factors are inextricably intertwined as both co-determine a state’s power and influence in the international system. It was only the combination of superior military and economic-technological resources that – coupled with the “soft power” appeal of US values like freedom and democracy – laid the foundations for America’s rise to global superpower status in the post-Cold War era. At the time, all of the other (potential) competitors for global primacy were lacking either military or economic resources to rival America. While Russia boasted the world’s largest WMD stockpiles, its economy was in tatters; Japan commanded impressive economic-technological might but had only a small Self Defence Force.

⁹³² Huntington (1993) p. 72

⁹³³ Luttwak (1990) quoted in Cable (1995) p. 308

⁹³⁴ Pages (1996) p. 7

⁹³⁵ “The model which is implicit in this view is a kind of zero-sum game in which the gains of one country (primacy) are seen as cancelling out the losses of another (subordination) even if both achieve growing prosperity.” Cable (1995) p. 308

What makes the BMD and EADS merger cases selected for this thesis so interesting is that the A&D sector is the “strategic, high-technology, high value-added industr[y]”⁹³⁷ par excellence, with enormous importance for international military *and* geo-economic security.⁹³⁸ In 1991, Huntington warned his countrymen “to be concerned by the current challenge to American economic primacy posed by Japan and the possible future challenge that could come from Europe”⁹³⁹.⁹⁴⁰ While Huntington focuses on Japan as the immediate threat, it is obvious that a reunified Europe and a bigger, more powerful EU are viewed as potential (economic) challengers to America’s superpower status.

“Japanese strategy, behaviour, and declarations all posit the existence of an economic cold war between Japan and the [US].”⁹⁴¹ [...]

“The Japanese government [...] has targeted aerospace for rapid development with government ‘subsidies, loans, and political support’⁹⁴². If Japan is successful, the future of Seattle can be seen in Detroit.”⁹⁴³

Huntington’s comparison between Seattle (home of Boeing) and Detroit (home of the Big Three carmakers) underscores his mercantilist agenda derived from a hard-core IR realist background. Only die-hard protectionists would argue that Detroit’s automotive industry should be protected as a national asset.⁹⁴⁴ The competitive threat posed by European A&D companies (Airbus) and the rise of Japan, China, India, etc. raised the spectre of long-term US decline and loss of national wealth in a “strategic, high-technology, high value-added industry” critical to bolstering America’s economic, political, military leadership position in the world. Realists believe that sovereign states – even those that enjoy strong political, economic, social, and military ties – can never fully trust each other. Today’s allies can be tomorrow’s enemy. Huntington and Mearsheimer reject the notion that the “Atlantic Community” had fundamentally transformed the context of international relations, including international economic relations. It was therefore a full dismissal of liberal institutionalism as a concept. This hard realist argument has made for a deep ambiguity in US-

⁹³⁶ Huntington (1993) p. 73

⁹³⁷ OTA (1991) p. 9; Huntington (1993) p. 74

⁹³⁸ “In the geo-economic view of the world, a trade deficit is intrinsically undesirable, not merely for its own sake (imports ‘destroy’ jobs) but because it is balanced by capital inflows – foreign investment or the acquisition of claims on the federal government so that the ‘US becomes dependent on imports or money from Japan’ and ‘vulnerable to Japanese threats.’” Cable (1995) p. 309

⁹³⁹ Huntington (1993) p. 72

⁹⁴⁰ This was the reverse argument to that of Servan-Schreiber’s “Le défi américain”.

⁹⁴¹ Huntington (1993) p. 76

⁹⁴² Stevenson (1992)

⁹⁴³ Huntington (1993) p. 76

⁹⁴⁴ America’s carmakers have consistently failed to anticipate changes in consumer preferences or in technology and thus rendered themselves vulnerable to foreign competition. By relying on SUVs sales for too long, Detroit missed the boat on investing in alternative fuels / engine technologies and the necessity to build smaller, more fuel-efficient cars.

European relations, especially in defence industrial cooperation, with some US policymakers arguing for a balanced “two-way street” and others pushing for the maintenance of unilateral dominance. This tension has been an underlying ambiguity through successive US administrations.

US and European policymakers have long regarded commercial aircraft exports as semi-political in nature; not only due to the major revenues and jobs at stake but also because of the growing technological overlaps between civil and military aerospace. Washington, Paris, and the other European capitals concerned have repeatedly tried to use their political leverage to help secure major export deals for Boeing and Airbus, respectively. In 2005, President Bush and Secretary Rice – lobbied their counterparts in New Delhi to make sure Air India’s US\$7 billion purchase of new commercial aircraft would go to Boeing.⁹⁴⁵ Despite French lobbying efforts to promote Airbus, the Indian government opted for the US firm, prompting European diplomats and business leaders to complain that Airbus was not given “fair and equal treatment”⁹⁴⁶ and that “factors other than commercial”⁹⁴⁷ clinched the deal for Boeing.⁹⁴⁸ Similar lobbying efforts involving senior US / European policymakers have accompanied major aircraft purchases in many other countries (China, Saudi Arabia, etc.).

The Boeing deal took place in the context of Washington’s strategic rapprochement with India, “a major Asian democratic power with the potential economic and military strength to counter the adverse effects of China’s rise as a regional and world power”⁹⁴⁹. It was closed shortly before the signing of a “New Framework for the US-India Defence Relationship”⁹⁵⁰ and the landmark US-India nuclear deal in June and July 2005, respectively. Washington and New Delhi agreed to “expand two-way defence trade between our countries [...] as a means to strengthen our countries’ security, reinforce our strategic partnership, achieve greater interaction between our armed forces, and build greater understanding between our defence establishments”⁹⁵¹. India plans to spend US\$10-12 billion to purchase at least 126 fighter jets by 2011. “[S]ix aerospace companies, backed by their respective governments, are in intense competition [...] for what may be one of the world’s last great defence contracts”⁹⁵².

⁹⁴⁵ Cherian (2005)

⁹⁴⁶ Ibid.

⁹⁴⁷ Ibid.

⁹⁴⁸ India might also have selected Boeing to gain US backing for its attempt to become permanent UNSC member and to ease Washington’s concerns about the widening bilateral trade deficit. Ibid.

⁹⁴⁹ Richardson (2002) p. 20

⁹⁵⁰ “New Framework for the US-India Defence Relationship”

⁹⁵¹ Ibid.

⁹⁵² Srivastava (2009). The competitors are: LMC, Boeing, Saab, MIG, EADS-BAE, Dassault.

5.4 *Major transatlantic M&As after the end of the Cold War*

By contrasting large-scale transatlantic M&As in a variety of industries (automotive, banking, telecommunications) with the absence of transatlantic mergers between A&D primes, this chapter provides analyses what separates EADS and BMD from M&A transactions in less strategic or even non-strategic industries.⁹⁵³ All three selected cases involved successful acquisitions of American firms by European companies. The term “successful” means that these transactions received shareholder approval and were not blocked by Washington. It does not imply that these acquisitions were successful from a financial or corporate strategy point of view.

⁹⁵³ In fact, compared to the automotive or banking businesses, the telecommunications industry is certainly a more strategic sector of the economy since it raises potential national security concerns related to eavesdropping and espionage operations conducted by foreign powers. In addition, terrorists might be tempted to attack critical elements of the US telecommunications infrastructure in an effort to magnify the effects of a terrorist strike (by hampering the coordination of first responders and other ensuing rescue / counter-terrorism operations).

5.4.1 *The DaimlerChrysler merger: “a marriage made in heaven”?*

When the link-up between Germany’s Daimler-Benz AG and America’s Chrysler Corporation was completed on 18 November 1998, it ranked as the biggest transatlantic merger and the biggest industrial merger ever recorded. The deal’s architects, Daimler-Benz CEO Schrempp and Chrysler CEO Eaton, hailed the US\$92 billion merger as a “marriage made in heaven”. In 1998, DaimlerChrysler (DCX) had a turnover of US\$154 billion, an operating profit of US\$8.6 billion, sold 4.4 million vehicles, employed 442,000 people, and had a market capitalisation approaching US\$100 billion. Schrempp hailed DCX as “a merger of equals, a merger of growth, and a merger of unprecedented strength”⁹⁵⁴. Only ten months passed between first exploratory talks in January 1998 and the merger’s completion in November. The EC and the FTC approved the transaction in July 1998, and in mid-September close to 100 percent of Chrysler and Daimler-Benz shareholders voted in favour of the merger, thus paving the way for the launch of DCX on 18 November 1998.

Both Daimler-Benz and Chrysler were looking for a suitable partner to attain the size and economies of scale necessary to survive in a competitive global marketplace. In the US auto industry, high R&D, labour, healthcare and pension “legacy” costs, increased competition from cheaper and more efficient Asian carmakers, and incentive programmes were eating into profit margins. In the mid-1990s, Chrysler ranked as the world’s most profitable car company on a per-vehicle basis – US\$1,076 followed by Toyota (US\$540) and Ford (US\$534)⁹⁵⁵ – driven by SUV, minivan, and pick-up truck sales.^{956 957} That being said, Chrysler had teetered on the brink of bankruptcy four times since WWII. In each instance, the firm only managed to survive with the help of massive government bailouts and / or large-scale cutbacks in R&D. It was against this long shadow of history that Robert Eaton addressed his employees in July 1997 and sternly warned that Chrysler’s very survival would be at stake in the years to come. “I think there may be a perfect storm brewing around the industry today. I see a cold front, a nor’easter, and a hurricane converging on us all at once”⁹⁵⁸. “The cold front was chronic overcapacity, the nor’easter was a retail revolution that empowered buyers, and the hurricane was a wave of environmental concerns that threatened the very existence of the internal combustion engine”⁹⁵⁹. The DCX merger offered Chrysler an opportunity to weather “the perfect storm” ahead by joining forces with one of the world’s leading automotive companies. The alternative would have been to remain independent and

⁹⁵⁴ Graesslin (2000) p. 155

⁹⁵⁵ “The Harbour Report 1996”

⁹⁵⁶ Finkelstein (2002) p. 2

⁹⁵⁷ In the conventional passenger car segment, Chrysler had been losing market share for a long time and its export record was poor.

⁹⁵⁸ (Vlasic & Stertz, 2001) p. 174

⁹⁵⁹ Finkelstein (2002) p. 2

risk being swept away by a wave of consolidations which was soon expected to hit an industry notorious for its overcapacities.⁹⁶⁰

Schrempp saw the DCX merger as the crowning moment of his attempt to create a “Welt AG”: a globally integrated automotive company with strong brands in all key international markets. He realised that, “as competition became tougher, even Mercedes [the world’s leading luxury brand] needed greater volume to support the increasingly expensive technological development required to stay ahead”⁹⁶¹.⁹⁶² Schrempp was careful to present DCX as a “merger of equals”:⁹⁶³ DCX established two headquarters (Stuttgart and Detroit), made English the official language, and appointed Schrempp and Eaton as equal “Co-Chairmen” (Co-CEOs) presiding over 15 board members (nine Germans and six Americans).

However, the gradual “Germanisation” of DCX’s Managing Board would soon begin. In March 2000, Eaton was handed a golden parachute and sent into early retirement. The head of Chrysler was asked to leave the company, too.⁹⁶⁴ The German take-over was completed in November 2000, when Dieter Zetsche and Wolfgang Bernhard were installed as top Chrysler managers. Under the terms of the merger agreement, each Daimler-Benz share was converted into one DCX share while each Chrysler share was only exchanged for 0.6235 DCX shares. These different “conversion factors” reflect the different weight of the respective financial assets that the two companies contributed to DCX. In that sense, the creation of DCX was no real “merger of equals”. In October 2000, Schrempp declared that “Me being a chess player, I don’t normally talk about the second or third move.” “The structure we have now with Chrysler (as a standalone division) was always the structure I wanted,” he added. “We had to go a roundabout way but it had to be done for psychological reasons. If I had gone and said Chrysler would be a division, everybody on their side would have said: ‘There is no way we’ll do a deal’.”⁹⁶⁵ ⁹⁶⁶

There are several reasons why Chrysler and the US government agreed to the DCX merger. First, CEO Eaton feared that his company would soon be hit by “a perfect storm” threatening Chrysler’s survival. It seemed only a question of time before Chrysler would be pushed to the brink of

⁹⁶⁰ Graesslin (2005) p. 24

⁹⁶¹ *The Economist* (2006)

⁹⁶² “With US\$2.8 billion in annual profits, remarkable efficiency, low design costs, and an extensive American dealership network, Chrysler appeared to be the perfect match.” Finkelstein (2002) p. 2

⁹⁶³ Europeans and Americans shareholders each held 44 percent of DCX.

⁹⁶⁴ The DCX Supervisory Board subcommittee members in charge of Managing Board appointments were all German.

⁹⁶⁵ (Burt & Lambert, 2000)

⁹⁶⁶ Kirk Kerkorian, Chrysler’s largest shareholder prior to the merger, sued DCX for US\$3 billion, arguing that the German take-over bid disguised as a “merger of equals” had denied Chrysler shareholders the higher premiums usually paid in acquisitions. The lawsuit was dismissed in 2005.

bankruptcy or swallowed by one of its competitors. Second, a merger with Daimler-Benz and its flagship brand Mercedes-Benz – “the epitome of European automotive aristocracy, brimming with confidence, cash and technology”⁹⁶⁷ – promised to provide Chrysler with the necessary financial and technological clout needed to survive in a competitive international auto industry. For Chrysler, the timing of the DCX merger was fortuitous. While Chrysler had posted record annual operating profits of more than US\$5 billion during 1998-1999, that figure dropped to US\$499 million in 2000. In 2001, Chrysler even swung to a US\$2.2 billion loss. DCX’s market capitalisation fell from US\$100 billion in 1998 to US\$44 billion in 2001. Three years after the merger, DCX had a market valuation similar to that of Daimler-Benz prior to the link-up with Chrysler.

Eaton rightly believed that Chrysler only had a narrow window of opportunity to find a merger partner. During 1998-2006, Chrysler’s share of the US car and light truck market fell from 16 to 13 percent as Asian rivals made further inroads in the American automotive market. In 2006, DCX earned US\$7.3 billion, while Chrysler lost US\$1.48 billion. In August 2007, DCX sold 80.1 percent of Chrysler to US private equity firm Cerberus, and pulled out completely in April 2009. In 1998, DCX was “the harbinger of a new age of transnational industrialism”.⁹⁶⁸ In 2007, the picture was very different:

“Whether the marriage of [Daimler-Benz] and [Chrysler] was a flawed idea based on phantom synergies, or whether it was a brilliant concept whose execution was horribly botched, will be debated within the auto industry and in business schools for years to come. It’s likely that both are true: The synergies were overestimated and the clash of cultures made things much worse.”⁹⁶⁹

The DCX merger promised Chrysler to gain access to cash, automotive technology, and managerial expertise from Daimler-Benz. It can therefore be interpreted as an American attempt to “marry up”, to adopt best managerial / engineering practices, and to allow the US auto industry to boost its competitiveness to international levels. Since Daimler-Benz – clearly much bigger and stronger than Chrysler – presented DCX as a “merger of equals”, it is evident that from a business and national industrial policy perspective, Chrysler and America stood to benefit disproportionately from this biggest industrial merger ever.

⁹⁶⁷ *The Economist* (2001)

⁹⁶⁸ Ingrassia (2007) analyses why DCX went “so wrong, so quickly”.

⁹⁶⁹ *Ibid.*

5.4.2 *Deutsche Bank's take-over of Bankers Trust*

In June 1999, Deutsche Bank AG (DB), Germany's biggest bank (US\$734 billion in assets), completed its US\$10.1 billion acquisition of Bankers Trust (BT), the eight-largest American bank (US\$133 billion in assets).⁹⁷⁰ The DB-BT deal was the biggest foreign take-over of a US bank and (temporarily) turned DB into the world's largest commercial banking group. The rationale behind the acquisition of BT – a bank serving corporate clients – was DB's desire to join the ranks of Wall Street's investment banking powerhouses. As European financial markets were shifting from corporate lending – DB's traditional business – to stock underwriting in the 1990s, DB feared that banks like Goldman Sachs or Morgan Stanley would soon establish a commanding presence on its home turf. The DB-BT take-over took place against the backdrop of major consolidation in the US and European financial industry. In January 1998, Union Bank of Switzerland and the Swiss Banking Corporation engineered a US\$24.7 billion merger to form UBS. In April 1998, Citicorp and Travelers Group created "Citigroup Inc.", the world's largest financial services concern.⁹⁷¹ These mergers underscored DB's need to find a suitable (US) investment banking partner.⁹⁷²

After DB's initial talks with J.P. Morgan had failed, it set its sights on BT which, despite its smaller size, offered the German bank an attractive opportunity to enter the investment banking market. Following several scandals in the early 1990s that had hurt its reputation and bottom-line, BT transformed itself from a commercial bank into an "investment banker to the world's smallest, faster-growing companies" while at the same time carving out "a niche underwriting and trading high-yield debt, so-called junk bonds"⁹⁷³. In early 1998, BT CEO Newman – a former Deputy Treasury Secretary in the Clinton administration – had made it clear that his company wished to remain independent. However, following BT's loss of almost US\$500 million in connection with the Russian financial crisis in August 1998 and a sharp drop of the company's stock, the BT board urged Newman to explore merging with a bigger bank to ensure the company's survival. Between 20 October 1998 – when the FT first reported "preliminary" DB-BT take-over talks – and the end of November 1998, BT's share price increased from US\$55 to US\$87. This was still below DB's US\$93-per-share offer finalised on 30 November 1998. DB CEO Breuer made it clear from the start that this transaction was a German-led take-over and no transatlantic "merger of equals": "We don't believe in autonomy as an instrument of management and leadership. [...] [W]e want a centralized management of the business."⁹⁷⁴

⁹⁷⁰ Fed (1999) p. 2

⁹⁷¹ (O'Brien & Treaster, 1998)

⁹⁷² *Financial Times* (1998) and Corrigan (1998)

⁹⁷³ (O'Brien & Holson, 1998)

⁹⁷⁴ Andrews (1998)

Regulatory approval for the deal was thrown into doubt in February 1999, when an internal DB investigation unearthed documents suggesting it had lent money to construction companies that built the Auschwitz camp. This revelation caused a massive backlash from leaders of New York's influential Jewish community, including the city's comptroller Alan Hevesi, who had himself lost relatives in the Holocaust. There were also allegations that DB had "before and during [WWII], collaborated with the Nazi regime to confiscate and liquidate Jewish assets, and that the bank financed or controlled other companies that used slave or forced labour"⁹⁷⁵. Finally, there were concerns that DB "may have handled gold stolen by the Nazis"⁹⁷⁶. Hevesi asked the Federal Reserve (Fed) not to approve the DT-BT take-over "until all interested parties agreed on a structure to settle all Holocaust-era claims"⁹⁷⁷. Just a year earlier, Hevesi helped coordinate a boycott against Swiss banks that had illegally seized the unclaimed deposits of thousands of Holocaust victims.⁹⁷⁸

Jewish groups like the World Jewish Congress (WJC) were not only threatening to block the DB-BT take-over. The WJC also considered making DB the target of an international disinvestment campaign – similar to the sanctions imposed on South African companies during Apartheid. In May 1999, Berlin announced that 13 of the country's major German banks, insurers, and industrial companies had agreed on the creation of the "Foundation Initiative of German Enterprises: Remembrance, Responsibility, and Future" to help the victims (and their surviving heirs and family members) of Nazi-era confiscation of (Jewish) assets and slave / forced labour.⁹⁷⁹ The companies (including DB) recognised that the risks of current and future lawsuits made it imperative to reach a Swiss-style "global" settlement of all Nazi-era claims. Due to Germany's multi-billion dollar compensation fund and pressure from the DoS, the WJC and influential Jewish individuals like Hevesi (who had no jurisdiction over the DB-BT deal) had dropped their opposition to the DB-BT take-over by May 1999. Hevesi recommended that the Fed base its M&A review "exclusively on the [...] [transaction's] impact on the banks, the public, and the financial community"⁹⁸⁰. Furthermore, "a [DoS] official had warned [the Fed] that opposition to the merger on political grounds could chill the [US] economy"⁹⁸¹. The DoS stressed that "sanctions against German banks are not justified and would only retard progress on Holocaust-related issues"⁹⁸².

⁹⁷⁵ Fed (1999) p. 16

⁹⁷⁶ Ibid., p. 16

⁹⁷⁷ Ibid., p. 18

⁹⁷⁸ Swiss banks offered US \$1.25 billion as a global Holocaust claims settlement in order to end all legal and diplomatic sanctions.

⁹⁷⁹ Sanger (1999)

⁹⁸⁰ Fed (1999) p. 18

⁹⁸¹ AP (1999)

⁹⁸² Fed (1999) p. 18

The DB-BT transaction was unanimously approved by the Fed governors on 20 May 1999. The Fed concluded that the take-over “would not result in any significantly adverse effects on competition or on the concentration of banking resources in the New York banking market or any other relevant banking market”⁹⁸³. Regarding the Holocaust-related objections to the deal, the Fed made it clear that many of these concerns were not within the “limited jurisdiction” of its DB-BT regulatory review. To the extent that some of the Holocaust-related concerns had legal relevance for the anti-trust review, the Fed “considered, in particular, the past efforts of [DB] to investigate and address its Holocaust involvement, and the forthcoming and ongoing efforts of current management to resolve these matters”⁹⁸⁴. In sum, the Holocaust-related objections did not “warrant denial of the [DB-BT] proposal”⁹⁸⁵.

⁹⁸³ Ibid., p. 6

⁹⁸⁴ Ibid., p. 18

⁹⁸⁵ Ibid., p. 19

5.4.3 *Deutsche Telekom's take-over of VoiceStream*

After overcoming massive opposition by protectionist-minded Congressional lawmakers, Deutsche Telekom's (DT) US\$26 billion acquisition of US wireless carrier VoiceStream (VS) was completed in May 2001. Given VS's size and financial performance – 2.3 million customers; 1999 turnover of US\$665.7 million with a US\$580 million loss – the company was an expensive acquisition target.^{986 987} DT viewed the deal as an entry to the lucrative US market and announced the “creation of the world's only global GSM operator”⁹⁸⁸. VS CEO Stanton hailed the DT link-up as “a compelling strategic opportunity for [VS] to partner with one of the world's leading telecommunications companies”⁹⁸⁹. He also praised the deal “as an extremely attractive opportunity for both sets of shareholders and for our employees”. Finally, Stanton pointed to the “enormous benefits for US consumers, as [VS] becomes an even more competitive national operator that can accelerate the introduction of next-generation wireless voice and data services such as mobile Internet and multimedia applications”⁹⁹⁰.

What drew the ire of US lawmakers was the fact that at the time of the merger announcement, former German monopolist DT was still majority-owned by the government. While the VS acquisition would reduce Berlin's stake to 45.7 percent⁹⁹¹, this was well above the 25-percent foreign government ownership limit imposed by US law. In theory, the Federal Communications Commission (FCC) could waive that restriction if the proposed transaction was in the public interest.⁹⁹² Congressional opposition formed quickly after the DT-VS deal was announced. On 21 July 2000, 30 Republican and Democratic lawmakers – led by Senator Ernest Hollings (D-SC) circulated a “Dear Colleague” letter stating that they were “not opposed to private foreign investment in the telecommunications industry”, but that “we did not deregulate US telecommunications to permit the regulated foreign government-owned telecommunications companies to take over the US market”⁹⁹³. If the US allowed such take-overs, they could reduce free competition since government-owned firms “can raise staggering amounts of capital and the financial markets assume that their governments will not allow them to fail”⁹⁹⁴. Senator Hollings also invoked national security and privacy concerns, noting that American telecommunication firms

⁹⁸⁶ On a per-subscriber basis, DT-VS was the most expensive acquisition of a wireless carrier to date. (Sorkin & Romero, 2000)

⁹⁸⁷ Schmid 2000)

⁹⁸⁸ DT (2000) p. 18

⁹⁸⁹ *Ibid.*, p. 3

⁹⁹⁰ *Ibid.*, p. 3

⁹⁹¹ *Ibid.*, p. 9

⁹⁹² However, as Senator Hollings pointed out, “the FCC has never waived, in any significant fashion, the law for foreign government ownership”. Hollings (2000)

⁹⁹³ (Sorkin & Romero, 2000)

⁹⁹⁴ *Ibid.*

owned by foreign government-controlled companies could eavesdrop on their customers and possibly track their whereabouts.

Hollings – initially backed by Senate Majority Leader Lott (R-MS) – attached two amendments to a Senate appropriations bill to derail the DT-VS deal. The first amendment would have prevented the FCC from transferring any American telecommunications license to DT for one year. The second amendment would have permanently banned any transfer of US telecommunications licenses to any company owned at least 25 percent by a foreign government – thus removing the FCC’s corresponding waiver authority. In response to the concerns voiced by 30 Senators, FCC Chairman Kennard indicating that “I believe, as you do, that the commission’s approach must promote competition and maintain a secure telecommunication system for our national security”⁹⁹⁵. The DT-VS bid would therefore face “close scrutiny”⁹⁹⁶. While Kennard left open the possibility of approving the DT-VS deal, it became clear that the German telecommunications giant was facing a long regulatory battle with an uncertain outcome.

However, Senator Holling’s opposition to the DT-VS deal was neither shared by all of his colleagues in the Senate, nor by many other powerful players in the nation’s capital. Senator McCain (R-AZ) circulated his own “Dear Colleague” letter warning of the potential backlash abroad against the new protectionism at home:

*“Although it would be easy to envision new foreign restrictions on US programming, satellite launches and the like, foreign governments’ retaliation would not necessarily be confined to the telecom sector. Any foreign market in which American companies are vigorous participants could be fair game.”*⁹⁹⁷

The White House called Senator Hollings’s initiative “unnecessary”, arguing that the mandatory DT-VS merger reviews by the FCC, DoJ, USTR, and CFIUS would safeguard American economic and national security interests.^{998 999} The EU, too, moved quickly to defend DT against protectionist sentiments on Capitol Hill. On 26 July 2000, Trade Commissioner Lamy sent a strongly-worded letter to the USTR, urging Washington to oppose the Hollings bill: “This would clearly violate

⁹⁹⁵ FCC (2000)

⁹⁹⁶ Ibid.

⁹⁹⁷ Labaton (21 July 2000)

⁹⁹⁸ Labaton (24 July 2000)

⁹⁹⁹ For more information on the inter-agency DT-VS transaction review process, see Goodman (2000).

commitments in the WTO and would affect very substantial interests of European companies.”¹⁰⁰⁰
The EU threatened to refer the case to the WTO if the measure were to pass.

On 7 September, Congress held its first hearing on the issue. That same day, the DT-VS acquisition also cleared its first hurdle when the DoJ’s merger review deadline passed without objections.¹⁰⁰¹ Furthermore, Senate Majority Leader Lott had abandoned his opposition to the merger, following lobbying efforts by Republican Senator Gorton from VS home state Washington. To further turn the heat on Hollings, DT and VS hired several top lobbyists over the summer who forged a high-profile alliance of “strange bedfellows” in favour of the proposed merger: trade union AFL-CIO¹⁰⁰² and the Chamber of Commerce.¹⁰⁰³ The two powerful organizations – strong adversaries on virtually all other trade issues – joined forces “to defeat a bill they see as a threat to foreign investment and union jobs in telecommunications”¹⁰⁰⁴. The White House, too, reiterated its strong opposition to Senator Hollings’s initiative in early September, pointing out that it had already threatened to veto the relevant appropriations bill because of a different amendment opposed by President Clinton.

On the regulatory front, FCC Chairman Kennard made it clear in early October that his agency was not yet ready to clear the DT-VS deal, raising the spectre of a prolonged merger review.¹⁰⁰⁵ On the political front, in contrast, DT and VS scored a major breakthrough on 26 October 2000, when Senator Hollings and his allies decided to drop their proposed protectionist DT-related amendments.¹⁰⁰⁶ In view of the White House’s credible veto threat, the defection of Senate Majority Leader Lott, as well as the vocal support for DT-VS from influential trade unions and business groups, it had become clear that the Hollings amendment would not go anywhere before the US Presidential / Congressional elections on 7 November. In December 2000, the FBI, the DoJ, and DT-VS filed a joint petition asking the FCC to delay approval of the proposed merger to allow the four players involved to resolve any related US national security issues. According to the FBI:

“Granting the authority requested by the parties [DT and VS] in this transaction could present significant impediments to the ability of our government to meet its obligations to

¹⁰⁰⁰ Reuters (July 2000)

¹⁰⁰¹ (Srinivasan & AP, 2000)

¹⁰⁰² AFL-CIO = American Federation of Labor and Congress of Industrial Organizations

¹⁰⁰³ Reuters (October 2000)

¹⁰⁰⁴ Ibid.

¹⁰⁰⁵ Spiegel (2000)

¹⁰⁰⁶ Ibid.

the citizens to preserve the national security, enforce the laws and protect the public safety.”¹⁰⁰⁷

The FBI and the DoJ wanted to ensure that they retained the ability to tap any VS calls originating / ending in America and to detect any foreign eavesdropping on such calls. In January 2001, DT and VS reached an agreement with the FBI that guaranteed US law enforcement officials’ access to the VS network.¹⁰⁰⁸ In April 2001, the FCC finally approved the DT-VS deal, arguing that it would provide “public interest benefits for US consumers” warranting a waiver of the existing 25-percent limit on direct / indirect foreign government control of American phone licenses.¹⁰⁰⁹

¹⁰⁰⁷ Spiegel (11 January 2001)

¹⁰⁰⁸ Spiegel (18 January 2001); FCC (2001) pp. 43-45

¹⁰⁰⁹ Spiegel (18 January 2001)

5.5 *Moving both towards and away from aerospace and defence industrial globalisation*

Free-market advocates are probably tempted to interpret the massive rise of cross-border A&D industrial collaboration in recent decades as a clear indicator that changing industry dynamics, the continuing push for trade liberalisation, and the intense competitive pressures of an increasingly integrated global economy have created the necessary conditions to gradually transform this “strategic” industry into a “normal” economic sector. However, realist / neo-mercantilist concerns about the potential national security / economic risks associated with foreign dependence, unauthorised technology transfers / proliferation, and the implications of foreign ownership, control, and influence vis-à-vis the US domestic A&D industrial base continue to resonate with relevant American policymakers. These concerns largely explain why Washington preferred the kind of post-Cold War ethnocentric A&D industrial consolidation that resulted in the BMD merger.

It is important to recognise that the dominant international position of the American defence industry provides Washington with considerable political influence vis-à-vis friends and foes alike:

“The global defence industrial sector is a remarkably accurate indicator of the stratification of power in the post-Cold War international system. As in the overall system, the [US] plays the dominant role in this sector, and US policymakers use their comparative advantage to influence foreign affairs. [This sector] provides the [US] with the ability to encourage states to cooperate, reward compliance, and punish non-cooperation.”^{1010 1011}

“Arms-producing countries, regardless of their former position in the defence industrial hierarchy, have become increasingly dependent upon the [US] for sales, technological innovation, and the advanced technologies needed to modernise their own militaries and defence industries. This growing dependency has granted the [US] considerable direct and indirect political leverage. From the perspective of non-US governments, the price of entering the US market is increasing US influence over the direction of their technological development, the stability of their military industries, and the autonomy of their foreign policy decisions.”¹⁰¹²

Any full-scale mergers of equals between US mega-primes and their European competitors would have almost inevitably eroded America’s technological leadership position in this strategic industry

¹⁰¹⁰ Neuman (2006) p. 429

¹⁰¹¹ “The array of incentives and rewards the [US] has to offer for cooperation is quite broad. It includes the offer of military credits, offset arrangements, technology transfers, loans, economic aid, joint ventures, different forms of military assistance, and the removal of penalties—whether they are arms embargoes, technology transfer restrictions, onerous export regulations, or high transaction costs.” Ibid., p. 447

¹⁰¹² Ibid., p. 451

and thus have significantly reduced Washington's ability to enjoy the direct and indirect political leverage derived from it. Such transatlantic mergers would have made the unauthorised transfer of sensitive US technologies much more likely; they would also have given the US government far less influence and leverage than is the case under the constraints of an ethnocentric consolidation of the American A&D industry. MNCs active in many different jurisdictions are far less vulnerable to political / governmental interference than companies with an easily identifiable "home country". If most of a firm's R&DP facilities, top management, and revenue base are in a single country, that government invariably enjoys more direct and indirect influence over corporate decisions. The recurring haggling between Paris and Berlin over control of EADS is a prime example of the problems resulting from an A&D company that is subject to the political pressures and interferences of more than one "home government".

While the importance of privileged access to the US market and the sheer size of the Pentagon acquisition budget would have ensured that Washington still enjoys unparalleled political leverage over any transatlantic mega-primes, one must realise that a European government allowing its national champion to merge with an American firm would have insisted on certain national security safeguards ("golden shares" with veto power over strategic M&A decisions, sensitive arms exports, etc.). Any such European influence / veto power over transatlantic mega-primes would have led to a corresponding decline in Washington's ability to leverage the A&D sector in pursuit of its own national interests.

US policymakers and business executives are clearly struggling with the fact that the A&D industry is caught between two worlds: realism / neo-mercantilism vs. liberalism / globalisation:

"[SIPRI]¹⁰¹³ contends that the US defence industrial sector has opted for certain kinds of global and transnational initiatives while avoiding others. Whereas the [US] is eager to exploit foreign sources of technology, it simultaneously seeks to protect itself from becoming too dependent upon foreign suppliers. Only about 4 percent (US\$7 billion) of total Pentagon procurement during FY02 was for overseas contracts, and of that less than 1 percent was for military hardware. It is, SIPRI contends, a policy of moving both towards and away from defence industrial globalisation."¹⁰¹⁴

America is both the world's leading arms exporter and the country least dependent on defence imports. In 1999, US weapons imports amounted to less than 5 percent of its defence exports. For

¹⁰¹³ SIPRI = Stockholm International Peace Research Institute

¹⁰¹⁴ Neuman (2006) p. 430

the UK, France, Germany, and Russia, that figure stood at 50, 28, 68, and 16 percent respectively.¹⁰¹⁵ As the world's only superpower, Washington is the biggest promoter and economic / political benefactor of defence exports while, at the same time, it is also the country most concerned that the forces of globalisation will erode the international leadership position of its A&D industry. On the one hand, the post-Cold War internationalisation of the defence industry as well as the launch of major weapons procurement programmes in Eastern Europe, the Middle East, etc. has been a boon to US mega-primes, which were able to capture more than two-thirds of global arms export contracts in 2008.^{1016 1017} On the other hand, American mercantilists and realists fear that the growing internationalisation of the US megaprimes' underlying supplier networks in commercial (Boeing's "Dreamliner" cooperation with Japan, etc.) and military aerospace (LMC's JSF subcontracting agreement with BAE^{1018 1019}) poses direct risks for America's national security and economic competitiveness.¹⁰²⁰ Since 1997, Washington has registered a sharp increase in foreign collection efforts targeted at critical US defence / dual-use technologies such as information systems and aeronautics.

Repeated US policy statements in favour of a genuine "two-way street" in transatlantic defence trade notwithstanding, the Pentagon has continued to procure just a very small percentage of its military hardware from Europe, thus demonstrating that national security concerns / American distrust of NATO allies, neo-mercantilist economic considerations, and the effectiveness of Congressional defence of US industrial lobbies are powerful factors in an otherwise "broken" US defence acquisition system.^{1021 1022 1023} "[T]he US military services greatly dislike foreign

¹⁰¹⁵ Table 2, Arms Imports as Percentage of Arms Exports for the 35 Largest Arms-Producing Countries, Ibid., p. 437

¹⁰¹⁶ During 2001-2008, weapons exports to the developing world accounted for an average of 65 percent of all such deals globally. In 2008, America accounted for 70 percent (US\$29.6 billion) of all new arms transfer *agreements* with the developing world. In terms of global arms transfer agreements, Washington also ranked first with US\$37.8 billion worth of transactions (68 percent of all such deals sealed last year). In 2008, US arms *deliveries* world-wide totalled US\$12.2 billion (38 percent market share). All figures are expressed in constant (2008) dollars. CRS (2009) p. II; 33

¹⁰¹⁷ The huge difference between the 2008 US share of global arms transfer *agreements* (68 percent) and actual arms *deliveries* (38 percent) indicates that American defence companies have in recent years gained significant competitive advantages over their foreign rivals and are bound to strengthen their dominant position in the coming years. Ibid., pp. 32-33

¹⁰¹⁸ According to a 2008 DoD report, "advanced aviation and weapons technology in the [JSF] programme may have been compromised by unauthorised access at facilities and in computers at [BAE]" – LMC's most important foreign subcontractor on this biggest defence acquisition project in US history. That same report also accused BAE that it had failed to provide the Pentagon with security audits for the 2001-2003 period on the grounds that "all information contained in the internal audits was privileged and not available to the [US] government". Sevastopulo (2008)

¹⁰¹⁹ The JSF programme has also benefited from substantial technology transfers from the UK to the US (primarily vertical take-off and landing techniques and technology).

¹⁰²⁰ The DoD report warned that "incomplete [BAE] contractor oversight may have increased the risk of unintended or deliberate release of [classified] information to foreign competitors. [BAE] has a prominent role in providing technologies to other countries for the JSF programme while it is also under contract to develop a competing aircraft." DoD (2008) p. 12

¹⁰²¹ GAO (March 2009)

¹⁰²² (Cordesman & Kaeser, 2008)

dependence, an attitude that arguably presents a more formidable barrier to European company market access than the [...] [relevant] laws and regulations.”¹⁰²⁴ In view of these realist / neo-mercantilist concerns, the prevention of “merger of equals” between US and foreign / European A&D primes coupled with the pursuit of an ethnocentric consolidation approach in this strategic sector has been a key element in Washington’s attempt to preserve and defend its post-Cold War hegemonic status against all challengers, friends and foes alike.

US policymakers were much more open to M&A transactions in “normal” industries like telecommunications, banking or automotive. Germany’s partly state-owned DT was able to overcome protectionist / national security concerns in Congress to acquire VS, the first foreign take-over of a major US telecommunications carrier. The White House and leading Democratic and Republican Senators specifically backed DT’s bid for fear that a blocking of this transaction could provoke retaliatory action by Germany, the EU, and other allies. In the case of the DB-BT deal, the biggest foreign take-over of a US bank, the German company was able to overcome strong opposition by New York’s influential Jewish community related to DB dealings in Nazi Germany. While DB’s financial support for the launch of a multi-billion dollar German industry foundation to compensate Nazi-era victims certainly helped its BT bid, the US government was again lobbying for the deal to go through for fear that its blocking could threaten bilateral relations with Europe’s biggest economy. Against the backdrop of the many other high-profile transatlantic mergers that took place during the second half of the 1990s, one can convincingly argue that the globalisation / free market narrative was very compelling for business leaders and policymakers on both sides of the Atlantic. However, when it came to the US A&D industry, realist / neo-mercantilist arguments prevailed and ensured that Washington pursued an ethnocentric rather than transnational consolidation approach.

¹⁰²³ “These problems have roots in not only the acquisition process, but also in the requirements and funding processes. Collectively, these processes create pressures to demand high performance, keep cost estimates low, and proceed with calendar-driven versus knowledge-driven schedules.” GAO (April 2009) p. ii

¹⁰²⁴ Grant (1997) p. 115

Chapter 6: Building Europe and Balancing the American Hegemon

6.1 The emergence of CFSP and ESDI¹⁰²⁵

This chapter analyses the EADS merger in its wider European and transatlantic political context. EADS was fostered by the culmination of two inter-connected geopolitical trends in the 1990s: the first trend pertained to the EU's drive to create an "ever closer Union" at the political, economic, and military level; the second trend related to growing transatlantic tensions with America and Europe's corresponding desire to chart its own course in world affairs, with only minimal interference from Washington. Viewed from these perspectives, the EADS merger can be explained by neo-liberal institutionalist and realist approaches. The functionalist / interdependence school promoted by neo-liberals argues that by the late 1990s, political and economic integration between the EU's core member states – France and Germany in particular – had reached such a high level that the governments concerned were willing to allow a full-fledged merger of their respective A&D "national champions". Realists claim that the attempt by key EU member states "to balance against the American hegemon" – i.e., to create an effective counter weight to Washington's vast power and influence, and the anticipated dominance of the "new Boeing" in the A&D industry – played a decisive role in bringing the EADS founding nations together. At the time of the EADS merger, France and Germany's left-wing Red-Green government were the key drivers behind the attempt to give the EU a more independent and less Atlanticist posture. The major transatlantic clashes in the run up to the 2003 Iraq War would subsequently further cement the Paris-Berlin partnership, embodied at its climax by the close personal and political ties between President Chirac and Chancellor Schroeder.

From its inception, the process of European integration, led by France and Germany, served both an economic and a political purpose. In economic terms, the European Economic Community (EEC) "was essentially a compromise between German interest in market liberalisation, and the French interest in support for agriculture"¹⁰²⁶.¹⁰²⁷ Until German reunification in 1990, the process of European integration was based on this informal Franco-German "grand bargain": Germany served as Europe's economic powerhouse and assumed only a very limited role in foreign and security policy.¹⁰²⁸ France, in turn, tried to harness Europe's collective political, economic, and military resources to increase its standing and prestige in the world, which was built on the "*force de frappe*", membership of the P5 in the UNSC, and "*les relations privilégiées*" with francophone

¹⁰²⁵ ESDI = European Security and Defence Identity

¹⁰²⁶ Pedersen (1998) quoted in Cole (2000) p. 9

¹⁰²⁷ Washington played an indispensable role in fostering Franco-German reconciliation and Western European integration after WWII. "The integration of Western Europe began in the post-war period under US leadership and US protection." (Menon, Forster, & Wallace, 1992) p. 100

¹⁰²⁸ Germany had no nuclear weapons, long-range ballistic missiles or strategic bombers.

states around the globe. From the end of WWII to the present day, France's great-power ambitions have been driven by the concept of "Gaullism"¹⁰²⁹, a grand strategy defined as follows:

*"A cultural attachment to European values and civilisation, notably as embodied by France; a Europe prepared to protect its industry and agriculture; the promotion of common European policies where these do not endanger French interests; a marked anti-Americanism and advocacy of a more independent security and defence identity; a tight Community based on a Franco-German directorate, rather than a looser, more nebulous, grouping of nations; and a preference for intergovernmental over supranational institutions."*¹⁰³⁰

From a Gaullist perspective, the EADS merger advanced several of France's key objectives, including the protection of Europe's A&D industry and the creation of an independent EU security and defence policy, both of which would help counter US dominance in the post-Cold War era. For de Gaulle and subsequent French leaders, a strong Franco-German partnership led by Paris was the *conditio sine qua non* of a strong Europe that could chart its own course in world affairs, fending off the immediate Soviet threat while preventing America from dominating the West through NATO. During the Cold War, French leaders tried repeatedly to make West Germany choose between Paris and Washington (and between the EU and NATO) and challenged US / Anglo-Saxon dominance of the Alliance by pushing for a more equal European-US partnership and more intra-European political / military cooperation instead.¹⁰³¹ West German leaders tried to avoid making that difficult choice, stressing their commitment to both a strong Europe and a strong transatlantic partnership embodied by NATO. However, "when forced to choose, Germany preferred the security offered by the US nuclear umbrella over the dubious French alternative, especially because de Gaulle refused to extend nuclear protection to the Germans".^{1032 1033} While the 1963 Elysée Treaty included important provisions concerning bilateral defence collaboration, the Bundestag – in response to active US political lobbying beyond the capacities of the French leadership – adopted such a strongly pro-Atlanticist preamble¹⁰³⁴ that Paris "saw no point in implementing the defence clauses of the Treaty"¹⁰³⁵. De Gaulle pulled France out of NATO's integrated military structure in

¹⁰²⁹ For an analysis of how Gaullism shaped French and European space policy see McDougall (1985) pp. 179-203

¹⁰³⁰ Cole (2000) pp. 58-59

¹⁰³¹ (Menon et al., 1992) pp. 100-102

¹⁰³² Cole (2000) p. 13. France's Hades missiles strained Franco-German relations during the 1980s / 1990s as these short-range nuclear weapons were designed to strike (East) Germany in the case of a Soviet attack.

¹⁰³³ There are also other assessments: "If a decision was forced, Paris was more important to Bonn than London, the preferred (if difficult) partner with which German governments had worked closely for more than 30 years. However, Washington was as important as Paris, because the [US] offered a special relationship for global economic co-operation, as well as for European security." (Menon et al., 1992) p. 105

¹⁰³⁴ The Bundestag reaffirmed its commitment to "the common defence in the framework of [NATO]".

¹⁰³⁵ (Menon et al., 1992) p. 101

1966.^{1036 1037} It was not until the early 1980s that Franco-German security and defence co-operation received a major boost under President Mitterrand and Chancellor Kohl, who activated the Elysée Treaty's dormant defence provisions. In 1987, Kohl and Mitterrand agreed to launch the 4,200-strong Franco-German Brigade¹⁰³⁸, a unit expanded into "Eurocorps" four years later before being merged into the European Rapid Reaction Force (ERRF).¹⁰³⁹

The end of the Cold War and German reunification in 1990 were watershed events, both in terms of Franco-German / intra-European and transatlantic relations. For France, Germany's unexpected reunification was a rude awakening. President Mitterrand, like much of the rest of the French political elite, feared that a stronger, reunified Germany would no longer be a compliant partner and could feel tempted challenge France's political leadership position within the EC.¹⁰⁴⁰ In terms of transatlantic relations, the end of the Cold War and the demise of the Soviet Union provided France and Germany with much more strategic leeway to chart their own course in world affairs; independent from America and NATO if necessary.¹⁰⁴¹ The Alliance, under US leadership, was also embarking on its own transformation process. In July 1990, shortly before German reunification, Alliance leaders gathered in London "to transform NATO from a Cold War to a post-Cold War alliance", notably by becoming "less military and more political in nature".¹⁰⁴² "The London Declaration"¹⁰⁴³ launched four new political initiatives:¹⁰⁴⁴ first, NATO vowed to "enhance the political component" of the Alliance, second, it called on the Warsaw Pact to issue a joint declaration in which the two would "solemnly state that we are no longer adversaries", three, NATO proposed that the Soviet Union and the other Warsaw Pact members "establish regular diplomatic liaison with NATO"; finally, the Alliance suggested that the upcoming CSCE¹⁰⁴⁵ Summit in November 1990 "decide how the CSCE can be institutionalized to provide a forum for

¹⁰³⁶ "[F]rom 1966, [...] a policy of membership of the Atlantic Alliance without participation within NATO became a central plank of French foreign and security policies". Menon (2000) p. 2

¹⁰³⁷ "[N]on-integration served to reinforce France's quest for wider foreign policy aims: military autonomy, along with a certain standing on the world stage, or *grandeur*." Ibid., p. 3

¹⁰³⁸ The Franco-German Brigade was very much a symbolic exercise as there was no common basis for rules of engagement or deployment. During the late 1980s, the Brigade was one of the least wanted postings in the French army, because soldiers were least likely to do anything interesting while attached to that unit.

¹⁰³⁹ While Eurocorps was "[i]mportant as a symbol of closer Franco-German collaboration, in practice [it] performed a marginal role in security debate in the 1990s". Cole, (2000) p. 115

¹⁰⁴⁰ Fears of a resurgent Germany also arose in the UK, where Prime Minister Thatcher strongly opposed German reunification.

¹⁰⁴¹ "In short, to France, the end of the Cold War allowed NATO to move towards eliminating the [integrated military structure], removed the military need for the [US] and NATO to be the central players in West European security, and created a real possibility for Western Europe to construct a serious defence entity." However, "France's immediate post-Cold War vision of European security autonomy was too radical for Washington and most of the other allies." Grant (1996) pp. 59-60

¹⁰⁴² Art (1996) p. 12

¹⁰⁴³ NATO (1990)

¹⁰⁴⁴ Art (1996) pp. 12-13

wider political dialogue in a more united Europe”.¹⁰⁴⁶ “Together with the decision to institute a fundamental review of NATO’s military strategy, the Bush administration succeeded in launching NATO’s transformation so as to maintain it as the ‘new’ Europe’s central security institution.”¹⁰⁴⁷

1048

The launch of “Operation Desert Storm” in January 1991 to liberate Kuwait put security and defence issues on top of Europe’s nascent CFSP agenda. However, different European countries drew different conclusions from the war.¹⁰⁴⁹ For Britain, this successful US-led UN intervention underscored the importance of maintaining close security and defence ties with America since Europe was simply too weak to project its military power abroad. For France, which needed US logistical support to deploy to Kuwait, the Gulf War illustrated the urgent need to beef up Europe’s defence capabilities – independent of NATO and the US. Germany, due to its pacifistic post-WWII Basic Law, stayed out of any direct military involvement and engaged in “chequebook diplomacy” instead. “[L]ooking for ways of overcoming this handicap, [Bonn] kept a low profile and supported the French when it was safe to do so.”¹⁰⁵⁰

The 1992 Maastricht Treaty launched the EU and declared as one of its objectives “the implementation of a common foreign and security policy including the eventual framing of a common defence policy, which might in time lead to a common defence”. The Treaty also “requests the [WEU], which is an integral part of the development of the Union [...] to elaborate and implement decisions on actions of the Union which have defence implications”. Furthermore, the nine WEU members¹⁰⁵¹ (all of which were part of the EC) vowed “to develop WEU as the defence component of the [EU] and as a means to strengthen the European pillar of the Atlantic Alliance”. The other key Maastricht provision – the creation of the Euro – was “a stratagem to end Germany’s exclusive power to set Europe’s interest rates”¹⁰⁵² by disempowering the Bundesbank. While Germany was reluctant to abandon the Deutschmark, Kohl realised that this was the price to pay for French support for German reunification. By firmly anchoring reunified Germany in a closely integrated EU, Kohl wanted to allay fears about another German “*Sonderweg*”.

¹⁰⁴⁵ CSCE = Conference for Security and Co-operation in Europe

¹⁰⁴⁶ NATO (1990)

¹⁰⁴⁷ Art (1996) p. 13

¹⁰⁴⁸ “In the early 1990s, Mitterrand’s ambitious European initiatives were an almost complete failure. Europe failed to equip itself with a security organisation capable of rivalling a NATO which, despite France’s best efforts, succeeded in reforming itself and expanding its tasks.” Menon (2000) p. 4

¹⁰⁴⁹ Nuttall (2000) pp. 9-10

¹⁰⁵⁰ Ibid., p. 9

¹⁰⁵¹ UK, France, Germany, Italy, Belgium, Netherlands, Luxembourg, Portugal, Spain.

¹⁰⁵² Art (1996) p. 15

Going into the Maastricht negotiations, a familiar pattern emerged. Britain was strongly committed to NATO as Europe's premier security and defence organisation.¹⁰⁵³ London, however, was not determinedly sceptical about closer European defence, as demonstrated by the Eurogroup and St. Malo initiatives. Ultimately, Britain wanted to build real military capabilities rather than pass lofty declarations with empty promises.¹⁰⁵⁴ Paris, in contrast, viewed WEU as "the crucible of a European defence rooted in the Community and the second pillar of the Atlantic Alliance".¹⁰⁵⁵ "The French retained their traditional suspicion towards NATO, the [IMS], and the institutionalized US leadership within it."¹⁰⁵⁶ France also insisted that the EU required a robust defence component. Germany was caught in the middle, torn between its strong bilateral ties with France and the long-standing commitment to NATO / the US. Despite their close relationship, Kohl and Mitterrand had major differences over how to achieve "political union". Germany favoured a supranational approach characterised by a strong Commission / Parliament, and qualified majority voting, even in CFSP matters.¹⁰⁵⁷ France staunchly defended its national sovereignty and favoured an EU driven by intergovernmental politics. The contradiction of the French position was that Paris wanted a strong CFSP, but without yielding any more authority to the supranational institutions. "France's tendency to seek leadership, to distrust integration, and to resort to Europe only when it could not achieve its ends alone [...] served to alienate its partners."¹⁰⁵⁸

Washington feared that a CFSP that was "too big, robust, and capable would marginalise the [US] and gut NATO"¹⁰⁵⁹ by draining scarce resources away from the Alliance and fostering the emergence of a "European caucus" within the organisation.^{1060 1061 1062} The CFSP discussion was,

¹⁰⁵³ However, it was Prime Minister Thatcher's idea to revive WEU, which she saw as "a forum for co-operation among European countries and a bridge to NATO". Nuttall (2000) p. 154

¹⁰⁵⁴ "The British style in the negotiations stressed 'practical' measures rather than 'rhetorical' declarations; its aims were minimalist and incremental. British negotiators characteristically wanted to discuss details and implications before they agreed to accept principles." (Menon et al., 1992) p. 104

¹⁰⁵⁵ Nuttall (2000) p. 154

¹⁰⁵⁶ (Menon et al., 1992) p. 104

¹⁰⁵⁷ "French rhetoric concerning the need for Europe sat uneasily in German eyes with continued emphasis on a military strategy that seemed to protect France alone and was even for many years based in part on the deployment of nuclear weapons [Hades missiles] targeted on German soil." Menon (2000) p. 5

¹⁰⁵⁸ Ibid., p. 5

¹⁰⁵⁹ Art (1996) p. 19

¹⁰⁶⁰ Washington was concerned that the European allies would first reach agreement among themselves at the EC / EU level, before then dealing with America *en bloc*.

¹⁰⁶¹ "[E]fforts to construct a European pillar by redefining and limiting NATO's rule, by weakening its structure, or by creating a monolithic bloc of certain members would be misguided. [...] [W]e are concerned over the proposals that the WEU should be subordinated to the European Council, thereby developing a European security component – solely within the EC – that could lead to NATO's marginalisation". Excerpts from the DoS's 20 February 1991 "Bartholomew / Dobbins telegramme" to 11 European NATO members.

¹⁰⁶² "The French tendency to equate France's international influence with its ability to stand up to the [US] increasingly irritated Washington, which came to oppose the creation of the kind of European defence structures desired by Paris on the grounds that France's hidden agenda was to drive the US out of Europe." Menon (2000) p. 5

behind the scenes, very much a Franco-US clash, as the two countries represented opposite poles in this debate.¹⁰⁶³ ¹⁰⁶⁴ Ultimately, Washington decided “that it was wiser to roll with the fall”¹⁰⁶⁵ and provided at least rhetorical backing for the idea of a “European Security Identity and Defence Role” as well as a “European pillar within the Alliance”¹⁰⁶⁶. The British, Dutch and Germans did not agree to the Maastricht text until the NATO negotiations were concluded (with a commitment to a new alliance strategy); even then, the language of the EU Treaty was highly conditional.¹⁰⁶⁷ Nonetheless, the Maastricht Treaty negotiations marked an important first step towards defining Europe’s role on security and defence matters in the post-Cold War era.

*“The impression outside observers gained in the summer of 1992 was of a shift of attitude in all major European capitals, away from the rhetoric that had characterized so many previous West European defence initiatives towards a concern to build an effective structure for defence policy co-ordination, with at least some elements of military integration.”*¹⁰⁶⁸

1069

Europe’s faltering efforts to get its security and defence act together (Yugoslav Wars) coincided with President Clinton’s 1994 call on the Alliance’s European members to assume more responsibility and “burden-sharing”.¹⁰⁷⁰ Washington wanted the allies to transform themselves from Cold-War net security consumers into post-Cold-War net security providers without threatening American / NATO primacy on the Old Continent. Fostering Europe’s military capabilities while making sure it does not turn into a strategic competitor has been a key post-Cold War challenge in US foreign and security. While there was a certain Franco-American NATO rapprochement during 1992-1995 – exemplified by enhanced military coordination between France and NATO in Bosnia, French participation in NATO defence minister meetings, etc. – President Mitterrand refused to bring France any closer to NATO.¹⁰⁷¹

¹⁰⁶³ “The [US] sought to undermine French [CFSP initiatives] even as it was formally acknowledging in NATO declarations that European defence cooperation could reinforce both European security and the Alliance. [...] The inflexibility in both US and French positions was mutually reinforcing, and led to open competition between European and transatlantic approaches to security. [...] The overall tone of the period [...] was one of intense competition between French and US security policies.” Grant (1996) p. 60

¹⁰⁶⁴ Menon (2000) pp. 39-44; 44-48

¹⁰⁶⁵ Heisbourg (1992) p. 672

¹⁰⁶⁶ NATO (1991)

¹⁰⁶⁷ The NATO and EU negotiations were in parallel. European governments could (or would) not agree with France unless / until the relevant Maastricht provisions concerning CFSP had been first reconciled within the NATO framework (and thus with Washington).

¹⁰⁶⁸ (Menon et al., 1992) p. 117

¹⁰⁶⁹ In 1992, the WEU adopted its “Petersberg tasks”: “humanitarian and rescue tasks”, “peacekeeping tasks” as well as “tasks of combat forces in crisis management, including peacemaking”. WEU (1992)

¹⁰⁷⁰ Heisbourg referred to the transatlantic burden-sharing debate as “the old chestnut of Cold War days”. Heisbourg (1992) p. 677

¹⁰⁷¹ Menon (2000) p. 48

The 1995 election of President Chirac provided fresh impetus for France's "creeping reintegration"¹⁰⁷² into the Alliance, especially as French leaders recognised their own military limits and the fact that they could only build a stronger Europe within, but not against NATO / Washington.^{1073 1074 1075} "In both political and military terms, France's ability to play a significant unilateral international role decreased markedly."¹⁰⁷⁶ Chirac signalled France's willingness to rejoin NATO's integrated military structure under certain conditions and was thus ready to break "the last taboos of Gaullism"¹⁰⁷⁷. Paris specifically pushed for the "Europeanisation" of NATO commands and demanded that Alliance assets be available for EU-led military operations. The 1996 NATO Berlin Summit translated the Alliance's previous ESDI commitments into concrete actions:¹⁰⁷⁸ European allies, operating through WEU, were given the possibility to use NATO assets (command & control systems, intelligence and reconnaissance information, AWACS, etc.)¹⁰⁷⁹ for WEU-led operations where the US, Canada, Turkey, etc. were not involved. The Clinton administration hailed this decision as a "major foreign policy shift"¹⁰⁸⁰ since it allowed for the establishment of WEU military capabilities which were "separable but not separate"¹⁰⁸¹ from those of NATO.¹⁰⁸² Furthermore, Washington agreed to the appointment of a European Deputy SACEUR to lead future (WEU-led) CJTF¹⁰⁸³ operations. However, decisions about the potential use of Alliance "assets and capabilities" in WEU-led operations would be made on a case-by-case basis, each time requiring a consensus vote in the NAC (North Atlantic Council).¹⁰⁸⁴ As a result, Washington or Ankara enjoyed effective veto powers over core European security and defence matters. In recent years, the Turkish government – angered by the EU accession of Cyprus (a country not recognised by Ankara) and the slow progress and uncertain outcome of its own EU membership talks – has used its seat on the NAC to block closer NATO-EU cooperation. This

¹⁰⁷² (Ghez & Larrabee, 2009) p. 78

¹⁰⁷³ "Europe's failure to do more than contain the conflict in former Yugoslavia; the extreme difficulties in obtaining ratification of the Maastricht Treaty in France as well as in a number of other European countries; and the sharp decline in military spending and manpower in virtually all NATO countries combined to frustrate French hopes that there would be relatively rapid, significant progress on ESDI." Ibid., p. 63

¹⁰⁷⁴ "While during the initial post-Cold War period France saw NATO as, at best, irrelevant to the development of ESDI and, at worst, as a major obstacle to it, the French view shifted towards recognising NATO as a necessary instrument in the building of ESDI." Ibid., p. 63

¹⁰⁷⁵ Menon (2000) pp. 49-55

¹⁰⁷⁶ Ibid., p. 3

¹⁰⁷⁷ Cole (2000) p. 118

¹⁰⁷⁸ Ibid., p. 117

¹⁰⁷⁹ NATO has only few truly collective assets as most of its military capabilities are composed of national forces earmarked to the Alliance.

¹⁰⁸⁰ Gardner (1996) p. 31

¹⁰⁸¹ "What this means is that there would be two chains of political decision-making (a NATO chain and a European chain), but only one set of military assets that each would utilise, not two political chains and two sets of military assets." Art (1996) p. 31

¹⁰⁸² For an analysis of the CJTF concept, see Cragg (1996) pp. 7-10.

¹⁰⁸³ CJTF = Combined Joint Task Force

Turkish veto concerns not only the use of NATO assets through CJTFs in EU-led operations but also the sharing of classified information between the two institutions.¹⁰⁸⁵

For Paris, the Berlin Summit was just the beginning, and not the end, of its attempt to negotiate a full return to NATO. Specifically, Chirac argued that a European should take over the AFSOUTH¹⁰⁸⁶ command with responsibility for the important Mediterranean / Middle East regions.¹⁰⁸⁷ The issue came to a head in August 1996, when Clinton told Chirac that Washington would not give AFSOUTH to the Europeans. While Chirac responded in October with a handwritten note in English underlining the “capital importance of the southern command for France”, it soon became clear that Washington would not budge. Relations between Paris and Washington soured noticeably in late 1996 / early 1997, despite German attempts to mediate. In the campaign running up to the May 1997 elections that defeated conservative Prime Minister Juppé (a close Chirac ally), the Socialists decried the controversial NATO negotiations as a sell-out of France’s core national interests to America. The acrimonious French debate over NATO reform put the “decades-long tug-of-war between Gaullist pride and Cartesian logic”¹⁰⁸⁸ on full display. In July 1997, President Chirac and newly elected Socialist Prime Minister Jospin declared that the circumstances were not right for France’s full return to NATO. Chirac had clearly overbid his hand by demanding Naples. US forces were by far the strongest AFSOUTH component and Washington was not prepared to put these important military assets under French command.¹⁰⁸⁹ At NATO’s July 8-9 Madrid Summit, Washington rejected another French demand, namely that Romania and

¹⁰⁸⁴ Malcolm Rifkind, UK Foreign Secretary during 1995-1997, commented that the CJTF concept provided for Europe “as much autonomy as that enjoyed by an adolescent borrowing the family car to go out on Saturday night”. Menon (2000) p. 136

¹⁰⁸⁵ Michel (April 2007) p. 1. Paris, too, has been working behind the scenes to prevent closer EU-NATO collaboration, information sharing, etc. France’s primary motivation seems to be the fear that the US-dominated NATO could hijack CFSP, thus putting the Europeans in a position of inferiority and dependency vis-à-vis Washington.

¹⁰⁸⁶ AFSOUTH = Allied Forces Southern Europe

¹⁰⁸⁷ “The French [...] had reasons to complain about imbalances in the distribution of military commands. This was reflected in the situation in the Mediterranean prior to the withdrawal of the French fleet in 1959. [Allied Forces Mediterranean] was under the command of a British officer, under whom were placed all national fleets in the Mediterranean except the American Sixth Fleet. Of the six subordinate sectors, France had command of only the western Mediterranean sector. This remained the case even after, at the end of the 1950s, the British naval presence was sharply reduced, leaving the French Mediterranean fleet as the largest allied naval presence after the American Sixth Fleet.” Menon (2000) p. 30

¹⁰⁸⁸ Michel (April 2007) p. 1

¹⁰⁸⁹ “Chirac came very close to achieving France’s full reintegration into the Alliance in 1996-1997. Indeed, had he been a bit more modest in formulating his conditions for France’s return, his efforts might well have succeeded. However, Chirac’s price for agreeing to full reintegration was regarded by the Clinton administration as too high and the deal ultimately collapsed.” (Ghez & Larrabee, 2009) p. 78

Bulgaria be part of NATO's first round of enlargement.¹⁰⁹⁰ As Ron Asmus concludes, the failure to bring France back into NATO caused Chirac to "[retreat] back into Gaullist anti-Americanism".¹⁰⁹¹

In June 1997, EU members had finalised the Amsterdam Treaty, which incorporated the WEU's "Petersberg tasks" and created the post of "High Representative for Common Foreign and Security Policy".¹⁰⁹² The Treaty also declared that "The progressive framing of a common defence policy will be supported, as [m]ember [s]tates consider appropriate, by co-operation between them in the field of armaments."¹⁰⁹³ By 1997, however, it had become clear that years of negotiations, summits, and lofty NATO / EU declarations had done little to achieve what the French commonly refer to as "*l'Europe politique*" – an EU that can muster the political will and military resources necessary to defend its foreign policy and security interests in the world. The major transatlantic compromises of the "Eurodefence debate" about Europe's post-Cold War security architecture favoured a prominent role for America / NATO and seemed to marginalise the EU's nascent CFSP: "Paris found itself faced to face with a NATO that had taken over European security and now carried out all manner of military and politico-military tasks, without having reformed itself in a manner that satisfied Paris."¹⁰⁹⁴

¹⁰⁹⁰ Washington was only willing to admit Poland, Hungary, and the Czech Republic. However, given the limited transformation of Romanian and Bulgarian armed forces, intelligence services, and political elites from the pre-1989 era, most other European NATO members did not support France's position either.

¹⁰⁹¹ Asmus (2007)

¹⁰⁹² In September 1999, Javier Solana became the first "High Representative" and was also appointed WEU Secretary-General in anticipation of a WEU-EU merger.

¹⁰⁹³ Art. J.7.1 of the Amsterdam Treaty

¹⁰⁹⁴ Menon (2000) p. 60

6.2 *The ESDP breakthrough: from St. Malo to Helsinki and beyond*

“Put into perspective, the development of a common EU security and defence policy between December 1998 and December 2000 was almost revolutionary compared with the slow progress made during the preceding half century, at least in terms of political commitments and policy guidelines.”¹⁰⁹⁵

The origins of this revolution can be traced back to the autumn of 1998, when Britain’s new Labour Prime Minister Tony Blair made a historic political U-turn and began pushing for a stronger EU security and defence role. Blair first used an EU gathering in Austria¹⁰⁹⁶ in late October and a policy address in Edinburgh in early November to road-test his ideas. In a clear departure from the UK’s traditional Atlanticist outlook, the prime minister expressed disappointment about the EU’s limited ability to undertake autonomous military action and called on his EU counterparts to undertake the necessary changes in terms of institutional reforms and resource allocations to make the EU a more equal partner of the US within NATO.¹⁰⁹⁷ The big breakthrough happened at the British-French Summit at St. Malo on 4 December 1998, which “effectively launched ESDP”¹⁰⁹⁸. In their landmark “Joint Declaration on European Defence”, Blair and Chirac agreed that “the [EU] needs to be in a position to play its full role on the international stage” and that “it will be important to achieve full and rapid implementation” of Amsterdam provisions on CFSP”.^{1099 1100}

“To this end, the Union must have the capacity for autonomous action, backed up by credible military forces, the means to decide to use them, and a readiness to do so, in order to respond to international crises. [...]

In order for the [EU] to take decisions and approve military action where the Alliance as a whole is not engaged, the Union must be given appropriate structures and a capacity for analysis of situations, sources of intelligence, and a capability for relevant strategic planning, without unnecessary duplication, taking account of the existing assets of the WEU and the evolution of its relations with the EU. In this regard, the [EU] will also need to have recourse to suitable military means (European capabilities pre-designated within NATO’s European pillar or national or multinational European means outside the NATO framework). [...]

¹⁰⁹⁵ Rutten (2001) p. ix.

¹⁰⁹⁶ Rutten (2001) pp. 1-3

¹⁰⁹⁷ Ibid., p. 14

¹⁰⁹⁸ Michel (November 2007)

¹⁰⁹⁹ (Blair & Chirac, 1998)

¹¹⁰⁰ “The biggest single stumbling block to both a [...] CFSP and an ESDP has been the inability of France and Britain to agree on fundamentals.” Howorth (2000) p. 33

Europe needs strengthened armed forces that can react rapidly to the new risks, and which are supported by a strong and competitive European defence industry and technology."¹¹⁰¹
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Blair wanted to show the UK's commitment in an area where it had much to contribute¹¹⁰³ as well as to challenge other EU governments to improve defence spending and force modernisation. Underlying this approach was "the British government's conviction that the US will no longer underwrite European security in the same way as during the Cold War" and that "enhanced European military capability is [...] the most effective means of silencing the voices of isolationism or, more importantly, the advocates of 'burden sharing' on Capitol Hill"¹¹⁰⁴.¹¹⁰⁵ Chirac, who recognised that building ESDP against NATO was not feasible¹¹⁰⁶, had two St. Malo objectives. First, he tried to regain the initiative on defence issues following his failed AFSOUTH gambit; second, Chirac wanted to challenge Germany to restructure its forces and equipment programmes on the French model (which was inspired by Britain's 1998 SDR)¹¹⁰⁷ ¹¹⁰⁸: reduce forces geared to territorial defence, prioritise expeditionary units; abolish conscription; improve military lift capabilities, increase defence equipment spending, particularly on satellites, airborne surveillance, "smart weapons", etc.¹¹⁰⁹ Sadly, St. Malo failed to shift the German position very much. The rapprochement between France and Britain – two countries that have been described as "mirror images"¹¹¹⁰ ¹¹¹¹ in their approach to foreign and security policy – was brought about through

¹¹⁰¹ (Blair & Chirac, 1998)

¹¹⁰² Blair's 1997 election platform accused the Tory government of having neglected the British defence industrial base, with corresponding adverse effects on national security and the country's high-technology sector. Blair also vowed to develop a new UK defence industrial strategy. McInnes (1998) p. 828

¹¹⁰³ Blair's St. Malo / ESDP initiative was "a major expression of political will in an area where firm policy initiatives and robust executive actions are less dependent on building a constituency of public support than may be the case in other areas of policy [monetary union, etc.]" Howorth (2000) p. 34

¹¹⁰⁴ Ibid., p. 35

¹¹⁰⁵ "For the UK, the starting-point is of the best means of maintaining [NATO], and the solution has been identified as the creation of [ESDP]." Ibid., p. 36

¹¹⁰⁶ "For France, ESDP is first and foremost a European project, which nevertheless assumes readiness, when necessary, to make use of an Atlanticist instrument, NATO." Ibid., p. 36

¹¹⁰⁷ UK MoD (1998)

¹¹⁰⁸ "Britain's [SDR] is a good model for rethinking priorities and redesigning forces that are more sustainable, mobile, deployable, and flexible." (Schake, Bloch-Lainé, & Grant, 1999) p. 26

¹¹⁰⁹ Ibid. pp. 25-27

¹¹¹⁰ "French diplomacy and security policy-making is known for its awareness of strategic vision; a clear understanding driven from the very top of what it wants to achieve in a medium- to long-term time frame, based around a shared sense of its own identity and purpose, imbued with confidence in the national role France should play. [...] This can make it long on political rhetoric and short on practical implementation. British policy-making, by contrast, is known instead for its short-term practicality. A concern to get the details right, a natural suspicion of strategic visions; based on a pervading uncertainty that goes back at least to the 1930s about the role Britain should play in the world, and now in Europe." Clarke (2000) p. 729

¹¹¹¹ "Issues such as state versus market / civil society; territorial defence versus force projection; conscription versus professionalism; deepening versus enlargement; institutional priorities versus capabilities; strategy versus tactics; political will versus pragmatism; and, above all, Europeanism versus Atlanticism (in which France has traditionally epitomised the former and Britain the latter) still complicate the finer details of Franco-British cooperation." Howorth (2000) p. 35

effective cooperation in Bosnia, after initial hesitation.¹¹¹² The UK and France alone accounted for 50 percent of Europe's defence procurement expenditures and had the largest forces deployable outside Europe.^{1113 1114}

St. Malo took the Clinton administration by surprise and raised concerns that London could be led off its pro-transatlantic track by France's neo-Gaullist agenda.¹¹¹⁵ Like Chancellor Kohl before, Blair tried to reassure Washington that his *liaison* with the French would reinforce NATO by improving Europe's military burden-sharing with America. While US policymakers initially seemed to give Blair the benefit of the doubt, Secretary Albright published an op-ed three days after St. Malo to express Washington's ESDP concerns through the famous "Three Ds"¹¹¹⁶: no decoupling, no duplication, no discrimination. First, ESDP should not undermine NATO by delinking America from its European allies. Second, ESDP should not duplicate the Alliance's efforts as "defence resources are too scarce for allies to conduct force planning, operate command structures, and make procurement decisions twice – once at NATO and once more at the EU".¹¹¹⁷ The St. Malo declaration ran counter to that as it only referenced avoiding "unnecessary" duplication. Third, ESDP should not discriminate against non-EU NATO members.

NATO's 1999 "Operation Allied Force" against Serbia revealed sharp quantitative and qualitative disparities in American and European military capabilities, especially in areas like secure communications, reconnaissance, precision-guided ammunitions, and all-weather aircraft^{1118 1119}

¹¹¹² "The reasons why the UK, in 1998, crossed the Rubicon are entirely compatible with realism – as indeed is the explanation for France's 1995 *rapprochement* with NATO. Both France and Britain came to the conclusion that cooperation with each country's former *bête noire* (NATO and European defence) was, henceforth, in their own national interests." *Ibid.*, p. 34

¹¹¹³ In 1999, the UK and France accounted for 24.6 percent (US\$33.3 billion) and 21.0 percent (US\$28.4 billion), respectively, of the total defence expenditures (US\$135.2 billion) by the "old" European NATO allies. Germany's share was 17.6 percent (US\$23.8 billion). The Pentagon budget that same year amounted to US\$252.4 billion (64.0 percent of all defence spending by all "old" NATO members). In terms of defence R&D, the UK and France accounted for 43.7 percent (US\$3.9 billion) and 35.2 percent (US\$3.1 billion), respectively, of all such spending by the "old" European Alliance members in 1999. Germany spent US\$1.3 billion (14.1 percent). That same year, US defence R&D spending was US\$35.3 billion (79.9 percent NATO share). Finally, in terms of military procurement, the UK and France accounted for US\$8.3 billion (30.4 percent) and US\$5.2 billion (19.3 percent), respectively, of all such spending by the "old" European NATO members. Germany spent US\$3.7 billion (13.7 percent). The US spent US\$47.1 billion on defence procurement that year (62.4 percent NATO share). All figures (in constant 1997 US\$) calculated by author based on IISS (1999), Table 8, p. 37.

¹¹¹⁴ "Since the end of the Cold War, the UK has provided the largest and most effective non-American contingent in three US-led extra-European conflicts: the first Gulf War in 1991; the intervention in Afghanistan since 2001; and the second Gulf war of 2003 and the subsequent occupation of Iraq." (Wallace & Phillips, 2009) p. 267

¹¹¹⁵ Sloan (2000) pp. 15-16

¹¹¹⁶ Albright (1998) p. 22

¹¹¹⁷ *Ibid.*, p. 22

¹¹¹⁸ IISS (1999), pp. 30-31

¹¹¹⁹ In response to the NATO imbalances exposed in Kosovo, Alliance leaders seized on the occasion of NATO's 50th anniversary summit in Washington in April 1999 to launch the "Defence Capabilities Initiative" (DCI), which focused

While the Americans dominated the aerial bombing campaign, it was French and UK forces that took the lead in deploying to Kosovo after Serbia had backed down, thus overcoming President Clinton's long-time reluctance to commit US ground troops.^{1120 1121} The Summit Communiqué and the new Strategic Concept¹¹²² adopted by NATO leaders in Washington affirmed, for the first time ever, Europe's need "to have the capacity for autonomous action so that it can take decisions and approve military action where the Alliance as a whole is not engaged".¹¹²³ NATO also emphasised the need to make this strengthened European role compatible with the "Three Ds" earlier outlined by Secretary Albright. While Washington was happy with NATO's handling of St. Malo, the initiative's implementation at the EU-level became increasingly a source of concern.

*"[...] American disappointment at Europe's unwillingness to accept US leadership unconditionally has fluctuated between despair over European political incoherence and fear that the European allies might agree on a framework for integration different from what Washington had prescribed."*¹¹²⁴

At the EU's 1999 Cologne Summit – which coincided with the final phase of the Kosovo War and was hosted by Germany's new Red-Green government – European leaders declared that the EU requires "a capacity for autonomous action backed by credible military forces" and that "the EU will need a capacity for analysis of situations, sources of intelligence, and a capacity for relevant strategic planning".¹¹²⁵ Furthermore, the leaders agreed "to further develop more effective European military capabilities from the basis of existing national, bi-national, and multinational capabilities and to strengthen our own capabilities for that purpose".¹¹²⁶

"We also recognise the need to undertake sustained efforts to strengthen the industrial and technological defence base, which we want to be competitive and dynamic. We are determined to foster the restructuring of the European defence industries amongst those States involved. With industry we will therefore work towards closer and more efficient defence industry collaboration. We will seek further progress in the harmonisation of

on mobility and deployability, sustainability, effective engagement, survivability, and interoperable communications. Robertson (2001) pp. 50-51

¹¹²⁰ "NATO [...] experienced tensions due to the fact that the US supplied about 85 percent of the effective power in the bombing campaign, a figure which demands reflection about European readiness for independent security policies. Only with the entry of KFOR (Kosovo Force) into Kosovo in June was the imbalance in military burden-sharing visibly redressed." Roberts (1999) p. 119

¹¹²¹ US troops constituted 15 percent of KFOR and were primarily deployed in the relatively safe Eastern part of Kosovo.

¹¹²² NATO (1999)

¹¹²³ Ibid.

¹¹²⁴ (Wallace & Zielonka, 1998) pp. 65-66

¹¹²⁵ European Council (June 1999)

¹¹²⁶ Ibid.

military requirements and the planning and procurement of arms, as Member States consider appropriate.^{1127 1128}

This reference to defence industry restructuring was certainly the result of French lobbying. Prior to Cologne, France and Germany held two bilateral meetings and vowed to strengthen Europe's defence industrial base:

*“A l’heure de la globalisation, nous favoriserons les projets industriels ou technologiques communs dans la perspective de pôles européens, notamment dans le domaine des industries aéronautiques et de défense, de l’intégration des marchés financiers et du développement de la société de l’information.”*¹¹²⁹

*“A Toulouse, la ville qui symbolise la coopération franco-allemande dans le domaine aéronautique, nous affirmons que la construction d’une Europe de la sécurité et de la défense exige le développement d’une base industrielle et technologique forte, dynamique et performante. La restructuration des industries d’armement et le renforcement de notre coopération en ce domaine contribueront à la réalisation de cet objectif.”*¹¹³⁰

Washington followed the EU's post-St. Malo steps with growing unease. “[F]ollowing St. Malo [...] and [...] Cologne, it appeared that something different was being created – something that might not in the long run serve Alliance interests.”^{1131 1132} In October 1999, Deputy Secretary of State Talbott expressed concerns that the EU had strayed from ESDI's CJTF and “European pillar” concept in an effort to achieve more political-military [ESDP] autonomy from the Alliance in defence matters than was either necessary or conducive to stronger transatlantic relations.¹¹³³ Talbott also discussed the “vexatious issue of defence industry collaboration” and promised to “explore new ways to promote technology-sharing, streamline licensing production, and encourage appropriate joint ventures.”¹¹³⁴ However, he emphasised that Washington would “[guard] against

¹¹²⁷ Ibid.

¹¹²⁸ “If this [Cologne Declaration] is to become a reality, increases in defence spending, or at least a radical reallocation of resources, along with genuine collaboration in defence procurement, are necessary.” IISS (1999) p. 290

¹¹²⁹ Final Declaration of the Franco-German Summit in Potsdam on 1 December 1998. Rutten (2001) p. 4

¹¹³⁰ Declaration of the Franco-German Defence and Security Council in Toulouse on 29 May 1999. Ibid., p. 40

¹¹³¹ Sloan (2000) p. 24

¹¹³² “Alliance interests” should be interpreted as code for “US interests”. American officials tend to elide Alliance and American interests, just as French officials elided French and European interests.

¹¹³³ “We do not want to see an ESDI that comes into being first within NATO but then grows out of NATO and finally grows away from NATO, since that would lead to an ESDI that initially duplicates NATO but that could eventually compete with NATO.” [...] [T]he EU leaders’ declaration at Cologne in June [...] could be read to imply that Europe’s default position would be to act outside the Alliance whenever possible, rather than through the Alliance.” Talbott (1999)

¹¹³⁴ Ibid.

illicit and dangerous transfers of sensitive know-how and equipment”.¹¹³⁵ To this day, national security concerns are being used by Washington as powerful arguments against closer transatlantic defence industrial cooperation.

In November 1999, two weeks after the EADS agreement, French foreign minister Védrine famously stated that “We cannot accept a world that is politically unipolar or culturally uniform. Nor can we accept the unilateralism of the single hyperpower. This is why we are fighting for a multipolar, diversified, and multilateral world.”¹¹³⁶ The British-Franco Summit in London later that month made the strengthening of Europe’s collective military capabilities a top priority. Foreshadowing decisions subsequently confirmed at the EU Summit in Helsinki on 10-11 December 1999, London and Paris called on the EU to be able to deploy up to 50,000-60,000 soldiers and relevant air / naval combat forces for “the most demanding crisis management operations”¹¹³⁷ within 60 days and sustain them in operations for at least one year. They also affirmed that the strengthening of Europe’s military capabilities will “need the support of a strong and competitive European defence industry”.¹¹³⁸

“We want European strategic airlift capabilities to be strengthened substantially. [...]. We note the common European need for new transport aircraft.” [...]

“The restructuring of the European [A&D] industry is a major step which will help improve competition in the global market. We welcome this recent consolidation and restructuring of European defence companies [...]. The strengthening of our armaments will foster the development of European technological capabilities and will allow transatlantic cooperation to develop in a spirit of balanced partnership. We look forward to early progress toward the establishment of Airbus as a single commercial business and a fully united management.”¹¹³⁹

The Franco-German Summit a few days later hailed EADS as “a major step forward” in making “substantial progress” on ESDP.¹¹⁴⁰

“Conscients de l’importance d’une base industrielle technologique forte et compétitive, nos deux pays se félicitent vivement de l’avancée majeure que constitue le rapprochement de

¹¹³⁵ Ibid., p. 57

¹¹³⁶ Védrine (1999)

¹¹³⁷ (Blair & Chirac, 1999)

¹¹³⁸ Ibid.

¹¹³⁹ Ibid.

¹¹⁴⁰ (Chirac & Schroeder, 1999)

nos industries d'armement au sein de la nouvelle EADS. La fusion [AM] / DASA facilitera notre coopération autour de programmes communs."¹¹⁴¹

With the lessons of Kosovo fresh on their minds^{1142 1143}, EU leaders gathered in Helsinki in December 1999 to make the creation of a 60,000-strong ERRF¹¹⁴⁴ that can be deployed within 60 days and be sustained for one year for EU-led operations across "the full range of Petersberg tasks" their joint – albeit voluntary – Headline Goal to be accomplished by 2003.¹¹⁴⁵ While EU leaders agreed "to develop an autonomous capacity" to decide and conduct their own crisis management operations independent of the US-led alliance if necessary, they also affirmed that (1) "NATO remains the foundation of the collective defence of its members"¹¹⁴⁶, that (2) the realisation of the Headline Goal would avoid "unnecessary duplication" of NATO assets, and that (3) it did "not imply the creation of a European army".¹¹⁴⁷ The Helsinki Summit also established three new political-military bodies to give the EU the necessary institutional capacity to conduct crisis management operations.¹¹⁴⁸

"Decades of failure to make progress on common defence, coupled with declining defence expenditures, do indeed provide cause for scepticism as to whether the EU will finally back up its rhetoric with action."[...]

*"The central issue at hand is capability. As long as Europe delivers on capability, the necessary institutional changes [within NATO] will be forthcoming."*¹¹⁴⁹

Ultimately, ESDP's success hinged on capabilities. If the EU members were not able to match their ambitious rhetoric with smarter, more efficient defence procurement and a fundamental restructuring of their militaries, it would be impossible to achieve the Headline Goal.

¹¹⁴¹ Ibid.

¹¹⁴² „Whatever the arguments surrounding the decision to use force in Kosovo, and its consequences, what mattered for both analysts of European security capabilities and institutions, and for European leaders was the widespread sense of disappointment, frustration and even failure over the scale of the effort mounted by European forces compared to that of the [US]. [...] Once again, as earlier in the 1990s, Europeans appeared weak and incapable when responding to a security challenge in their own 'backyard' – the Balkans." (Cornish & Edwards, 2001) p. 588

¹¹⁴³ "In the aftermath of the Kosovo War, Europe is forging ahead on the defence front with an unprecedented seriousness of purpose and collective will." Kupchan (2000) p. 16

¹¹⁴⁴ Given the rotational schedules of expeditionary forces, the 60,000-strong ERRF will require a total of 180,000 soldiers to sustain an operation for at least a year: 1/3 of the force is deployed in the field; 1/3 is recovering; 1/3 is in training.

¹¹⁴⁵ European Council (December 1999)

¹¹⁴⁶ Ibid.

¹¹⁴⁷ Ibid.

¹¹⁴⁸ (1) Political and Security Committee (PSC); (2) Military Committee (MC); (3) Military Staff (MS). The EU also agreed that (1) "modalities will be developed for consultation, cooperation, and transparency between the EU and NATO [...]"; and (2) appropriate arrangements will be defined that would allow, while respecting the Union's decision-making autonomy, non-European NATO members and other interested states to contribute to EU military crisis management"; Ibid.

¹¹⁴⁹ Kupchan (2000) pp. 26; 28

*“This is not fundamentally a problem of gross resources – European allies spend two-thirds to three-quarters as much on defence as the [US] and have nearly half-again as many troops under arms. The central task is more efficient, more focused, better-planned and coordinated use of such resources.”*¹¹⁵⁰

*“[W]hatever the level of defence spending, moreover, the fielding of advanced European military systems is delayed by the inability or unwillingness of European governments to cooperate among themselves more closely on R&D, including the definition of R&D priorities, the consolidation of laboratories and testing facilities across national boundaries, and the integration of national development and purchasing offices. [...] The transatlantic gap is not at the level of basic technologies; rather it is at the level of integrating these technologies into suitable defence applications.”*¹¹⁵¹

In the 1990s / 2000s, European countries launched several initiatives outside and inside the EU framework to address key obstacles to the creation of stronger European military capabilities: “Europe’s armament sector has remained fragmented into national markets, with costly duplication in all armaments-related areas (procurement bureaucracies, research activities, industrial capacities and defence programmes).”¹¹⁵² The 1992 WEAG (Western European Armaments Group)¹¹⁵³ and the 1996 WEAO (Western European Armaments Organisation) shared the same overall objectives: “more efficient use of resources, in particular through better harmonisation of requirements, opening up of national defence markets to cross-border competition; strengthening of the European defence technological and industrial base; and cooperation in [R&D].”¹¹⁵⁴ Ultimately, however, these WEU-affiliated institutions “suffered from a lack of both interest and political support from national authorities”¹¹⁵⁵ and were closed down. European armaments cooperation was also hampered by continuing differences over the “juste retour” principle. In November 1996, France, Germany, Britain, and Italy established OCCAR¹¹⁵⁶ in an effort “to provide more effective and efficient arrangements for the management of existing and future collaborative [European] armament programmes”. OCCAR tried to develop “a more flexible calculation of industrial ‘juste retour’, replacing the strict application of ‘cost-share equals work-share’ on a project-by-project basis by a multi-year / multi-programme balance”¹¹⁵⁷: “global juste retour”. However, given the significant delays and cost overruns of the A400M – which is seen as OCCAR’s key test – and the

¹¹⁵⁰ Kramer (2000) p. 5

¹¹⁵¹ CSIS (2003) pp. IX-X

¹¹⁵² Schmitt (August 2003) p. 10

¹¹⁵³ WEAG was created in 1992, when IEPG’s activities were transferred to WEU.

¹¹⁵⁴ Schmitt (August 2003) p. 20

¹¹⁵⁵ Ibid., p. 22

¹¹⁵⁶ OCCAR = Organisation Conjointe de Coopération en matière d’Armement

¹¹⁵⁷ Schmitt (August 2003) p. 24

fact that the Organisation's other armaments programmes are rather limited in scope, OCCAR has established at best a mixed track record so far.

European NATO defence spending (as a percentage of GDP) continued to decline after Helsinki. That benchmark reached 2.09 percent in 1999; 2.02 percent in 2000; 1.97 percent in 2001; and 1.93 percent in 2002.¹¹⁵⁸ “The weakness of Europe's economies, together with the constraints imposed by the EU Stability and Growth Pact and the absence of any increase in the public's threat perception, suggest that the current constraints on European NATO defence budgets will persist.”¹¹⁵⁹ The UK did restructure its armed forces and augmented the defence budget to implement the 1998 SDR. Military expenditures reached GBP23.5 billion in 2001, and increased to GBP24.2 billion and GBP25.6 billion in 2002 and 2003, respectively.¹¹⁶⁰ France, too, boosted its defence spending – especially on procurement and R&D – following the election of a conservative government in 2002. The MoD budget reached EUR28.4 billion in 2001, before increasing to EUR28.9 billion, EUR31.3 billion, and EUR32.4 billion in 2002, 2003, and 2004 respectively. Defence procurement reached EUR12.5 billion¹¹⁶¹ and EUR13.6 billion in 2002 and 2003, respectively.¹¹⁶² That figure increased 9.5 percent to reach EUR14.9 billion in 2004, which was partly used to buy new Rafales and “to restock the military with spare parts so that fighter, helicopter, transport, and tanker fleets can return to full strength”¹¹⁶³. Germany, in contrast, cut its defence budget from EUR23.9 billion in 2001 to EUR23.6 billion in 2002, before spending EUR24.4 billion and EUR24.1 billion in 2003 and 2004, respectively.¹¹⁶⁴ Germany's low equipment expenditures increased from EUR3.5 billion in 2002 to EUR3.88 billion and EUR3.99 billion in 2003 and 2004, respectively. However, the Bundeswehr was forced to slash key acquisition programmes to cut costs “as the 2008 procurement bow head approach[ed]”¹¹⁶⁵. Ultimately, the EU did not match its ambitions with the necessary defence spending to address the Headline Goal's capability shortfalls.

¹¹⁵⁸ IISS (2003) p. 245

¹¹⁵⁹ Ibid., p. 242

¹¹⁶⁰ Ibid., p. 250

¹¹⁶¹ IISS (2002) p. 248

¹¹⁶² IISS (2004) p. 272

¹¹⁶³ IISS (2003) p. 243

¹¹⁶⁴ In 2004, Germany spent 51.2 percent of its defence budget on personnel expenditures. That figure is even higher if one also takes into account military pensions, which are paid from a different budget. IISS (2004) p. 273. In contrast, Germany spent very little on military equipment, which made it a weak partner for France in weapons system development (A400M, etc.).

¹¹⁶⁵ IISS (2003) p. 243

In July 2004, the European Defence Agency (EDA) was established to better coordinate Europe's defence activities and to achieve greater efficiencies in procurement programmes.^{1166 1167} As part of ESDP, EDA¹¹⁶⁸ embraced the identification and redressing of Headline Goal shortfalls in the EU's military and defence capabilities as its "fundamental agenda"¹¹⁶⁹. EDA also "[promotes] European cooperation on defence equipment, both to contribute to defence capabilities and as a catalyst for further restructuring the European defence industry"¹¹⁷⁰. In November 2005, the 26 EDA defence ministers agreed to a voluntary, non-binding Code of Conduct (CoC) for defence procurement contracts valued at least EUR1 million beginning in July 2006.^{1171 1172 1173} While EDA specifically conceived the CoC to encourage competition in the areas previously exempt from the Common Market under Art. 296 TEU¹¹⁷⁴, the fact that the CoC has no formal enforcement powers constitutes a major structural weakness.¹¹⁷⁵

With about 80 permanent staff and a first-year budget of EUR20 million, EDA was initially greeted with disappointment by Europe's defence industry, which had hoped for a much more ambitious

¹¹⁶⁶ "The [EDA], which should be subject to the Council's authority and open to participation by all Member States, will aim at developing defence capabilities in the field of crisis management, promoting and enhancing European armaments cooperation, strengthening the European defence industrial and technological base (EDITB) and creating a competitive European defence equipment market, as well as promoting, in liaison with the Community's research activities where appropriate, research aimed at leadership in strategic technologies for future defence and security capabilities, thereby strengthening Europe's industrial potential in this domain." European Council (2004)

¹¹⁶⁷ In June 2003, the European Council requested "the appropriate bodies of the Council to undertake the necessary actions towards creating, in the course of 2004, an intergovernmental agency in the field of defence capabilities development, research, acquisition, and armaments". European Council (2003)

¹¹⁶⁸ Prior to the Lisbon Treaty, "[EU High Representative] Solana [chaired] the Steering Board, the principal decision-making body of the Agency, made up of Defence Ministers from 26 participating Member States (all EU members except Denmark) and a member of the European Commission. In addition to ministerial meetings at least twice a year, the Steering Board also meets at the level of national armaments directors, national research directors, national capability planners and policy directors." Baroness Ashton, the new EU High Representative for Foreign Affairs and Security Policy, succeeded Javier Solana as EDA Steering Board chair in December 2009. See EDA's organisational chart: <http://www.eda.europa.eu/genericitem.aspx?area=Organisation&id=119>

¹¹⁶⁹ IISS (2005) pp. 46-47

¹¹⁷⁰ EDA background description: <http://www.eda.europa.eu/genericitem.aspx?area=Background&id=122>

¹¹⁷¹ EDA (2005) and EDA Code of Conduct (2005)

¹¹⁷² The CoC is based on five principles: (1) a voluntary, non-binding approach; (2) fair and equal treatment of suppliers (a competition process based on objective and transparent selection criteria; specifications and statements of requirements, preferably defined in terms of function and performance; clear and transparent award criteria; and debriefings for all unsuccessful bidders); (3) mutual transparency and accountability; (4) mutual support; (5) mutual benefit. EDA has created a website to post to post defence procurement opportunities with a net contract value of at least EUR1 million (excluding VAT): <http://www.eda.europa.eu/ebbweb/Default.aspx>

¹¹⁷³ The CoC exempts "procurement of research and technology; collaborative procurements; and procurements of nuclear weapons and nuclear propulsion systems, chemical, bacteriological and radiological goods and services, and cryptographic equipment" from its purview.

¹¹⁷⁴ TEU = Treaty on European Union

¹¹⁷⁵ The first key principle of the CoC, enshrining the regime's "voluntary, non-binding approach", is defined as follows: "No legal commitment is involved or implied. The regime will operate on the basis of sovereign Member States [sMS] voluntarily choosing to align their policies and practices, on a reciprocal basis, in this area. Those who elect to join the regime, and follow this Code, will be free to cancel their participation in the regime at any time. No sanction is envisaged for any non-observance of this Code by any sMS, beyond the requirement to account to the other members of the regime. In all cases, the final authority for contract award remains with sMS national authorities."

EU undertaking.¹¹⁷⁶ However, EDA's first CEO, Nick Witney, strongly defended the agency, emphasising that Javier Solana is a "strong advocate of this enterprise" and that EDA's regular Steering Board meetings allow for "a lot of contact with the highest decision-making levels".¹¹⁷⁷ Witney described OCCAR as EDA's "complementary sister organisation"¹¹⁷⁸ that operates in a different market section:

*"My vision of the future is that we keep OCCAR's project management pipeline full with projects we have had a hand in generating. It is perfectly possible [that OCCAR will become part of EDA], but I don't think it is going to happen in the three years I will be here."*¹¹⁷⁹

Witney conceded that there were fundamental differences within EDA between those who "believe in European-preference" and those who "believe equally strongly that 'Fortress Europe' would be a bad idea"¹¹⁸⁰. This on-going debate is particularly relevant for Europe's defence industrial relations with America. The EDA deliberately avoided this thorny issue and created "a regime that governs the conduct of European member states toward each other in matters of defence procurement".¹¹⁸¹ Speaking in 2005, Witney described as one of his top priorities to boost European defence research and testing (R&T) budgets, if necessary by moving money over from other budget areas. Apart from spending more, the EDA CEO specifically urged his members to boost the share of collaborative R&T defence projects that they undertake beyond the current 5 percent mark, directly tied to the jointly-defined capabilities needed for the future.¹¹⁸² Finally, Witney defined EDA's future success or failure as follows:

"One of the things that is going to matter – this is a rather informal indicator but it is hugely important – is to look around those meetings and see if the minister is actually present. Our ability to succeed or fail depends on our ability to retain interest at the highest levels. There are also some very specific things: If I can look back in two and a half years and see cross-border competition in defence procurement in Europe, that in itself would be a huge step forward. I would like to think there will be at least half a dozen significant collaborative projects that might not have happened without the Agency's influence. I would like to see a significant increase in the amount of money we are spending on defence R&D

¹¹⁷⁶ Witney (2005)

¹¹⁷⁷ Ibid.

¹¹⁷⁸ Ibid.

¹¹⁷⁹ Ibid.

¹¹⁸⁰ Ibid.

¹¹⁸¹ Ibid.

¹¹⁸² Ibid.

collectively. And, of course, [we must make] real progress in increasing the pool of European forces fit and ready for crisis-management operations.”¹¹⁸³

¹¹⁸³ Ibid.

6.3 *The US reaction to ESDP: “Yes, but...”*

The EU’s unprecedented momentum at the political-military level since the St. Malo, Cologne, and Helsinki Summits hardly looked reassuring for Washington and raised serious questions about ESDP’s ultimate impact in terms of duplicating Alliance assets, fostering the creation of an EU caucus in NATO, etc.¹¹⁸⁴ After it had become obvious that Secretary Albright’s harsh “Three Ds” response towards ESDP had failed to rein in the EU’s defence effort, her deputy used the NATO Ministerial in mid-December 1999 to express the US thinking about ESDP in more positive terms. Adopting language first publicly employed by the new British NATO Secretary-General Lord Robertson a month earlier, Talbott stressed that ESDI / [ESDP]¹¹⁸⁵ should rather be based on the “Three Is” principles: “improvement in European defence capabilities; inclusiveness and transparency for all Allies; and the indivisibility of [transatlantic] security, based on our shared values”¹¹⁸⁶. Washington insiders viewed the State Department as most sceptical / hostile towards ESDP, while the NSC tended to be more EU-friendly.¹¹⁸⁷ At the Pentagon, interestingly, there was a clear disconnect between the civilian and military leadership. The former adopted an “alert-but-relaxed” approach characterised by “attempting to downplay the negative [US] reactions to ESDP while emphasising how important it is for the European allies to produce real military capabilities”¹¹⁸⁸. The Joint Chiefs, in contrast, seemed to harbour “apparently residual suspicion of the whole [ESDP] operation and of French motivations behind it”¹¹⁸⁹.

While the Clinton administration changed its official rhetoric in mid-December 1999 and appeared to view ESDP in less confrontational terms, a majority of Democrats and Republicans in Congress remained concerned about ESDI / ESDP. Two Congressional resolutions as well as individual member statements and committee hearings reflected that sentiment. The first resolution, passed by the House on 2 November 1999 by a 278-133 margin, made a strong commitment to NATO and supported ESDI on the condition that it resulted in more European capabilities and transatlantic burden-sharing.¹¹⁹⁰ At the same time, the measure also expressed concerns about ESDI / ESDP

¹¹⁸⁴ Kupchan (2000) pp. 18-21

¹¹⁸⁵ “Already there is an initial strategic disconnect indicated by the American reactions. Most American commentators refer to ESDI as their source of concern when they should be talking about ESDP. ESDI did not give rise to much alarm in the [US] because it was defined fully within the framework of the Alliance. ESDP, defined as autonomous from NATO and within the EU framework, is what most US commentators find alarming even if they refer to it as ‘ESDI’.” Sloan (2000) p. 23

¹¹⁸⁶ Robertson (1999)

¹¹⁸⁷ Sloan (2000) p. 25

¹¹⁸⁸ *Ibid.*, p. 25

¹¹⁸⁹ *Ibid.*, p. 26

¹¹⁹⁰ The burden-sharing argument was particularly appealing to the Republicans’ small-government-and-lower-taxes fiscal hawks in charge of the House at the time.

using the “Three Ds” language.¹¹⁹¹ On 8 November 1999, the Senate passed a similar NATO-ESDP resolution introduced by Republican William Roth, Jr. and backed by influential Senators Helms, Lugar, Biden, Kyl, Hagel, Lieberman, etc. The resolution called on the EU to (1) “undertake an autonomous mission through [ESDI] only after [NATO] had declined to undertake that mission” when “matters of transatlantic concern” were at stake; and (2) not to implement the Cologne Summit decisions in a way that “promote[s] a strategic perspective on transatlantic security issues that conflicts with that promoted by [NATO]”^{1192 1193 1194}.

Hearings held by the House International Relations Committee also exposed deep-seated US reservations about ESDP among neoconservatives like John Bolton, who warned Congress that on-going efforts by EU members to align their “foreign and defence policies [...] into one shared and uniform policy is at times motivated either by a desire to distance themselves from US influence, or in some cases by openly anti-American intentions”¹¹⁹⁵. Ultimately, ESDP could spell “the end of NATO as we know it as a military organisation, a fragmentation of transatlantic political cooperation, and could quite possibly spill over into harmful economic conflict as well”.¹¹⁹⁶ Bolton’s testimony was echoed by Peter Rodman, who charged that the Europeans, “rather than joyfully falling in step behind our global leadership [...] are looking for ways to counter our predominance”.¹¹⁹⁷ Kim Holmes from the conservative Heritage Foundation warned that “hamstringing and weakening US global leadership by insisting on UN mandates for every overseas military operation or other multilateral action could undermine the will of the [US] to lead”¹¹⁹⁸. As William Wallace and Jan Zielonka observed:

“Eurobashing is back in fashion in the [US].” [...]

“Just as European anti-Americanism damaged Western solidarity during the Cold War, so American Eurobashing threatens to unravel transatlantic cooperation in the post-Cold War era. If the [US] expects Europe to shoulder a larger burden of global leadership, a decent

¹¹⁹¹ Conservatives opposed to the resolution criticised that America was subsidising security for its rich European allies through NATO and therefore questioned the fundamental utility of NATO as an instrument of US foreign policy in the post-Cold War era. Liberal Congressmen voted against the resolution for fear that NATO expansion could antagonise Russia or that the US President could use the Alliance as a vehicle to weaken / circumvent the constraints imposed by the 1973 War Powers Act. Sloan (2000) pp. 29-30

¹¹⁹² Senate (1998)

¹¹⁹³ This resolution was “softer” than the initial version introduced by Senator Roth, in which he had used very controversial language such as that Washington would “assign” to Europe those military and security tasks where the US did not want to get involved. Sloan (2000) p. 31

¹¹⁹⁴ At their Helsinki Summit in December 1999, EU leaders refused to give NATO a *droit de regard* over future ESDP operations.

¹¹⁹⁵ Bolton (1999)

¹¹⁹⁶ Ibid.

¹¹⁹⁷ Rodman (1999)

¹¹⁹⁸ Holmes (1998)

respect for Europe's opinions is in the American interest. The current approach, combining demands for greater burden-sharing with knee-jerk dismissals of European policies, risks alienating America's most important allies."¹¹⁹⁹

Beginning in 1997-1998, against the backdrop of rising transatlantic tensions, key EU leaders embraced a political rhetoric that was increasingly critical of America and talked openly about the need to balance against the US hegemon.¹²⁰⁰ One should not forget though that former senior Clinton officials like Bob Hunter, NATO Ambassador during 1993-1998, and NSC Europe Director Ivo Daalder, now President Obama's NATO Ambassador, held a much more benign view of ESDP. At the same House hearing, Hunter affirmed that "a functioning [ESDI] [...] will indeed promote our interests in Europe [and] strengthen the bonds of alliance"¹²⁰¹ by providing for more equitable burden-sharing. And as Daalder, now President Obama's NATO Ambassador, stated: "Europe's problem today is not its potential future strength. On the contrary, it is Europe's actual political and military weakness [that is the problem]."¹²⁰² Similarly, Kupchan argued that "French rhetoric notwithstanding, the EU is anything but an instrument for amassing or projecting power. [...] The EU is fundamentally about binding and pooling power, not projecting it. In that sense, the realistic risk is still of too little Europe, not too much of it."¹²⁰³

Extremely critical or very positive assessments of ESDP by US politicians and defence analysts across the political spectrum notwithstanding, the Clinton administration ultimately adopted an approach towards ESDP that Stanley Sloan dubbed the "'Yes, but...' policy, supporting the European effort but warning of its potential negative consequences".^{1204 1205 1206} However, the deep-seated distrust, hostility, and protectionist mindset displayed by the Republican-dominated Congress (and some Democrats) vis-à-vis France and ESDP further constrained the Clinton

¹¹⁹⁹ (Wallace & Zielonka, 1998) pp. 65 ; 68

¹²⁰⁰ On 3 December 1999, Chris Patten, EU Commissioner for External Relations, stated that it was the objective of ESDP "to make sure the European voice is heard at the same strong decibel level as when the [EU] speaks as the world's biggest trade bloc and the biggest foreign aid donor." On 28 December 1999, Chancellor Schroeder said that Washington "lacked consideration for its allies" [and that] [w]hining about US dominance doesn't help. We have to act." In June 2001, Swedish Prime Minister Persson remarked that the EU "is one of the few institutions we can develop as a balance to US world domination". Mowle (2004) p. 131

¹²⁰¹ Hunter (1999)

¹²⁰² Daalder (1999)

¹²⁰³ Kupchan (2000) p. 23

¹²⁰⁴ Sloan (2000) p. viii

¹²⁰⁵ "[The American 'yes, but...' attitude is one] in which there nearly always coexist the sacrosanct nature of NATO, a large dose of historical suspicion of France, a deep-seated aversion to the very term European 'autonomy' and a certain uneasiness – which is new – regarding recent British and German policies." Gnesotto (April 2000) p. vi

¹²⁰⁶ "After 1945, the American prescription for Europe was to make it 'more like us': to build a United States of Europe that would become America's loyal partner within a broader Western alliance. In the years since, American disappointment at Europe's unwillingness to accept US leadership unconditionally has fluctuated between despair over European political incoherence and fear that the European allies might agree on a framework for integration different from what Washington had prescribed." (Wallace & Zielonka, 1998) pp. 65-66

administration's freedom of movement and made it impossible to envision any transatlantic A&D industry "merger of equals".

6.4 *Growing US unilateralism and the rise of transatlantic political clashes*

The launch of ESDI / ESDP and the creation of EADS in the 1990s coincided with growing transatlantic tensions in a number of areas, ranging from arms control, the environment, trade policy / sanctions to human rights and military cooperation. Thomas Mowle captured the essence of the emerging “transatlantic rift” debate: “Why, despite their professed similarity of goals, do the policy preferences of the [EU] and the [US] diverge on so many multilateral issues?”¹²⁰⁷ Mowle analyses four major EU-US clashes in four distinct issue areas where America and Europe had clear political differences during the December 1997-December 1998 timeframe: Mine Ban Treaty (MBT); Kyoto Protocol; International Criminal Court (ICC), and St. Malo. The first three of these transatlantic clashes were triggered by Washington’s opposition to the establishment or strengthening of multilateral institutions.¹²⁰⁸ As the world’s last superpower, America was particularly sensitive to any (perceived) attempt by other countries – including its allies in Europe – to leverage multilateral institutions to restrain US capabilities or freedom of action. From Europe’s perspective, the clear shift in mood within US policy-makers in the 1990s against acceptance of international law and multilateral institutions – evidenced by the conservative Republican take-over of Congress in 1994 – made Washington increasingly appear as an arrogant, unilateral, and trigger-happy superpower. The subsequent change to the George W. Bush administration, the impact of 9/11, and the 2003 Iraq War led to a dramatic deterioration in US relations with key European allies like France and Germany.

The transatlantic clash over MBT¹²⁰⁹ was significant because “for the first time since its rise to superpower status at the beginning of the Cold War, the [US] made non-negotiable demands at an international security conference – and saw its demands set aside.”¹²¹⁰ In June 1997, after four years of high-profile NGO lobbying efforts, more than 90 countries – including virtually all EU members – declared their unconditional support for a complete landmine ban world-wide. Washington, in contrast, pushed for five treaty changes (three of which were deemed “non-negotiable”), including an exemption for the heavily fortified DMZ¹²¹¹ on the Korean Peninsula.¹²¹² When all these demands were rejected by a two-third majority vote, Washington pulled out of the MBT conference in September 1997. The following month, the ICBL¹²¹³ was awarded the Nobel Peace Prize, a

¹²⁰⁷ Mowle (2004) p. 1

¹²⁰⁸ Ibid., p. 26

¹²⁰⁹ The MBT was signed in December 1997 and entered into force in March 1999.

¹²¹⁰ Mowle (2004) p. 12

¹²¹¹ DMZ = Demilitarised Zone

¹²¹² Mowle claims that Washington’s opposition to the MBT “merely derived from the official position of the DoD, which did not represent a monopoly opinion within the security community”. Mowle (2004) p. 72

¹²¹³ ICBL = International Campaign to Ban Landmines

decision that made America – especially among European publics – look even more like an arrogant, unilateralist superpower that throws its weight around and refuses to be bound by international regimes and institutions.

The second transatlantic political clash was triggered by the Kyoto Protocol signed in December 1997. For Republican and Democratic opponents of Kyoto, the main problem was that key developing countries – in particular rapidly-growing major CO2 emitters like China and India – were exempt from any binding emission reduction targets.¹²¹⁴ While Washington was able to extract some concessions¹²¹⁵ during the Kyoto negotiations, these changes did not satisfy the Senate, which had specifically insisted on the inclusion of countries like China and India in the Kyoto regime. While President Clinton signed the Kyoto Protocol in November 1998, he never submitted it to the Senate for ratification.¹²¹⁶ The long-time refusal by prominent, mainly Republican US policymakers to accept the notion that man-made climate change is for real further fostered the impression that America and Europe did no longer share the same value system. As the globe's largest CO2 emitter, the US was seen by the rest of the world, and Europeans in particular, as the biggest and most intractable problem in the global climate change equation. After the end of the Cold War, Europeans began to rank environmental challenges such as climate change among their top global security concerns. It is therefore no surprise that Washington's opposition to Kyoto created the perception of a "transatlantic rift", especially when measured in terms of America's poor image and reputation abroad. Over the past decade, Washington's steadfast rejection of legally-binding international CO2 emission reductions has widely been viewed as one of the most egregious symbols of American arrogance and unilateralism.^{1217 1218}

The third transatlantic clash was triggered by the Rome Statute establishing the ICC, which opened for signature in the Italian capital in July 1998. Here again, the underlying source of (transatlantic) conflict was the extent to which the American hegemon would allow itself to be bound by multilateral rules and institutions. In particular, the controversy erupted over whether US military

¹²¹⁴ In 1997, the Senate voted 95-0 for resolution S. 98 calling on President Clinton not to sign the Kyoto Protocol unless it contained "specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period".

¹²¹⁵ These concessions concerned the way CO2 emission targets were calculated or how the relevant reduction timetables were to be structured. Mowle (2004) pp. 73-74

¹²¹⁶ In March 2001, President Bush made it clear that the US would not ratify the Kyoto Protocol as it would seriously harm US economic growth and destroy American jobs.

¹²¹⁷ Virtually all major European countries – with the exception of Germany – were themselves lagging behind their Kyoto commitments.

personnel and government official serving abroad should be subject to the ICC's jurisdiction, which includes genocide, war crimes, crimes against humanity, and aggression. Washington, fearing that politically motivated ICC charges could be brought against its troops, lobbied hard to weaken the Court's reach.^{1219 1220} In the end, the US was left isolated as all other EU / NATO members, backed by many African and Latin American countries as well as Russia, India, Japan, etc. supported the ICC despite US objections.¹²²¹ President Clinton signed the Rome Statute on 31 December 2000, the last possible day, to ensure that Washington could "influence the evolution of the court".¹²²² When it became obvious that the ICC was on track to enter into force, the new Bush administration tried aggressively to secure bilateral non-surrender "Article 98" waiver agreements with ICC members to exempt US soldiers and officials from the Court's jurisdiction, using economic and military aid as well as the provision or withholding of political support as carrots and sticks in the negotiating process.¹²²³ Washington's push for "Article 98" agreements created serious tensions with the Europeans, who once again seemed to be on the receiving end of an arrogant, unilateral American superpower that was not willing to play by the rules and worked "against the object and purpose of the statute".¹²²⁴

When discussing US unilateralism vis-à-vis Europe in the 1990s, one also needs to mention the transatlantic trade disputes during that period: bananas, hormone beef, GMOs, the Iran-Libya Sanction Act (ILSA), and the Helms-Burton Act.¹²²⁵ While these trade disputes created considerable resentment on both sides of the Atlantic (particularly in Europe), it is fair to say that "[transatlantic] disputes over trade are not very puzzling: the [US] and the [EU] compete in trade,

¹²¹⁸ US President Obama has promised to fight climate change through the introduction of a cap-and-trade system and a strong push for energy conservation / renewable energy. However, given the economic costs involved, the cap-and-trade measure is highly controversial among Republicans and Democrats in Congress.

¹²¹⁹ The Clinton administration tried to give the P5 UNSC members veto powers over future ICC prosecutions. Paris did support Washington on some counts during the ICC negotiations, including the possibility to grant ICC members the right to opt out of crimes other than genocide. Mowle (2004) p. 91

¹²²⁰ Interestingly, the ICC was also opposed by Democrats like Senator Feinstein (D-CA), who feared that an ICC provision prohibiting "the transfer, directly or indirectly, by the Occupying Power of parts of its own civilian population into the territory it occupies" could be potentially used against the Israeli government and its citizens. Ibid., p. 90

¹²²¹ The following seven countries are believed to have rejected the Rome Statute: America, China, Iraq, Israel, Libya, Qatar and Yemen. Ibid. p. 91

¹²²² President Clinton emphasised that the Rome Statute had "significant flaws" and that he did "not recommend that my successor submit the Treaty to the Senate for advice and consent until our fundamental concerns are satisfied". Statement by the President on the Signature of the [ICC] Treaty, 31 December 2000, quoted in Ibid., p. 91

¹²²³ The American Service-Members' Protection Act, passed by Congress in August 2002, was designed "to protect [US] military personnel and other elected and appointed officials of the [US] government against criminal prosecution by an international criminal court to which the United States is not party".

¹²²⁴ Dempsey (2002) quoted in Mowle (2004) p. 8. According to the 1969 Vienna Convention on the Law of Treaties, a signatory state to an international treaty that has not yet ratified the agreement must not act in ways that undermine the "object and purpose" of the treaty. A signatory can therefore decide to "un-sign" the treaty to be free from that restriction. Mowle (2004) pp. 90-91

¹²²⁵ The "Cuban Liberty and Democratic Solidarity (Libertad) Act" is commonly referred to as the Helms-Burton Act, named after its two original sponsors, Senator Helms (R-NC) and Congressman Burton (R-IN).

so one expects to find conflict”¹²²⁶. That being said, transatlantic conflicts over unilateral, extra-territorial US trade sanctions targeted at Iran and Cuba are clearly more political in nature than “normal” market-access trade disputes over tariffs or quotas. The ILSA and Helms-Burton Act clashes reflect not only very different US-EU views regarding the constraints imposed by international laws and institutions on the exercise of American power; they are also indicative of diverging geopolitical threat perceptions as well as different transatlantic capabilities and preferences along the “engagement vs. confrontation” policy toolbox spectrum.

¹²²⁶ Mowle (2004) p. 14

Chapter 7: Action and reaction: the BMD vs. the EADS merger

7.1. *Ethnocentric vs. regiocentric aerospace and defence consolidation*

The BMD merger, like virtually all the other major elements of the American A&D industry structure, was driven by what Keith Hayward has termed an ethnocentric approach: one that regards the retention of American control and ownership over Boeing and MDC as paramount due to relevant national security considerations. The Clinton administration's mercantilist agenda – defined as the attempt “to assure that the aeronautical capabilities (technological, industrial, and commercial) of the respective countries are nurtured and protected and given every advantage over their rivals”¹²²⁷ – also played a role in shaping US A&D industrial policy. In comparison, the EADS merger involving three European “national champions” conformed to the model of a regiocentric company “blending strategic interests with regional integration / national sensitivity”. Hayward coined these terms during the crucial 1997 / 1998 period: after the BMD merger but before the creation of EADS. At the time, he was only beginning to see the contours of Europe's future industry consolidation process. Hayward identified Eurocopter and Airbus Integrated Company (AIC) as existing or potential examples of regiocentric firms in Europe.¹²²⁸ Subsequently, EADS would become the example *par excellence* of a region-centric company, both in Europe and the rest of the world.

Despite the pressures of globalisation and the progress towards more open international trade and investment regimes that could be observed during the 1990s, governments on both sides of the Atlantic remained heavily involved in “their” respective A&D industries; be it as customers, shapers of industrial policy and R&D aid providers, regulators, political / executive-level backers for export sales, or owners and shareholders. While the founding of EADS certainly marked a historic milestone in the (transnational) integration of the European A&D industry, one must not forget that the governments of France, Germany and Spain continued to be the ultimately decisive factors weighing on EADS' internal structure and overall strategic orientation. In particular, France and Spain made sure to retain significant direct and indirect state-controlled EADS shareholdings, thus adding further economic weight to their already considerable political influence.¹²²⁹ In 2007, for example, when EADS embarked on a major internal restructuring programme dubbed “Power8”, all the key elements of this highly controversial cost-cutting package involving plant closures, thousands of job losses, and a top-level management shake-up were ultimately decided by the three governments concerned, primarily Germany and France. In 2007, then-French presidential

¹²²⁷ Thornton (1999) p. 72

¹²²⁸ Ibid., p. 9

¹²²⁹ It is fair to say that the French and Spanish governments are explicitly mercantilist. The German government, in contrast, is rhetorically liberal market, but in practice has mercantilist instincts in strategic industries.

candidate Nicolas Sarkozy even made the EADS restructuring plan part of his rather populist campaign platform, declaring boldly that “If I’m elected President of the Republic, I’ll renegotiate with the Germans.”¹²³⁰

In the US, in contrast, direct state holdings in the American A&D industry are virtually unheard of. However, there is a web of long-standing relationships linking the executive branch (notably the Pentagon, but also the White House) and Congress (Senators and Congressmen care a lot about jobs in their districts) to the country’s major A&D companies. Sometimes relations are even too close, as evidenced by various high-profile procurement corruption scandals. In 2003, for example, senior Boeing and USAF officials attempted to secure an improper multi-billion dollar Pentagon deal to lease and buy 100 KC-767 Boeing aerial refuelling tankers to the detriment of US taxpayers and, indirectly, its European rival Airbus. Cases of outright corruption left aside, US national security concerns as well as parochial, often mercantilist-inspired thinking in Congress – which is an integral element of the “iron triangle” connecting the legislative branch, the government bureaucracy, and outside interest groups / business players as part of the military-industrial complex – have been the key obstacles to full-fledged transatlantic A&D industrial integration at the prime contractor level. Another important factor has been Washington’s “revolving door” tradition allowing senior government officials (primarily political appointees) to move to A&D companies and then back into the public sector.¹²³¹

For sure, similar parochial motivations can be found on the other side of the Atlantic as well. However, apart from Gaullist France, the other major European A&D companies and the governments behind them have, in principle, shared a strong interest in entering into (roughly balanced) mergers with suitable American counterparts; primarily to gain access to the vast US military procurement business, to leverage state-of-the-art US technologies, and to better tap into America’s deep capital markets. At least in the defence sector, European aerospace companies have been the underdogs since 1945. This state of affairs explains why British and German firms in particular were so eager to “marry up” and join forces with suitable US partners in the 1990s provided that there would be “merger of equals”. Conversely, in the commercial aerospace sector, Airbus had effectively used the last few decades to establish itself as a formidable force in the

¹²³⁰ Gartzke (2007)

¹²³¹ Current US Deputy Defense Secretary William J. Lynn III, who took office on 12 February 2009, previously served as senior vice president of government operations and strategy at Raytheon during 2002-2009. Prior to that, he worked as executive vice president of management consulting firm DFI International. In the second Clinton administration, William Lynn served as Under Secretary of Defense (Comptroller) during 1997-2001. Lynn’s appointment was very controversial because President Obama had to waive his administration’s new ethic rules that impose a two-year waiting period between registered lobbying activities and working for the administration on the same issues.

global market for large-scale aircraft, driving Lockheed and MDC out of the civil aviation business, and successfully breaking Boeing's long-standing market hegemony.

Writing during the crucial 1997-1998 period, Keith Hayward commented about the impact of globalisation on the traditionally close ties between national governments and their respective A&D industries:

"[...] [E]thnocentricity remains the most powerful force determining [A&D] industrial development and [...] any assumption of reduced state intervention would be somewhat heroic."

"[T]he links between aerospace and the nation-state remain strong and definite. There has been change [due to globalisation], but not fundamental change. One might even assert a more ambitious argument, that while the nation state remains the pre-eminent actor in international relations with all of the security overtones that implies, such a de-coupling will be impossible."¹²³²

Apart from political / national security realism one can also point to mercantilism as a powerful force behind the continuing strong links between nation states and their respective A&D industries. As the economic variant of realism, mercantilism can also serve as an effective analytical bridge connecting the military and the civilian side of the aerospace business. The two industry areas are crucially important for virtually all governments concerned; both from a strategic / national security perspective and in terms of the aerospace sector's economic-technological weight, its ability to generate crucial export earnings, secure cutting-edge jobs, etc. For these reasons, governments care about how their country's military and civilian aerospace companies are doing, especially relative to foreign competitors. For example, Boeing's economic importance is highlighted by the fact that the company has long been ranked as America's single biggest exporter.¹²³³ At the same time, Airbus and the EC have accused the US government of effectively subsidising Boeing's commercial aircraft operations through the Pentagon's huge military aircraft procurement and defence R&D programmes.¹²³⁴

Furthermore, top US and European political leaders have repeatedly engaged in competitive, aggressive lobbying efforts vis-à-vis third-country governments to make sure that "their" aerospace

¹²³² Hayward (1999) pp. 13-14

¹²³³ Boeing (2007)

¹²³⁴ "[W]hile the spin-off from military to civilian applications may not be as strong in the past, the American defence budget will continue to be the world's most significant industrial policy for many dual-use technologies." Moran (1993) p. 213

companies win crucial multi-billion civil and / or military aircraft orders. “Civil aeronautics exports have been closely linked to security issues and on occasion have arisen on the back of defence sales”.¹²³⁵ Countries from around the world (Europe, Middle East, Asia, Latin America, etc.) have repeatedly leveraged commercial and military aircraft orders as an effective way to curry favour with the United States or relevant Airbus / European governments concerned and to obtain their political and sometimes even (tacit) military backing on issues of mutual concern. As the world’s sole superpower – and to the envy of Europe’s Airbus backers – America was in the position “to offer a unique package of security-for-trade deals with overseas customers”.¹²³⁶ During the 1990s, the Clinton administration was particularly bent on pursuing neo-mercantilist strategies in the aerospace industry to counter the Europeans:

“[T]he more overt mercantilist policy of the Clinton era is related precisely to the competitive challenge mounted by Europe in civil aeronautics in the last 20 years and the high levels of unemployment experienced in the US industry after the end of the Cold War.”^{1237 1238}

Looking at the big-picture relations between the US and European civil aerospace industries since WWII, one can identify a pattern of government-sponsored actions and reactions on both sides of the Atlantic which were inspired by national security as well as neo-mercantilist considerations. In each instance, the respective governments’ interventions were driven by the perceived need to shore up the (declining) fortunes of their national aerospace companies and / or to foster the creation of “national champions”. As one analyst put it succinctly: “The aeronautics industry in 1970, including both the military and commercial side of the business, embodied and powerfully reinforced American political and economic hegemony in the Cold War era.”¹²³⁹

¹²³⁵ Lawrence (1999) p. 28

¹²³⁶ Braddon (1999) p. 87

¹²³⁷ Lawrence (1999) p. 28

¹²³⁸ The Clinton administration paid particular attention to the A&D industry because of the significant impact of “big ticket” commercial and military aircraft sales on the US trade balance.

¹²³⁹ Thornton (1999) p. 72

7.2 *Safeguarding Europe's aerospace and defence industrial base vis-à-vis the United States*

The launch of the Airbus consortium in the late 1960s was Europe's successful response to the crushing American dominance of the world's commercial airliner market at the time. France, in particular, played a crucial role in Airbus, mainly because the "[French] political elite had a coherent and integrated framework for industrial policy and a matching foreign policy".¹²⁴⁰ The French were determined to play the lead in Airbus from the start, relying on the DGA to coordinate government policy on this from the highest level.¹²⁴¹ The British, in contrast, "had neither [policy]"; in essence, they were caught in the middle, "facing simultaneously across the Channel and the Atlantic"¹²⁴².

"Airbus did emerge and prosper, but in the early days this was despite rather than because of any British contribution. Not surprisingly, dominance on the first Airbus project went to the French, '[...] consistent French support for and commitment to a truly European response to the American challenge in civil aerospace was translated into project leadership on the A300B'.¹²⁴³ As a result, Toulouse became the emotional as well as the physical home of the European aircraft industry."¹²⁴⁴

The dilemma confronted by the British aerospace industry – that is, the (perceived) need of having to choose between closer industrial cooperation with mainland Europe or with America – also became apparent during the events preceding the EADS merger in the 1990s. In December 1998 / January 1999, BAe decided that it was more important to acquire GEC-Marconi to become the UK's undisputed national champion and gain privileged access to the lucrative US defence market than to join forces with Germany's DASA and build the first European A&D champion. As a result of its decidedly Atlanticist strategic outlook, BAE subsequently did not join EADS. BAE's decision in October 2006 to sell its 20 percent stake in Airbus to EADS was further proof of its orientation away from mainland Europe and towards the US (defence) market. It is important to emphasise that BAe pursued the GEC-Marconi merger and sold its Airbus stake against the express wishes of the Blair government – something completely unthinkable in France's state-dominated A&D industry.

Despite some launch hiccups, Airbus took off commercially and rapidly gained market share at the expense of its US competitors MDC and Lockheed, which was forced to abandon the commercial

¹²⁴⁰ Lawrence (1999) p. 37

¹²⁴¹ For additional information on the DGA and its important role in French armaments policy, see Chapter 1.3 of this thesis.

¹²⁴² Lawrence (1999) p. 37

¹²⁴³ Thornton (1995) quoted in Lawrence (1999) p. 37

¹²⁴⁴ Lawrence (1999) p. 37

aircraft business in the early 1980s. “[Arguably the most important development in commercial aeronautics during the 1970s and 1980s was the re-emergence of a European capability in large airframe manufacturing in the form of Airbus Industrie”.¹²⁴⁵ By the late 1980s / early 1990s, it was clear that Airbus had “thoroughly and permanently altered the very structure of the [aerospace] industry”:¹²⁴⁶

“Even as Boeing remains the market leader and is the single most significant force in the industry, American hegemony in the civil airliner market has been [...] thoroughly challenged if not broken decisively.”¹²⁴⁷

It is interesting to note that Airbus’s successful assault on Boeing’s hegemonic position in the commercial aircraft business coincided with America’s rise to sole superpower status after the end of the Cold War. In this context, one must not forget that America’s macroeconomic situation also improved dramatically beginning in 1992-1993, allowing newly elected President Clinton to take credit for stronger economic growth, record low unemployment, a shrinking budget deficit, low interest rates, and a booming stock market fuelled by the nascent Internet economy.

“[The Clinton administrations] [...] most assuredly deserve recognition for their determined and concerted efforts to marry these developments in the realms of security and economics [that is, America’s rise to sole superpower status and the resurgent US economy] into a coherent, ‘geo-economic’ strategy designed to extend US commercial and political influence abroad.”¹²⁴⁸

Against the backdrop of Washington’s geoeconomic strategy, Thornton also emphasised that the “on-going consolidation [in A&D] is occurring in a technological and industrial context in which the lines between the civilian and military sectors are becoming increasingly blurred”.¹²⁴⁹ This growing linkage between the commercial and the military side of the aerospace business is crucially important, since it made the fate of MDC and Boeing an even bigger matter of concern for the US government and Members of Congress.

At various points in the 1990s, America like Europe had the perception that their aerospace industries were under serious competitive attack from the other side, threatening to cause a decline over the long-term. For the US, that threat concerned primarily Airbus’s surge in the commercial

¹²⁴⁵ Thornton (1999) p. 73

¹²⁴⁶ Ibid., p. 75

¹²⁴⁷ Ibid., p. 75

¹²⁴⁸ Ibid., p. 77

¹²⁴⁹ Ibid., p. 77

aerospace business. According to an Airbus executive, “The commercial success of Airbus has infuriated the Americans who consider the domination of the LCA [Large Commercial Aircraft] market by US industry is the normal state of the world”.¹²⁵⁰ On the military front, in contrast, US defence contractors (especially after their successive rounds of consolidation), enjoyed not only a commanding lead over their European competitors in terms of size and technology, but also successfully leveraged Washington’s position as the world’s hegemon to launch successful export offensives in Eastern Europe and elsewhere. America, after all, had no (military) peer competitor. In FY1996-1997, the US defence budget amounted to US\$270 billion. In contrast, the combined defence budgets of six major EU military powers¹²⁵¹ only totalled US\$120 billion during that same period. Furthermore, given the highly fragmented state of the European A&D industry, senior executives from these companies repeatedly lamented the fact that “[i]n Europe we are trying to support three times the number of contractors on less than half the budget”¹²⁵² compared to the Americans.

While US mega-primers like Boeing, LMC, and NGC clearly dominated the defence business, the stunning success of Airbus on the global civil aviation market was of growing concern to American executives and policymakers. The importance of spin-on effects from civil to military aerospace meant that a loss of market share and lagging technological innovation for US companies risked weakening America’s industrial base and causing national security vulnerabilities.¹²⁵³ The rise of Airbus and the corresponding decline in Boeing’s technological capabilities and sales constituted a clear threat to US national and geo-economic security.

“[US] attention has been focused on the idea of national ‘competitiveness’ and on the persistent US trade and current account imbalances which are seen as leading to the accumulation of external debt and inward foreign investment and ownership (leading to ‘dependence’ on foreigners, especially the Japanese, for ‘strategic’ technologies).”^{1254 1255}

¹²⁵⁰ Bieler (1999) p. 113. Mr. Bieler served as Director of International Affairs at Airbus Industrie.

¹²⁵¹ UK, France, Germany, Italy, Spain, and Sweden

¹²⁵² Whitfield (1999) p. 105

¹²⁵³ In 1997, David Thornton defined the growing civilian-defence linkage as follows: “As military strategy, tactics, operations, and equipment come to rely more and more heavily on so-called information technologies (IT, especially data processing and microelectronics), the ‘defence industry is gradually dissolving into civilian high-technology industries’.” Thornton (1999) p. 77, who quotes van Scherpenberg (1997) p. 103. “In the US, following the end of the Cold War, the defence industry has gradually dissolved into a range of high technology industries where global competitiveness is the over-riding goal. As a result, the most promising route to commercial success in the aerospace industry now resides in the greater integration of civil and defence sectors. New over-arching systems integration skills and new integrated production technologies allow civil users enhanced access to leading edge defence research and development while providing the military sector with access to path-breaking civil advances in information technology and microelectronics to drive forward the trend towards ‘information-based warfare’.” Braddon (1999) pp. 82-83

¹²⁵⁴ Cable (1995) p. 309

Mercantilists, by definition, are greatly concerned about trade deficits and try to avoid or minimise them at all costs.¹²⁵⁶ “From a geo-economic point of view, the US external deficit originates in an uneven playing field for trade. The solution is to be found in forcing open foreign markets (or restricting imports) so as to balance trade.”¹²⁵⁷ It is easy to see this geo-economic approach at play when Washington is accusing Airbus of benefiting from illegal European government subsidies. Mainstream economists, in contrast, would argue that US trade deficits are inevitable as long as the country consumes more than it produces and needs to rely on imports and capital inflows from abroad to make up the difference.¹²⁵⁸ Therefore, “Japan-bashing or EC-bashing in trade, or Exon-Florio regulations for investment can affect the composition of the imbalances, but not their magnitude.”¹²⁵⁹

“The fact that the greatest threat to US power in the international system is ‘made in the USA’ should in now way detract from its importance to neorealists. Since 1980 the [US] has consumed almost US\$1.5 trillion more than it produced, while two of the prospective ‘challengers’ alone, the Germans and the Japanese, have accumulated more than US\$1 trillion in demands on our assets. Reversing this Paul Kennedy-esque trend would strengthen US freedom of action (present and future) in comparison to an America becoming more indebted to or owned by foreigners. It would foster external respect, rather than creeping contempt.”¹²⁶⁰

European firms, in turn, felt fundamentally threatened by the rapidly consolidating US A&D giants, especially after the BMD merger, which was perceived as an all-out assault on Airbus and its four partner nations. In this context, one must not forget that fundamental European concerns about losing the economic and technology race against America (or Japan for that matter) were nothing new:

¹²⁵⁵ “The popular notion of competitiveness – that, in the words of President Clinton, ‘each nation is like a big corporation competing in the global marketplace’ – has been widely used to create a sense that the US and Europe are ‘losing’ (to each other, Japan or everyone else) in some kind of knock-out competition. [...] [M]any [...] publications of recent vintage leave their readers in little doubt as to what the ‘competitiveness’ debate is all about: an economic equivalent of the Cold War.” Ibid., p. 310

¹²⁵⁶ “In the geo-economic view of the world, a trade deficit is intrinsically undesirable, not merely for its own sake (imports ‘destroy’ jobs), but because it is balanced by capital inflows – foreign investment or the acquisition of claims on the US federal government – so that the ‘US becomes dependent imports of goods and money from Japan’ and ‘vulnerable to Japanese threats.’” Ibid., p. 310

¹²⁵⁷ Ibid., p. 309

¹²⁵⁸ “[T]he mainstream economic interpretation of the US deficit [...] is that the external deficit is a mirror image, and consequence, of the internal imbalance between savings and investments and should be addressed not by trade policy but by government deficit reduction and, where possible, encouraging private savings.” Ibid., p. 310

¹²⁵⁹ Moran (1993) p. 212

¹²⁶⁰ Ibid., p. 212

*“Since the creation of the European Communities in the 1950s, the issue of Europe’s technological and economic competitiveness in relation to the [US] has been on the political agenda. Three waves of technology-gap fever can be identified. The first occurred in the mid-1960s, the second in the early 1980s [this time also vis-à-vis Japan], and the third during the 1990s.”*¹²⁶¹

The 1997-1999 period between the BMD and EADS mergers is particularly relevant as it promises valuable insights into the strategic perceptions of European aerospace executives and senior government officials pondering their next moves. In 1997, Robert Whitfield, strategy and external affairs director of BAe Airbus, summed up Boeing’s dominant post-BMD merger position in the civil aircraft business as follows:

“It now has over 70 percent of the world’s civil aircraft market by value. In terms of market penetration, 84 percent of fleets of aircraft are Boeing’s, including military conversions, a total 87 percent share of all jet aircraft with civil origins are Boeing – and in terms of seats the figure is around 93 percent. The statistics here speak for themselves.”^{1262 1263}

To counter Boeing’s dominance, Whitfield strongly urged his fellow Europeans to get their act together, notably by transforming Airbus into a single company: “in our view, it is the way forward and the first step to the ultimate goal of total [A&D] consolidation within Europe. [...] [Airbus] SCE¹²⁶⁴ will create a benchmark company forming a bridge for the rest of the industry to follow.”^{1265 1266} Whitfield also laid out Europe’s two existing strategic options in rather blunt terms: “Governments will face a choice, either to relinquish some control or watch their defence industries

¹²⁶¹ Moerth (2003) p. 60. With regard to the “three waves of technology-gap fever”, the author also references Sandholtz (1992). The EU’s 2000 Lisbon Agenda can be seen as another European attempt to formulate a coordinated strategic response to the new economic and technological challenges posed by the US and, increasingly, China as well as the Asia-Pacific region. At its European Council meeting in Lisbon in March 2000, the EU leaders agreed on a “new strategic goal for the next decade: to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion.” European Council (2000)

¹²⁶¹ Moerth (2003) p. 60

¹²⁶² Whitfield (1999) p. 107

¹²⁶³ “Despite a 30 percent market share, Airbus still only has 13 percent of the fleet of civil airliners flying and less than 10 percent of the seats, making it effectively a market entrant still for decades to come. The recently approved [BMD merger] illustrates the competitive threat: [1] Airbus has half the throughput to recover its costs against; [2] it also has more investments to make than Boeing to extend its product range; [3] aircraft prices are currently 30 [percent] lower than [five] years ago; [4] Airbus gets far less funding from governments than the US gives its industry and Airbus has to pay most of it back!” Bruce (1999) pp. 127-128

¹²⁶⁴ SCE = Single Corporate Entity

¹²⁶⁵ Whitfield (1999) p. 103

¹²⁶⁶ The governments of the four Airbus partner countries met in June 1997 to express their support for the January 1997 industry shareholders’ Memorandum of Understanding (MoU) which established concrete dates and deliverable to transform Airbus into a fully integrated company with the kind of single, streamlined management structure necessary to compete effectively with arch rival Boeing.

slowly wither and die in the face of superior US competition.”¹²⁶⁷ Looking back at the launch of Airbus in the late 1960s and early 1970s, this common European approach worked extremely well in the large-scale commercial aircraft business. Whitfield’s conclusion illustrates the high-stakes transatlantic rivalry in the A&D industry in the 1990s, both at the bilateral and the global level:

*“Now is the time for a strong drive to sort out Europe to ensure we can work with the rest of the world from a position of strength – both in civil and ultimately in defence markets. If not, we will be reduced to a niche player with an increasingly limited technology base. Europe must get its act together to compete with the US and negotiate as equals, not as junior partners.”*¹²⁶⁸

For Michel Bieler, Airbus Industrie’s Director of International Affairs, the ultimate goal of the BMD merger was obvious:

*“[T]here is no doubt that the [BMD] merger is the last concerted and finely engineered move to create in the wake of defence consolidation, a globally dominant national champion in the civil aircraft sector. Even if it is at the price of some compromise with antitrust law, this newly created champion has, in the US view, the muscles needed for restoring US dominance on the LCA market by marginalising Airbus, the only remaining challenger. The politicisation by the US administration with threats of a trade war and the personal intervention of President Clinton against the EC when speaking in opposition to the merger, is the mere proof of the [US government’s] commitment to get the merger through according to its strategic views.”*¹²⁶⁹

To respond to the American challenge, in Bieler’s assessment, Airbus had no choice but to go on the offensive and try to increase its global commercial aircraft market share to 50 percent – “the only long term sustainable position in a duopoly situation with a competitor like the new Boeing”.¹²⁷⁰ Bieler also recommended that Airbus focus on building the A3XX to attack the existing B747-400 monopoly in the 400+ passenger segment and to thereby “kill” Boeing’s crucial cross-subsidisation capabilities.¹²⁷¹ In contrast, a defensive posture would “inevitably [...] marginalise Airbus sooner or later as a niche player ‘à la Douglas’”.¹²⁷² To be sure, streamlining Airbus by transforming it from a GIE into a SCE / AIC would be much easier to achieve than

¹²⁶⁷ Whitfield (1999) p. 107

¹²⁶⁸ Ibid., p. 112

¹²⁶⁹ Bieler (1999) p. 115

¹²⁷⁰ Ibid., p. 119

¹²⁷¹ Ibid., p. 119

¹²⁷² Ibid., p. 119

creating a fully integrated European A&D champion: “[A]n Airbus [SCE] can show what is possible in efficiency, allay some of the fears of losing control by individual nations and act as an example to facilitate wider European aerospace [and defence] restructuring at the earliest time”.¹²⁷³

The potential creation of Airbus Military Company as a subsidiary majority-owned by the four Airbus partners with the participation of other interested (European) aerospace companies to build the Future Large Aircraft (FLA) military transport aircraft (later dubbed A400M) was seen as a crucial step towards “breaking the US monopoly in the military transport business”.¹²⁷⁴ Allowing Airbus to branch into the military business would therefore also weaken Boeing’s ability to cross-subsidise its commercial aircraft sales with the proceeds from military transport deals.¹²⁷⁵ Writing in 1997, the BAe Airbus executive in charge of the FLA programme put it bluntly:

*“It is recognised that if we don’t do something to change this [existing US monopoly in the military transport business] we will be placing ourselves at the mercy of the US in the future, allowing them to control the market, control prices to Europe, and control technology.”*¹²⁷⁶

A March 1997 research report presented to the EC Directorate-General (DG) for Industrial Affairs warned sternly of a “real [US] threat to the survival of a European defence industrial base that is able to provide European forces with state-of-the art equipment”.¹²⁷⁷

*“Under these circumstances the big challenge for European defence industrial policy is to avoid a situation where there are only two policy options left: either to buy less capable but national or European equipment with security of supply assured but military superiority undermined, or to buy highly capable US equipment providing military superiority over potential opponents but with security of supply being dependent on US willingness and capability to support European forces in specific scenarios. If decision-makers want to avoid this choice and thus improve the prospects of a globally competitive European DITB¹²⁷⁸, European arms and defence industrial cooperation has to be improved dramatically and quickly.”*¹²⁷⁹

¹²⁷³ Bruce (1999) p. 132

¹²⁷⁴ Ian Gray (1999) p. 153. At the time, the US A&D industry enjoyed a near-complete monopoly in military transport aircraft; only minor players such as Spain’s CASA still competed in the small military transport plane segment.

¹²⁷⁵ Ibid., p. 154

¹²⁷⁶ Ibid., p. 154

¹²⁷⁷ (Rohde, Taylor, & Schmidt, 1997) p. 8, quoted in Moerth (2003) p. 43

¹²⁷⁸ DITB = Defence Industrial and Technological Base

¹²⁷⁹ (Rohde, Taylor, & Schmidt, 1997) pp 48-49, quoted in Moerth (2003) p. 43

Despite these rather dramatic industry assessments, the EU's 1997 Amsterdam Treaty made only a brief reference to the issue of armaments policy, stating simply that "the progressive framing of a common defence policy will be supported, as Member States consider appropriate, by cooperation between them in the field of armaments".¹²⁸⁰ At the 1999 Cologne Summit, the issue of European armaments cooperation figured much more prominently on the agenda:

Specifically, EU members agreed to "[...] undertake sustained efforts to strengthen the industrial and technological defence base, which we want to be competitive and dynamic. We are determined to foster the restructuring of the European defence industries among those States involved. With industry we will therefore work towards closer and more efficient defence industry collaboration. We will seek further progress in the harmonisation of military requirements and the planning and procurement of arms, as Member States consider appropriate."¹²⁸¹

In her fascinating study of the EU's armaments policy (covering primarily the 1990s), Swedish analyst Ulrike Moerth notes:

*[The A&D industry] "has been conceptualised within two different projects of European integration: the political economy project ["market field"] – developed through the EC – and the defence and security project ["defence field"] – organised through NATO, the WEU, and recently through the EU."*¹²⁸²

In the market field, the restructuring of the European A&D industry was seen through the prism of having to safeguard Europe's economic and technological competitiveness vis-à-vis America. During the 1990s, the EC was the first European political institution that was gripped by this transatlantic "technology-gap fever" and that tried to do something about it – both with regard to defence items as well as civilian / dual-use products and technologies.¹²⁸³ In January 1996, the EC

¹²⁸⁰ Article 17 (formerly J.7) of the Amsterdam Treaty.

¹²⁸¹ European Council (1999)

¹²⁸² See back cover description of Moerth (2003).

¹²⁸³ Back in the early 1980s, during the "second wave of technology-gap fever", Europe had launched three different major European RTD programmes. The first two EC initiatives – dubbed ESPRIT (European Strategic Programme for Research and Development in Information Technology) and RACE (Research and Development in Advanced Communications Technologies for Europe) – were initiated by Industry Commissioner Davignon, who worked closely with the leaders of Europe's twelve biggest information technology companies in defining and implementing the RTD programmes. The third initiative, called EUREKA (European Research Coordination Agency), was initiated outside the EC framework by French President Mitterrand, who saw EUREKA as a first response to Reagan's proposed space-based Strategic Defence Initiative (SDI). *Ibid.*, pp. 62-63. Despite their differing institutional set-ups, all three RTD programs "responded to the same fears about the status of high technology [in Europe]". Sandholtz (1992) p. 5 quoted in Moerth (2003) p. 63

issued a communication¹²⁸⁴ aimed at fostering increased civil-defence synergies in the EU's official RTD¹²⁸⁵ programmes in an effort to counter America's perceived assault on Europe's competitiveness. The EC proposed to formally integrate dual-use technologies in the EC's RTD programmes, a move that would have yielded direct benefits for Europe's A&D industry. By the 1990s, it was already evident that traditional military-to-commercial spin-off effects were increasingly being replaced by commercial-to-military spin-on effects. In 1996, the EC also declared that "It has been estimated that technology areas of potential dual-use account for as much as one third of the overall Community research budget."¹²⁸⁶ These increased inter-linkages between commercial and military technologies were particularly pronounced in the aerospace sector. However, when the EC formally presented its fifth framework RTD programme in April 1997, there was no explicit reference to dual-use RTD programmes. In the end, it seemed that some Commissioners and most EU member states were simply too afraid to open the dual-use items "Pandora's Box" by "putting into question the civilian objectives of the [RTD] framework programme and the traditional framing of civil and defence-related issues".¹²⁸⁷ At the same time, however, the maintenance of the status quo also meant that defence companies were still able to participate in EU-funded RTD initiatives as long as they "compl[ied] with the civilian objectives and rules of the programmes".¹²⁸⁸ To sum things up:

"The communication from January 1996 showed the Commission's ambition to pursue a more comprehensive industrial policy – an action plan – that included not only Europe's civilian industry, but also its defence-related industry. Although the future of the defence industry had been discussed earlier, the communication was the first comprehensive document from the Commission on the problems of the European defence industry. This was a rather bold initiative due to the fact that this sector has been regarded as an area of exclusive national prerogative. Article 296 (formerly Article 223) in the [TEU] allows governments to exempt defence firms from EU rules on mergers, monopolies, and procurement."¹²⁸⁹

According to the EC, an excessively broad (protectionist) interpretation of Article 296 by EU member states had resulted in a highly fragmented European DITB. In 1996, the EC declared that "On an overall industry level the [...] trade figures give a strong indication that the European

¹²⁸⁴ The 1996 EC communication was also dubbed "Bangemann report", named after the Commissioner for Internal Market and Industrial Affairs, Martin Bangemann.

¹²⁸⁵ RTD = Research and Technology Development

¹²⁸⁶ 1996 Bangemann report [(COM (96) 10, 20)] quoted in Moerth (2003) p. 67

¹²⁸⁷ Ibid., p. 68

¹²⁸⁸ Ibid. p. 68

¹²⁸⁹ Ibid., p. 69

defence-related industry has experienced a worsening of its competitive position vis-à-vis the US industry since the 1980s.”¹²⁹⁰ Back in 1990, the EC had already tried “to bring armaments production and trade fully under the discipline of the common market, which would involve, *inter alia*, the removal of [Article] 223”.¹²⁹¹ By weakening and ultimately removing Article 296 (formerly Article 223), the EC was hoping to create the conditions for a market-based consolidation process in the European A&D industry. In the end, this initiative failed because of political resistance from member states.

During 1996-1997, the EC, led by Internal Market and Industrial Affairs Commissioner Bangemann, became very involved in defence industrial issues. The EC hosted a number of informal seminars and meetings with representatives from business, think tanks, national administrators, etc. to discuss how to make the European armaments industry more competitive (notably vis-à-vis America). In November 1997, the EC presented a two-part communication on “Implementing [EU] Strategy on Defence-Related Industries”. The report’s first part laid out proposals for a joint European armaments policy. The second part, dubbed “Draft Action Plan for the Defence-Related Industry”, outlined concrete short-term and long-term actions that should be taken to strengthen the European DITB.¹²⁹² The following action items were presented:

*“[I]ntra-community transfers, a European company statute, public procurement, RTD, standardisation, customs duties, the innovation transfer of technology and small and medium-sized enterprises, competition policy, exports dual-use goods and conventional armaments, structural funds, indirect taxation and direct taxation, principles for market access, benchmarking, and enlargement.”*¹²⁹³

Furthermore, a streamlined, fully integrated European DITB would also require the creation of a joint European Armaments Agency in charge of coordinating defence cooperation and RTD initiatives.¹²⁹⁴ In 1995 and 1996, the relevant European industry associations – AECMA¹²⁹⁵ for the aerospace industry and EDIG¹²⁹⁶ for the defence industry in general – were already beginning to present their own reform proposals. The urgency to change the status quo in Europe was clearly palpable at the time:

¹²⁹⁰ Bangemann report [(COM (96) 10, 7)] quoted in *Ibid.*, p. 67

¹²⁹¹ (COM (90), 600 final, 5) quoted in *Ibid.*, p. 70

¹²⁹² *Ibid.*, pp. 71-72; 96

¹²⁹³ *Ibid.*, p. 96

¹²⁹⁴ The EDA launched by the European Council in July 2004 would subsequently take on that role, with the six-nation OCCAR organisation serving as a complementary entity. See Chapter 6.2 for more detailed information on both institutions.

¹²⁹⁵ AECMA = Association Européenne des Constructeurs de Matériel Aérospatial

¹²⁹⁶ EDIG = European Defence Industrial Group

“Only if the current fragmented structure of the industry is superseded by a few large transnational organisations which are unimpeded by individual policies based on national borders can the industry remain both competitive and profitable.”¹²⁹⁷

“Europe requires an aerospace industry to support its role in global air transport, to allow an autonomous foreign policy and defence position, to safeguard its access to space and to contribute to technologically driven growth.” [...] [This means that the preferred way for the restructuring of the European aerospace industry “is to replace the current loose cooperative arrangements with transnational company structures which have truly European dimensions.”¹²⁹⁸

“The major prerequisite to establishing a European Domestic Market will be that the member governments harmonise their operational requirements to enable common procurements. Other sensitive and complicated problems [that member governments] will have to resolve : harmonisation of acquisition procedures, laws and regulations, standards, security of supply, reciprocity of market access within Europe, work share and industrial return, and export controls.”¹²⁹⁹

The push for a harmonised European defence export control regime was doomed to failure as it would have constrained the ability of major EU players like France and the UK to use foreign military sales as a powerful tool of their foreign and security policy. The creation of a European company statute (SE – “*societa europea*”) proved to be another thorny issue that was not resolved until the EU Nice Summit in December 2000, when EU leaders finally agreed to provide the kind of legal framework which would allow companies to merge across borders and to transfer their registered offices from one EU member country to another without any changes in their legal personalities.¹³⁰⁰

Ultimately, it proved impossible to create the necessary political conditions to allow for a market-based A&D industrial consolidation process. That was simply never going to happen in this strategic sector. European governments were not willing to abandon the national sovereignty and prerogatives enjoyed over their respective A&D companies as enshrined in TEU Article 296. Also, the 14-point “draft action plan” for defence industrial restructuring presented by the EC in November 1997 (ranging from public procurement reform to harmonised export policies) was certainly ambitious to say the least. At the same time, the structural problems in Europe’s DITB

¹²⁹⁷ AECMA report (AECMA 1996, 55) is quoted in Moerth (2003) p. 76

¹²⁹⁸ AECMA report (AECMA 1996, 23) is quoted in Ibid., p. 76

¹²⁹⁹ EDIG report (EDIG 1995, 3, see also 14) is quoted in Ibid., p. 76

¹³⁰⁰ Ibid., p. 90, Chapter 4, footnote 17

persisted because of “inaction” on many of these crucial issues. “[T]he general image of European defence and aerospace is one of fragmentation, and one in which the industry needs to be consolidated in order to compete with American companies.” Moerth summed up the “market field” activities as follows:

“[T]he Commission has, together with the [A&D] industry, and through special journals and policy centres such as CEPS¹³⁰¹ created a political crisis awareness pointing to various economic, industrial, and technological threats from the [US].”¹³⁰²

It is important to point out that the EC’s attempted reinterpretation of TEU Article 296 to achieve a market-based consolidation and restructuring process would have required certain national security safeguards (Golden Shares, etc.) to protect Europe’s A&D companies against (hostile) take-over attempts by US mega-primes.¹³⁰³

In the end, however, Europe’s historic, transnational A&D industrial consolidation process during the late 1990 – embodied by EADS – made the really important and decisive strides outside the EC’s institutional framework (that is, outside of the “market field” dominant in the “First Pillar”). After all, the EADS deal ultimately required the political consent and support of all three governments involved. EADS was not the simple result of a market-based consolidation process that was allowed to play itself out independent of wider political considerations in the “defence field”. At the same time, though, the relationship between the “market field” and the “defence field” was certainly interdependent:

“It is difficult to imagine that complex cross-border mergers between defence industries would have taken place if there had been no credible political development of a European defence policy. This being said, it is also quite clear that the industry itself created the pressure for political initiatives and also that the process toward a strong European defence industry is driven by market factors and not only by the logic within the defence field.”¹³⁰⁴

The crucial role played by actors and developments in the “defence field” and “market field” can be analysed from two perspectives. First, the 15 EU member states (led by France, the UK, and Germany) made a largely concerted EU-wide effort to strengthen the bloc’s nascent autonomous security and defence policy, especially after the Kosovo War (“Spirit of Cologne”). Second, the

¹³⁰¹ CEPS = Centre for European Policy Studies

¹³⁰² Moerth (2003) p. 146

¹³⁰³ Ibid., p. 83

¹³⁰⁴ Ibid., p. 74

EU's leading A&D nations, including France, Germany, the UK, Italy, Spain, and Sweden, took steps outside of the EU institutional framework to streamline Europe's DITB.¹³⁰⁵

On 9 December 1997, the leaders of France, Germany, and the UK signed off on a Joint Statement declaring that their countries “share a vital political and economic interest in an efficient and globally competitive European A&D electronics industry.”¹³⁰⁶ In particular, they recognized the “urgent need to restructure the A&D electronics industries”, which “should embrace civil and military activities [...] and should lead to European integration based on balanced partnership”. Finally, Paris, Berlin, and London requested that their respective A&D companies “present a clear plan and detailed timetable for this restructuring and integration by 31 March 1998”.¹³⁰⁷ At the time, the political “grand vision” was still to create one fully integrated European Aerospace and Defence Company (EADC)¹³⁰⁸. While DASA, BAe, Aérospatiale, and CASA were able to present a report on the founding principles of a future EADC by the 31 March 1998 deadline, the document did not contain the requested “clear plan and detailed timetable” for European defence restructuring. Ultimately, the industry-government talks “never reached the stage of real negotiations. They were essentially an exchange of ideas and a general discussion of possible avenues to explore”¹³⁰⁹. Besides, there were concerns that the planned restructuring into EADC would have violated EU competition laws.¹³¹⁰ With BAe's take-over of GEC-Marconi announced in January 1999, the grand EADC vision was finally put to rest.

In retrospect, the United States played a crucial role in shaping European political and economic actions in both the “defence field” and the “market field” – the very developments that would ultimately bring about much-needed (cross-border) A&D industrial restructuring / consolidation in Europe:

“There are similarities between the market and defence fields in the sense that they both concern the notion of Europe's need to enhance its capacity in relation to that of the [US]. What is presented in these two fields is the need to create a European actor and to pursue

¹³⁰⁵ Just to re-emphasise, the defence industrial / procurement area had been a field “reserved” outside the EC since 1958.

¹³⁰⁶ Joint Statement by the President of the Republic and the French Prime Minister, the Chancellor of the Federal Republic of Germany and the Prime Minister of the United Kingdom, Restructuring of the European Aerospace and Defence Electronics Industry, 9 December 1997. The Joint Statement was supported by the Heads of Government of the Republic of Italy and the Kingdom of Spain.

¹³⁰⁷ The Joint Statement also invited other European companies / countries to join the initiative and called for “swift progress” in establishing Airbus SCE. Ibid.

¹³⁰⁸ See Chapter 4.2 of this thesis for more information on the EADC discussions.

¹³⁰⁹ Schmitt (2000) p. 30

¹³¹⁰ Moerth (2003) p. 81

*European economic and military strategies. The Other in this identity-seeking and capacity-building process is clearly the United States.*¹³¹¹

The “market field” actors like the EC as well as the relevant A&D companies and industry groups involved certainly viewed the US as a gathering economic-technological (civilian) threat. Accordingly, America’s mega-primes were perceived as fierce and threatening competitors, but not as mortal (military) enemies (even though one could easily get war-like impressions when following the high-stakes zero-sum dogfight between Boeing and Airbus). The ultimate goal of Europe’s major A&D groups was to acquire the necessary critical mass through (trans)national consolidation to allow them to compete with the US giants on an equal footing. In fact, to gain better access to the lucrative American defence market, European CEOs were quite willing and interested in potentially entering into full-fledged alliances / mergers-between-equals with suitable US partners.¹³¹² However, for such a scenario to play out, the Europeans would first need to consolidate their own A&D companies, be it through the creation of national champions (like BAE) or transnational champions (EADS).¹³¹³

The EC and the private sector played an important role in first putting the issue of A&D industrial competitiveness on Europe’s political agenda. That being said, the EC’s attempt to integrate this strategic, “high politics” sector into the EU’s supra-national “First Pillar” was doomed to failure as political leaders in London, Paris, Berlin, etc. strongly resisted such dramatic and revolutionary reforms. While “market field” actors and developments played a critical role in shaping European perceptions of the gathering threat posed by the US mega-primes, they alone were not sufficient in bringing about large-scale (trans)national A&D industrial restructuring in Europe. For that to happen, the relevant national governments had to be on board; and they felt much more comfortable dealing with these highly sensitive issues through the EU’s “Second Pillar” (see relevant ESDP declarations on that subject matter) or on an ad-hoc, informal, outside-of-the-official-EU-framework “coalition of the willing”-type basis.

“In comparison to how the issue of armaments has been part of the two fields – defence and market – the empirical evidence shows that the political breakthrough in the EU for the issues occurred when the EU became involved with defence issues. [...] [W]hen the [EU]

¹³¹¹ Ibid., p. 88

¹³¹² In the late 1990s, the American defence equipment market was *far* larger than the European, given the beginning recovery in US defence spending and continuing cutbacks in German, Italian, and other procurement budgets. This was part of BAE’s rationale for going “transatlantic” – the market was simply much larger there.

¹³¹³ European governments were also opposed to EC efforts to weaken or remove Article 296 for fears that US mega-primes could potentially acquire critical elements of Europe’s DITB, thus fostering an increased economic-technological dependency on America.

governments activated the issue of armaments in the defence field, they codified a political and industrial process that was already under way in the market field."¹³¹⁴

"[At the same time though,] activity within the defence industries in Europe suggests that the increased industrial collaboration into transnational defence companies has put pressure on the governments to 'act' European instead of national. The only item on the political agenda seemed to be to help industry cope in a more internationalised and competitive environment."¹³¹⁵

The desire of Europe's major A&D nations to restructure their respective national corporate players outside of the EU institutional framework (i.e., to stay clear of the "First Pillar" / "market field" controlled by the EC) also became evident when France, Germany, the UK, Italy, Spain, and Sweden signed a Letter of Intent (LoI) in July 1998. The goal of the non-binding LoI was "to establish a co-operative framework to facilitate the restructuring of European defence industry", notably with regard to sensitive issues like security of supply, export provisions, security of information, research and technology, treatment of technical information, harmonisation of military requirements, and the legal framework.¹³¹⁶ The LoI attempted to provide rather specific guidance on how to handle the various industrial and national security implications connected with the potential future creation of a Transnational Defence Company (TDC)¹³¹⁷ in Europe. In what is probably the LoI's most revolutionary element, the six nations even agreed to "accept mutual interdependence and the possibility of abandoning industrial capacity".

"[The Joint Statement] in December 1997 and the succeeding LoI have been discussed as a reaction toward the demands and pressure from the European defence industry, especially from the aerospace industry. Indeed, the LoI process started as a helping hand to the industry, but has evolved into a more independent and comprehensive political process. It also started as a political initiative to support the aerospace industry, but has gradually encompassed the European defence industry in general. Furthermore, although the [US] is hardly mentioned in the political statements, it is obvious that the Other is omnipresent and that the American consolidation of its defence industry was an important driving force for the European political process."¹³¹⁸

¹³¹⁴ Moerth (2003) p. 86

¹³¹⁵ Ibid., p. 86

¹³¹⁶ LoI (1998)

¹³¹⁷ The LoI defines a TDC as follows: A corporate, industrial or other legal entity within the territories of the Participants, formed by, or consisting of, elements of Defence Industry from two or more of the Participants national defence industries for the purpose of supplying Defence Articles or performing Defence Services." Ibid., Annex B, Definition of Terms.

¹³¹⁸ Moerth (2003) p. 109

In April 1998, the French, German, Italian, Spanish, and UK defence ministers had issued a Joint Statement confirming that “a strong, competitive and efficient defence industry is a key element of European security and identity as well as of the European scientific and technological base”.¹³¹⁹ It is important to reiterate that the perceived economic-technological competitive threat posed by the US mega-primes to the European A&D industry was primarily civilian in nature. In fact, that is how the EC as well as the relevant business players first defined “*le nouveau défi américain*” and subsequently helped put it on the political radar screen of European governments. And even after the (major) EU members did get involved at the political-military level to build “a strong Europe”, it was clear that they were not trying to build on the planned A&D industry restructuring to turn the EU into an all-out strategic rival to the US.

“[Like in the market field], the theme of the importance of a strong Europe is also a major one in the defence field. However, the European experience in the two fields is interpreted differently. In the defence field the EU is striving to acquire the strategic capability worthy of a great power. There is no aspiration to become the equal of the [US] – for instance, in nuclear weapons or aircraft carriers – but to have the independent capability for robust military crisis management even at great distances from Europe proper.”¹³²⁰

At the same time, however, it was obvious that the EU and its major A&D powers recognised that the US economic-technological (“low politics”) threat, if left unchecked, would ultimately have important negative political-military / national security (“high politics”) implications, both for Europe’s relationship with America and its relative standing and power position vis-à-vis the rest of the world. In the post-Cold War era, after all, the traditional demarcation lines separating “low politics” from “high politics” certainly became blurred, if not somewhat reversed (especially when one considers the military spin-on effects deriving from civilian / dual-use technologies). Also, as was already discussed in the previous chapter, increased international competition and the fight over economic growth, technological innovation, and access to information could certainly be “described in realist terms – as economic warfare between leading countries in the world”.¹³²¹ This analytical approach is particularly relevant for the A&D industry, which sits at the intersection of “low politics” and “high politics”.

“By combining a ‘realist’, Machiavellian, approach to international relations with the language of security and the economic insights of ‘strategic trade theory’, advocates of a

¹³¹⁹ LoI (1998), Annex A, Joint Statement of 20 April 1998

¹³²⁰ Moerth (2003) p. 141

¹³²¹ Ibid., p. 160

more mercantilist approach have achieved some intellectual respectability and made some impact, in the US especially."¹³²²

For Europe's leading powers, it was paramount to have a capable, internationally competitive A&D industry; one that could withstand the expected onslaught of the American mega-primes and that provided the Europeans with the necessary "*marge de manoeuvre*" (in terms of technological capabilities, security of supply, etc.) to act militarily without US political backing or material support (also outside NATO if required). Beginning in the late 1990s, European efforts to collectively achieve more independence / autonomy in security and defence matters vis-à-vis America had intensified significantly, both within the EU and NATO. While trying to become more independent from the US, European countries deliberately made further moves towards creating an "ever closer union". These integrative efforts at the political, economic, and military level took place both inside (Euro, ESDP, etc.) and outside (LoI¹³²³, EADS, etc.) the EU's institutional framework.

In the case of EADS and the LoI, the companies and countries involved were willing, in principle, to accept the increased mutual interdependencies and the associated potential political-military vulnerabilities necessary to achieve the goal of an integrated European A&D base. Vis-à-vis the American hegemon, in contrast, the same European countries were eager to avoid the very dependencies and potential vulnerabilities resulting from having a small, fragmented, and technologically inferior A&D industry that could not compete with the US. For EADS and the LoI to materialise, it was necessary to have an "us. vs. them" threat perception and identity-creating processes in Europe. The "Other" was clearly America and its mega-primes, both at the political and the business level.

The creation of EADS (and the LoI) took place against this "threat image", which "is not only instrumental for actors in their pursuit of interests [...] [but] also important in the European identity-building processes".¹³²⁴ In sum, the Europeans seemed more willing to trust each other than they were willing to trust the Americans (at least within the EADS-LoI community of nations). Of course, transnational A&D industrial integration in Europe was certainly facilitated by the trust and institutional cooperation established following several decades of collective efforts to achieve "ever closer union". Furthermore, the four Airbus partners (three of which would subsequently form

¹³²² Cable (1995) p. 307

¹³²³ While the LoI was established outside the EU institutional framework, it nonetheless made reference to the EU's CSFP "Code of Conduct on Arms Exports" for defence trade transactions involving non-LoI countries. See relevant LoI provisions on "Export Procedures".

¹³²⁴ Moerth (2003) p. 159

EADS) were already cooperating through an aerospace consortium that was locked into a high-stakes zero-sum transatlantic dogfight with Boeing: a set-up ideally suited to establishing “us. vs. them” identity patterns.

That being said, America was not simply perceived as a unitary political-economic threat. European A&D companies were very eager to explore partnership / merger options with their American counterparts once the industry restructuring and consolidation on the Old Continent had reached a critical mass. One must not forget that the US restructuring process served as a model for Europe: the creation of a small number of big A&D players. The industrial consolidation processes on either side of the Atlantic clearly interacted with each other. The fact that there were several different, partly competing US mega-primers made it possible for European business executives to (theoretically) conceive entering into potential alliances with select American players (for example, BAE joining forces with LMC, EADS with NGC, etc.): “The case of armaments shows that the [US] seems to be a friend and a foe [of Europe] at the same time.”¹³²⁵

Interestingly, many of the factors at play – EU integration, Airbus vs. Boeing dogfight, etc. – had been present before without causing sovereign European countries to merge their major A&D assets into one company. It took a “Perfect Storm”-type scenario in the late 1990s to achieve a goal that had been politically impossible before. According to Terrence Guay and Robert Callum, four factors explain that the European A&D industry “transformed itself from a collection of medium-sized, nationally orientated firms to one dominated by two giants, with several smaller firms closely linked to these leaders”¹³²⁶: (1) “developments within the US defence industry; (2) the impact of technology and defence economics; (3) general economic restructuring within the EU, coupled with a nascent defence industrial policy; and (4) progress towards the creation of [...] ESDP.”¹³²⁷

Writing specifically about the EU’s internal economic restructuring, Guay and Callum argue that “it is possible that the arrival of the [E]uro, and confidence in the success of a common currency, constitute a major reason why Europeans became more receptive to the idea of further integration in defence”. From that perspective, sharing a common European currency served as a crucial building block towards achieving the integration and shared control of the European A&D industry. It is important to emphasise that these four factors are not independent variables. For example, Guay and Callum posit that “an argument could be made that the external forces [(1) US defence restructuring and (2) technology / defence economics] influenced the timing of the EU-specific

¹³²⁵ Ibid., p. 160

¹³²⁶ (Guay & Callum, 2002) p. 757

factors”. And indeed, the major strides in European A&D industry restructuring were made only after the US mega-mergers were completed. In short, America took the initiative and acted, Europe followed and reacted. In fact, “Given its dispersion among several countries, it was unlikely that Europe’s defence industry would undertake much serious reorganisation before the US sector.”¹³²⁸ For sure, the process of globalisation and the changing dynamics of defence economics (rapidly rising R&DP costs, etc.) affected A&D companies around the world. But as the industry and technology leader, America was the first to wrestle with the dramatic changes that became apparent after the Cold War.

Regarding the EADS “merger of mergers”¹³²⁹, Guay and Callum draw particular attention to the role played by the private sector in accounting for the fact that EADS succeeded while other attempts to pull-off a cross-border A&D merger failed: “The best explanation is that the exigencies of the new defence market had finally become impossible for industry executives to ignore.”¹³³⁰ Indeed, before the “urge to merge” became simply inescapable, A&D business leaders in Europe were generally opposed to cross-border mergers for fear that such large-scale restructuring could undermine the “cosy relationships” the different “national champions” had established with their country’s respective political leadership and military-industrial complex. It is also true that the rapid pace of US A&D industry consolidation in the 1990s – notably the BMD merger – sent European business executives scrambling to achieve the size and critical mass necessary to ensure their survival vis-à-vis the American mega-primers. In the end, Guay and Callum argue, it was the private sector rather than the respective national governments concerned, that took the lead in pushing for EADS.

“The creation of EADS was not driven by national leaders who had for years been preaching the importance of consolidation – sermons that inevitably came to a naught over the political price of job losses; on the contrary, during the highly secretive discussions that led to EADS, the industry executives involved made a conscious and calculated decision to keep their respective national leaders uninformed of the plans until the negotiations had reached an advance stage. By such discretion, political meddling in what was essentially a business decision was kept to a minimum.”¹³³¹

¹³²⁷ Ibid., p. 757

¹³²⁸ Ibid., p. 769

¹³²⁹ In the context of EADS, the term “merger of merger” refers to the fact that several “national champions” agreed to merger their various A&D assets into one new, fully integrated transnational company.

¹³³⁰ (Guay & Callum, 2002) p. 758

¹³³¹ Ibid., p. 761

The initial merger discussions between BAe and DASA were certainly private-sector driven. Both companies were privately held and primarily (if not exclusively) driven by business objectives; factors that explain their natural affinity to one another. As a result, BAe and DASA were less influenced by political considerations than their French counterparts, notably state-owned Aérospatiale before its partial privatisation and merger with the Lagardère Group's MHT to form AM in June 1999. On the French side, businessman Jean-Luc Lagardère emerged as the central player in the EADS merger discussions with DASA.¹³³² On the German side, DCX CEO Juergen Schrempp took the lead in negotiating with the French.¹³³³ As private-sector executives, both Lagardère and Schrempp were instinctively wary of political interferences by their countries' respective leaders and therefore decided to keep the EADS merger discussions largely secret. In the end, however, top-level political backing from the participating countries' governments, especially in Paris, was indispensable for the EADS negotiations to succeed:

“The St. Malo and Helsinki declarations provided the political support for private sector reorganisation. For instance, it is unlikely that the French government would have acquiesced to a merger between Aérospatiale and DASA much before 1999.”¹³³⁴

Earlier pronouncements such as the 1998 LoI also demonstrate that key European governments were, in principle, increasingly willing to move beyond the traditional national security concerns and constraints of the past. European A&D companies, along with the EC and relevant industry associations, were among the first to put the competitive threat posed by America's mega-primers on Europe's wider political agenda. Like in the case of the actual EADS merger discussions, the private sector took the lead in formulating a (first conceptual) response to “the American challenge”. But in-between recognising a problem (i.e., Europe risks being left behind in an economically and strategically important high-technology sector) and trying to provide an adequate private-sector response (i.e., to engage in cross-border consolidation and restructuring to achieve the necessary economies of scale) must come the implicit or explicit political backing of the relevant European governments concerned.

In stark contrast to most other “normal” industry sectors, the primary concern of national political leaders when evaluating the potential implications of cross-border consolidation and restructuring operations in the A&D business has not traditionally been about securing jobs at home. Rather, the primary concern has been about the potential national security implications – i.e., (in)security of

¹³³² Schmitt (2001)

¹³³³ Ibid.

¹³³⁴ (Guay & Callum, 2002) p. 770

supply, etc. – associated with being dependent or interdependent on a foreign company or government for hardware or technology deemed relevant for protecting the country’s military and geo-economic security. Making sure that jobs and, even more importantly, relevant R&DP capabilities remain on national territory are certainly a relevant sub-set of considerations in evaluating virtually any international M&A transaction, both for the corporate and the political players involved. However, it would be a mistake to attribute the long-time inability of Europe’s A&D companies to form fully integrated cross-border corporate entities merely to “concerns at potential job losses” among the different national governments involved. If considerations about maximising economic utility had really trumped national security concerns, Europe’s major A&D companies (that is, at least those forming the Airbus consortium) would have fully integrated their operations long before AIC or EADS (which initially comprised only three of the four Airbus players) saw the light of day.

In spite of (or possibly because of) adopting a “national champions” approach, Europe’s fragmented A&D industry – essentially “a collection of medium-sized, nationally-orientated firms”¹³³⁵ – punched below its international weight and stature for decades. How else could one explain Boeing’s exceptional civil aircraft market position immediately after the BMD merger?¹³³⁶ The pressures to engage in full-fledged cross-border M&A transactions were somewhat softened by the fact that Europe’s major A&D players did cooperate internationally, both among themselves and with non-EU partners (primarily with the US for that matter). And to a certain extent, the remarkable success of Airbus seemed to suggest that the status quo was not only tenable but also working. At the same time, however, these international collaborative efforts were generally very limited in scope and duration. As a result, they were therefore also often subject to the economic pitfalls generated by “juste retour” policies and the uncertainties created by shifting politico-military procurement priorities (for example, Germany’s trimming of the Eurofighter and its A400M military transport orders). One additional reason for companies wanting further cross-border integration was the awareness that development costs for each major new civil / military aircraft were so huge that government support – by several governments – was indispensable.

For the EADS project to go ahead, the respective national governments (prodded, for sure, by the A&D sector) first had to come to the conclusion that the anticipated negative consequences of inaction (i.e., maintaining the status quo and not engage in major cross-border restructuring and consolidation) outweighed the potential risks associated with giving up (partial) direct or indirect

¹³³⁵ Ibid., p. 757

(in the case of privatised companies) national control over their major A&D assets. Europe's major governments confronted the fundamental choice between seeing their "national champions" steamrolled by the American mega-primes and consolidating at the European level by "accept[ing] mutual interdependence and the possibility of abandoning industrial capacity"¹³³⁷. In the end, Germany and France (subsequently joined by Spain) opted for transnational integration and created EADS. For DASA, the bilateral link-up with AM was admittedly only a second-best solution; but it was arguably the only merger option left after BAe's acquisition of GEC-Marconi.

Given the generally close relationship that even fully privatised A&D companies such as BAe / BAE maintain with their home governments, it goes without saying that the (ultimately abandoned) merger talks with DASA would have certainly required top-level political backing for their successful conclusion. There are also reports that the British government did not really like the BAe-Marconi deal and "would have preferred a marriage between Marconi and Thomson-CSF in support of the reorientation of its European defence policy, as symbolised by the Anglo-French St. Malo declaration [...]".¹³³⁸ This episode illustrates at least the *relative* political independence of privately-owned BAe vis-à-vis the British government compared to the much more "dirigiste" ties connecting the French government to A&D industrial base.

The willingness by European governments, expressed in their 1998 LoI, to "accept mutual interdependence and the possibility of abandoning industrial capacity" was of fundamental importance for all the corporate players involved. Knowing that they had been given the top-level political green light, corporate executives at DASA, AM, BAe, etc. then felt free to pursue potential industry restructuring options beyond the confines of the traditional "national champions" approach. Previously, the private sector players would not even have envisioned major EADS-style cross-border mergers as these would have surely been opposed on national security grounds by at least one of the European governments concerned.

At the same time, it is also clear that the pressures of globalisation and the related growing internationalisation of the A&D industry in Europe and America (i.e., cross-border M&As, collaborative JVs¹³³⁹, or the reliance on foreign-sourced / foreign-controlled parts or technologies) resulted in a greater *marge de manoeuvre* for the corporate players vis-à-vis their respective national governments:

¹³³⁶ "Despite a 30 percent market share, Airbus still only has 13 percent of the fleet of civil airliners flying and less than 10 percent of the seats, making it effectively a market entrant still for decades to come." Bruce (1999) p. 127

¹³³⁷ LoI (1998)

¹³³⁸ Schmitt (2000) p. 36

*“What is novel about this [...] movement towards greater Europeanisation of defence matters is undoubtedly the reversal of roles: it is no longer governments that are steering European cooperation on armaments but industry itself that is moving ahead of political constraints and adapting them, precipitating change and now acting as a driving force in the implementation of common defence.”*¹³⁴⁰

In retrospect, Gnesotto’s sweeping statement might well be described as premature and overly broad.¹³⁴¹ To this day, the French and German governments remain the ultimate arbiters when it comes to making strategic EADS decisions: who are the top EADS / Airbus executives in charge and what’s their distribution / break-down in terms of nationalities? Where and how should EADS restructure its operations, close factories, cut jobs, etc.? While the German government would generally prefer to adopt a hands-off / laissez-faire approach vis-à-vis EADS, continuing interferences by the French political leadership in the company’s management have made it imperative for Berlin to respond in kind to safeguard Germany’s political, economic, and military interests. In fact, rather than acquiesce to German demands that Paris sell its remaining 15-percent stake in EADS, the French Senate published a report in June 2007 calling on Berlin to take a direct stake in EADS “to guarantee its interests in the company”.¹³⁴² So far, Germany has refused to take a direct stake in EADS, but has confirmed it was studying a potential “golden share” arrangement that would formally give Berlin special veto rights over strategic decisions (to fend off unwanted investors, etc.).¹³⁴³ In that sense, EADS can certainly be described as a regiocentric company “blending strategic interests with regional integration / national sensitivity”.¹³⁴⁴ One of the long-term obstacles to transnational integration in the A&D sector was the underlying French determination to retain strategic direction from Paris, even as others merged into a European conglomerate. This issue is still not entirely resolved. BAe resolved it by opting out; German executives and policy-makers are still fighting...

¹³³⁹ JV = Joint Venture

¹³⁴⁰ Gnesotto (July 2000) p. v

¹³⁴¹ Another analyst, writing about the defence industry’s growing internationalisation ten years earlier, came exactly to the opposite conclusion: “Why multinationalism? [defined as the rise of multinational corporations that ‘control the shape and level of R&D spending and corporate investment in more than one state’] [...] In many ways [this trend] can be summarised as reflecting the readiness of governments to compromise political preferences for security of supply in order to bring to bear the economic pressures of competition and scale which they hope will bring lower, or rather more bearable, prices. Corporate behaviour reflects changing tolerances and policies on the part of governments.” Taylor (1990) pp. 66-67

¹³⁴² (Reuters & AP, 2007)

¹³⁴³ *The Daily Telegraph* (2007)

¹³⁴⁴ Hayward (1999) p. 9

7.3 Britain and the US Defence Market

Given the long-standing UK-US “special relationship”, senior BAe executives reasoned that they stood a better chance of penetrating the highly lucrative American defence market (and sealing a potential transatlantic merger of equals) if they stayed clear of continental European (especially French) entanglements and instead signed a deal in January 1999 to acquire GEC-Marconi to forge BAE Systems. The US\$12.7 billion acquisition made BAE the biggest foreign defence contractor in the US.¹³⁴⁵ ¹³⁴⁶ ¹³⁴⁷ In mid-November 1999 – even before BAE CEO Weston obtained formal regulatory approval to take over Marconi’s US subsidiaries – he was told by the Clinton administration that further acquisitions in the US would be “welcome”.¹³⁴⁸ In private talks with Weston, Deputy Defense Secretary Hamre conveyed that Washington was opposed to a “Fortress Europe” vs. “Fortress America” approach in defence consolidation. The Pentagon’s #2 official also encouraged BAE to look at ways of expanding its activities in the US market.¹³⁴⁹ Soon after completing the take-over of Marconi and its US subsidiaries (including Tracor) in November 1999, BAE made a bid to acquire Lockheed’s electronics warfare unit AES, including its crown jewel Sanders, the biggest US electronic warfare company. Interestingly, two of the four bidders for AES were either a foreign-owned company (BAE) or had a foreign partner in their consortium (EADS had formed a 20-80 consortium with US-based L-3 Communications).¹³⁵⁰

While Pentagon representatives were adamant that they did not pressure LMC to choose a US bidder over their foreign rivals, it is also clear that at least a few senior DoS and DoD officials leaked their concerns about the BAE and EADS bids to the press. Vago Muradian provides a

¹³⁴⁵ In June 1998, GEC-Marconi’s North American subsidiary completed the US\$1.4 billion acquisition of advanced US defence electronics company Tracor. The UK-US take-over deal received US regulatory approval (CFIUS, etc.) in less than two months; a remarkably short time span given the highly sensitive nature of Tracor’s sensitive Pentagon projects. The Pentagon’s take-over approval was granted based on the condition that GEC-Marconi establish a “proxy board” composed of US citizens with appropriate security clearances in charge of management operations on a day-to-day basis. With the acquisition of Tracor, GEC-Marconi became the largest foreign-owned defence company operating in the US, and the fifth-largest Pentagon defence contractor overall. GEC-Marconi was rechristened Marconi Electronics Systems (MES) before it was spun off from GEC to merge with BAe.

¹³⁴⁶ At the time of their 1999 merger, BAe and MES had a combined annual US turnover of US\$3 billion, making BAE the biggest foreign-owned defence contractor operating in America. Muradian (November 1999)

¹³⁴⁷ In 2006, BAE CEO Turner emphasised that his firm was pursuing a “core strategy of being the premier transatlantic defence and aerospace company”: “In the US we now have a business that turns over some [US]\$10 billion a year, employing 38,000 people in 36 States. We are involved in key programmes for the [DoD], where we now rank as the 7th largest contractor, and for the Intelligence and other federal agencies. [...] Although we are headquartered in London, almost 50 [percent] of our shareholders are American, 26 [percent] of our revenues come from sales in the US, and almost 40 [percent] of our 100,000 employees are in the US.” Turner (2006). According to unnamed US government sources, BAE North America already employed “more than 1,500 US citizens with top security clearances or above” at the time of its bid for AES / Sanders. Muradian (June 2000)

¹³⁴⁸ Harrison (November 1999)

¹³⁴⁹ Ibid.

¹³⁵⁰ The two other AES bidders were American (NGC and private equity firm Carlyle Group).

fascinating insiders' perspective on these US national security concerns and the corresponding underlying anti-foreign / anti-European sentiment and distrust:

“I don't see what's gained in selling one of the most important capabilities we have, that no one else in the world can match, to an overseas buyer,” one senior State Department official said [...]. ‘Any way you look at it, electronic warfare is a very sensitive technology, and very sensitive equals very important, and very important equals must be controlled.’ [...]

‘With L-3-EADS, the problem is ‘How comfortable are you with the French?’ [...] [a] senior defence official said. ‘There are lots of people who still feel that their [French] security is not compatible with the [US]’, in which case would you sell a particularly sensitive capability to a company with a major French component before you go through a process of demonstration that there are adequate technology safeguards? There are people who say this is too early to do that.’”^{1351 1352}

Speculation that the BAE bid for AES-Sanders could be derailed was also fuelled by the April 2000 departure of Deputy Defence Secretary Hamre, one of the Clinton administration's most prominent champions of closer transatlantic A&D industrial links. In an interview I conducted with Dr. Hamre in May 2007, the current President and CEO of the Center for Strategic and International Studies (CSIS) confirmed that he was convinced that BAE's acquisition of Tracor and AES-Sanders posed no threat to US national security. In Hamre's view, the security standards and firewalls established by BAE through its US subsidiary even exceeded the security measures taken by many US A&D companies. In the end, the BAE-AES deal received Washington's regulatory approval in late November, making it the biggest transatlantic defence merger to date.¹³⁵³ BAE's unprecedented

¹³⁵¹ Muradian (June 2000)

¹³⁵² US suspicions of the French, and their relaxed approach to third-country exports, remained much stronger than of the UK or even Germany.

¹³⁵³ Shortly after the BAE-Sanders take-over deal was announced, one US journalist described the following scenario to illustrate the potential problems and risks associated with the acquisition of a leading US defence company by a foreign rival: “One of the most troublesome issues in the sale of Sanders to a non-US company [BAE] is the matter of protecting newly acquired sensitive intelligence data, although Britain is one of our closest allies, and typically there is close coordination between the two nation's intelligence agencies. For example, if the Pentagon's Defence Intelligence Agency learns that Russia is developing a new anti-aircraft missile designed to counter the signal radiated by the ALE-55 towed decoy, in the past Sanders would be promptly informed so it could develop an effective countermeasure. Observers question whether word of a new Russian threat and a Sanders-developed countermeasure could be withheld from BAE's management. The reason is that BAE, which is developing the FOTD [Fiber-Optic Towed Decoy] for the new Eurofighter, would need to incorporate a similar fix as quickly as possible. Further, it seems likely that the problem / solution would leak to France's Thomson-CSF which has a joint program with BAE to develop a FOTD for French military aircraft. A related problem is likely to arise in dealing with BAE's foreign sales. For example, if BAE obtains British government approval to sell its Eurofighter FOTD to a former Soviet Bloc country, which the Pentagon opposes because the British FOTD employs a novel modulation similar to one devised by Sanders for the ALE-55, will BAE need to prove that the technique originated in its British operation?” Klass (2000). According to press reports, US Defense Secretary William Cohen also requested “to be kept continually briefed on the status of the transaction as it

take-overs of Tracor and AES / Sanders were a powerful reminder that “The British are trusted with technology, and are allowed to buy into the US market, in a way that the French and the Germans are not.”^{1354 1355}

In February 2000, following twelve months of negotiations, US Defense Secretary William Cohen and his British counterpart Geoffrey Hoon had signed the “US-UK Declaration of Principles for Defence Equipment and Industrial Cooperation”.¹³⁵⁶ The non-binding declaration was to provide a road map for strengthening bilateral US-UK defence industrial cooperation, notably with regard to “harmonization of military requirements, assurance of supply of defence goods and services, export procedures, information and technology security, ownership in corporate governance, and R&D cooperation”.¹³⁵⁷ According to senior Pentagon officials, the declaration reflected the fact that the US had become “more open-minded” about defence industrial cooperation, both with regard to the UK and other allies around the world.¹³⁵⁸ The May 1997 take-over of Tracor by GEC-Marconi was described as “groundbreaking in the sense of the size of the deal, the complexity of the deal, and the sensitivity of the technology involved”.¹³⁵⁹ The Pentagon also reiterated its opposition to fully-fledged transatlantic mega-mergers (at the prime contractor level) and instead argued in favour of more joint US-European projects (teaming arrangements, joint ventures of varying size and complexity) as viable alternatives. The Pentagon’s opposition to such mega-mergers was “not [...] a matter of philosophy, but [...] a matter of practicality”.¹³⁶⁰

During my interview with Dr. Hamre, he pointed out that the BAe-Marconi merger had made it virtually impossible to achieve a full-blown US-UK mega merger in the future (i.e., NGC-BAE). LMC and Boeing (or whatever firms were left out) would have strongly lobbied against any US-UK

moves through the regulatory process. Sources have said that Cohen’s request is unprecedented, but necessary given the importance of AES to US national security.” Muradian (September 2000)

¹³⁵⁴ (Guay & Callum, 2002) p. 761

¹³⁵⁵ Washington and London maintain a bilateral “Defence Priorities and Allocations System” (DPAS) allowing the two governments to “seek urgently needed (often classified) equipment through firms that have signed up to special streamlined order-processing procedures”. UK House of Commons (2003) paragraph 44. “Since 1990, the UK has received such US assistance under these provisions on 170 occasions (including on eight for the recent Iraq War), while the UK has assisted the US four times. Ibid. (footnote no. 115)

¹³⁵⁶ (US DoD & UK MoD, 2000)

¹³⁵⁷ DoD (2000) p. 2

¹³⁵⁸ At the time, the Pentagon was involved in similar talks with France, Germany, the Netherlands, and Australia. Furthermore, the US confirmed that Sweden would eventually also be included in that group. See Ibid., p. 6. James Bodner, the Principal Deputy Under Secretary of Defense for Policy, expressed the Pentagon’s rationale behind the new “open-mindedness” towards international defence industrial cooperation as follows: “[E]nsuring [US] national security requires that we do both – we have to have effective export controls and technology security, and we also have to have effective mechanisms for international cooperation in defence products and services. We need to prevent technology from going where we do not want it to go, and at the same time we have to facilitate the technology transfers to and from those with whom we expect to conduct military operations in the future.” Ibid., p. 1

¹³⁵⁹ Ibid., p. 5

¹³⁶⁰ Ibid., p. 8

merger deal involving BAE Systems by arguing that it put the other US players at a distinct competitive disadvantage vis-à-vis the newly created transatlantic defence giant. In other words, if it had not been for the creation of BAE Systems, BAe and GEC-Marconi individually would have been prime candidates for potentially two separate US-UK equity mergers involving at least two different American partners. “The Brits have themselves and the BAe-Marconi deal to blame for the fact that there were no transatlantic mega-mergers.”¹³⁶¹

Despite the long-standing “special relationship” between Washington and London, the DoD representatives acknowledged that there still remained major political and institutional barriers preventing closer US-UK (let alone transatlantic / international) defence industrial cooperation; chief among them complex, cumbersome US export licensing procedures.¹³⁶² According to its Pentagon backers at the same time, the Declaration of Principles laid forth “a road map that we intend to walk down, leading potentially to other agreements that would be legally binding, that would in fact change systems and processes”.¹³⁶³ In the end, however, British hopes that this document would herald a major shift in American strategic thinking and significantly facilitate closer US-UK defence industrial cooperation would be dashed.

Most disappointingly, there was only very little progress regarding the easing of US export restrictions. Washington did not grant Britain the much-coveted ITAR waiver status, an important step that would have made it much easier for companies active in both countries to transfer unclassified defence goods and technologies across the Atlantic without first going through the regular export licensing processes. According to BAE Chairman Sir Richard Evans, “the principal [ITAR waiver] benefit would be a much greater degree of interchange between individuals engaged in our companies on joint programmes [...]”.¹³⁶⁴ While the US-UK negotiations were delayed by the change of administrations in Washington as well as the 9/11 attacks, both sides had largely reached an agreement on the ITAR waiver by 2002.¹³⁶⁵ However, the deal was defeated in the House of Representatives, where Henry Hyde (R-IL), Chairman of the International Relations Committee, refused to pass the agreement – above all for reasons related to US national security / “leakage” of US technology to third parties.¹³⁶⁶

¹³⁶¹ Hamre (2007)

¹³⁶² “In preparing to have these discussions with the [UK], [the Pentagon] [...] surveyed some US concerns and asked for their views as to what the impediments, were. And the largest single impediment that was identified by everyone was the export license process, [...] an area that we are paying particular attention to.” DoD (2000) p. 3

¹³⁶³ Ibid.

¹³⁶⁴ UK House of Commons (2003) paragraph 47

¹³⁶⁵ Ibid., paragraph 49

¹³⁶⁶ Ibid., paragraph 49. House Armed Services Committee chairman Duncan Hunter (R-CA) was another prominent opponent of the UK ITAR waiver.

To this day, America has failed to grant ITAR waiver status to Britain, and the matter has become a source of growing disappointment and frustration on the other side of the Atlantic. As Pierre Chao and Robin Niblett warned in May 2006:

*“In the last few years, [...] one long-standing irritant is growing into a major tension and now threatens the closeness of the bilateral [US-UK] relationship. The issue revolves around the limits and restrictions that [America] imposes upon UK access to US defence technologies, and the inability or unwillingness of successive US administrations to change the situation measurably despite their stated intention to do so.”*¹³⁶⁷

The core of the problem is that the UK, while being America’s closest security ally, is also viewed by policymakers in Washington “through the lens of its potential – like any other country – to be a gateway for sensitive US technologies to third countries or actors”.¹³⁶⁸ For the United States, “maintaining technological superiority over all potential adversaries is a central national priority”.¹³⁶⁹ While American restrictions on UK (and transatlantic / international) technology transfers are primarily driven by US national security concerns, Chao and Niblett also identify related commercial / mercantilist motivations.

*“Some US officials as well as corporate executives are not always disposed to give to their UK partners intellectual property and technologies that have been developed with substantial amounts of US taxpayer dollars while the UK is unable to make equal investments to achieve similar advances – especially when such transfers could enhance the competitiveness of UK defence firms vis-à-vis their US counterparts in the UK, European, and global defence markets.”*¹³⁷⁰

Chao and Niblett warn that restrictions on US defence exports and technology sharing, if left unaddressed, could have potentially serious negative political, military, and economic repercussions for both countries. From the British perspective, the existing impediments to closer US-UK defence industrial cooperation interfere with London’s stated objective of achieving “operational sovereignty” over its key weapons systems. To that end, the UK wants to be in a position to independently “maintain, operate, upgrade, and modernize its key weapons platforms purchased from the [US] or other third parties”.¹³⁷¹ ¹³⁷² Of course, British firms already enjoy much better

¹³⁶⁷ (Chao & Niblett, 2006) p. 9

¹³⁶⁸ Ibid., p. 25

¹³⁶⁹ Ibid., p. 6

¹³⁷⁰ Ibid., p. 26

¹³⁷¹ Ibid., p. 4

(i.e., more lucrative) access to American technologies and the US defence market than any of their European competitors.¹³⁷³ That preferential access, however, comes with certain trade-offs and with a certain price. BAE, for example, is compelled to create “two-pillar structures that undermine the logic of having Anglo-American defence firms and limit the hoped-for synergies”.¹³⁷⁴

“If the issue of information and technology exchange is not ultimately resolved, shareholder pressure and management frustration will force an unwinding of these transatlantic industrial relationships, to the detriment of both the [US] and UK.”¹³⁷⁵

“[I]f the [US] and the UK, the two closest of allies, are unable to overcome the continuing obstacles to the efficient sharing of defence-related technologies, what hope is there for broader transatlantic defence industrial and technological cooperation?”^{1376 1377}

As one US analyst summed up Europe’s difficulties to enter the American defence market:

“For European arms producers, then, entrance into the US military market for sales and collaborative programs is critical for both the economic viability of their defence industries and the technological sophistication of their armed forces. However, it entails a Hobson’s choice: accepting US technology-transfer constraints. Unwilling to lose control over the destination and use of its exported technologies, services, and technical data, the [US] requires that even close allies agree to retransfer / end-user restrictions and conform to key US export controls. From the perspective of other governments, the cost of entry to the US market is increased dependence for them and greater political leverage for the [US].”¹³⁷⁸

1379

¹³⁷² “The central British concern was their desire for operational sovereignty. The UK did not seek, or need, to produce or own [IP] for every part of the JSF. But the UK asserted the need to make deliberate and independent decisions on a capability – especially in an operational context. In their view, the UK forces must be able to operate independently and without continually seeking permission – or worse, struggling to get permission – for the latest software updates, threat information, etc. The UK has its own operational approach and seeks to act autonomously in operations, even when operating systems they acquire from or develop with the [US].” Bialos (2009) vol. II, p. 573

¹³⁷³ (Guay & Callum, 2002) p. 761

¹³⁷⁴ (Chao & Niblett, 2006) p. 5

¹³⁷⁵ Ibid., p. 5

¹³⁷⁶ Ibid., p. 3

¹³⁷⁷ “[T]echnology licensing on the JSF remains a sore spot to this day and highlights an underlying reality of the long-standing US policy of keeping defence strategy and armament cooperation largely divorced from technology transfer policy. JSF is only the latest of a series of cooperative programmes on which the [US] and its allies have faced intractable technology issues.” Bialos (2009) vol. II, p. 573.

¹³⁷⁸ Neuman (2006) p. 439

¹³⁷⁹ There are also long-standing European suspicions that US end-user controls were sometimes misused (and had been misused) to disadvantage European companies when competing for exports with US firms.

Chapter 8: Conclusion

This thesis uses the theory of realism to demonstrate that transatlantic rivalries over the political, military, economic, and technological power and prestige derived from the A&D industry exist even among close Western NATO allies. The specific findings of this thesis can be summarised as follows: the US – which became the world’s sole superpower after the end of the Cold War – adopted an ethnocentric approach to US A&D industry consolidation in an effort to better defend its hegemonic position in the international system vis-à-vis potential challengers, both in Europe and beyond. Realist / neo-mercantilist concerns about the potential national security / economic risks associated with foreign dependence, unauthorised technology transfers / proliferation, as well as the implications of foreign ownership, control, and influence vis-à-vis the US domestic A&D industrial base clearly shaped the choices and preferences of policymakers in Washington, DC, particularly on Capitol Hill.

The US government and especially Congress feared that large-scale, full-fledged transatlantic A&D mergers could seriously undermine America’s military-technological lead by facilitating potential leakages of sensitive military / dual-use technologies to European NATO partners as well as third countries around the world. Commercial aerospace companies also provide significant economic benefits (including export earnings, jobs, and technology clusters) for their respective home countries, thus providing powerful neo-mercantilist incentives for national governments to prevent these firms from falling into the hands of foreign competitors. In America, aerospace companies have been the most important industrial contributor to US merchandise exports since the 1950s. In 2008, for example, that leading US export sector alone had a positive external trade balance of more than US\$62 billion while the country as a whole ran a gaping trade deficit (-US\$816 billion). To ensure that the defence / military as well as the economic-technological benefits of that key strategic industry sector continued to benefit primarily the United States, policymakers in Washington decided to foster the creation of US mega-primes under American control and majority-ownership. After all, if US companies had been allowed to merge with their European counterparts, the US government would have enjoyed far less influence and leverage over these new transatlantic mega-primes than is otherwise the case under the constraints of an ethnocentric consolidation of the American A&D industry.

This ethnocentric approach to A&D industry consolidation is fully in line with the key tenets of realism, which would predict, in essence, that sovereign, independent states will try to prevent strategic companies / industries of critical importance to their national security and survival from coming under full or even partial foreign control. During the 1990s, relations between Washington

and many of its European allies were strained over a number of different issues, ranging from the Kyoto Protocol to the ICC as well as the EU's attempt to establish a common security and defence policy to act independently of the US and NATO if necessary. Since America and Europe were no longer united by a common Soviet threat and found themselves increasingly at odds over the fundamental principles governing the exercise of power in the international arena (unilateralism vs. multilateralism, etc.), it is not surprising that Washington was not eager to provide the Europeans and their A&D players with the substantial relative gains (in terms of access to US state-of-the-art technologies, etc.) that full-fledged transatlantic mergers of equals would have entailed. Washington also feared the potential proliferation of sensitive US technologies from Europe to third countries and that such transfers could result in countermeasures that would jeopardise the survivability of US systems. France's relatively liberal export control policies were deemed to be of particular concern.

According to realism, international cooperation is constrained by sovereign states' fears that such a strategy could (1) cause a relative shift in the existing international balance of power configuration (i.e., by allowing one of the partners to derive a disproportionately greater benefit from cooperation than the other) and (2) create new national security vulnerabilities due to the increased dependency on other countries associated with heightened cross-border cooperation. In the US case, realist-type considerations were certainly driving the ethnocentric approach to A&D industry consolidation adopted by Washington in the 1990s. In realist terms, the potentially uncontrolled diffusion of proprietary, cutting-edge US technologies in the strategically important A&D sector – be they for military, civilian, or dual-use purposes – to European countries and beyond certainly risked causing a corresponding (relative) loss of American power and influence vis-à-vis the rest of the world. In fact, after it had emerged as the world's sole superpower during the early 1990s, the American hegemon stood even less to gain and even more to lose from international / transatlantic A&D industrial cooperation than during the Cold War – a time when transatlantic A&D trade (the success of Airbus notwithstanding) was essentially a “one-way street” from America to Europe. In November 2002, Burkard Schmitt provided a succinct summary of the various factors hampering closer transatlantic A&D industrial cooperation:

“In the US, both the political leadership and the armed forces are extremely reluctant to rely to any extent on foreign suppliers. On the other hand, in Europe there is widespread anxiety in many arms-producing countries about the possibility of US market hegemony. Both attitudes make it very hard to create a positive political climate for transatlantic

armaments cooperation. Even more important, transatlantic cooperation is hindered by a fundamental imbalance of power between the US and Europe: [...]

The US has such enormous financial resources, defence-industrial assets and military capabilities that they simply do not need armaments cooperation or arms imports. From the US perspective, the potential benefit of transatlantic cooperation is, at best, the cohesion of the Alliance. This argument, however, is hardly sufficient to overcome bureaucratic and political resistance. [...]

*Last but not least, the US pursues an explicit and coherent strategy for defence-related industries, aimed at technological superiority in all relevant sectors.*¹³⁸⁰

The Clinton administration's call for major A&D industrial consolidation at the 1993 "Last Supper" was primarily driven by the projected drastic post-Cold War cuts in Pentagon procurement, R&DP, etc. during the 1990s. Washington stressed that it wanted the various US prime contractors to consolidate quickly to reduce overcapacities and drive down costs in order to allow the Pentagon to get "more bang for the buck". It appears that the DoD planners were trying to seize on the unique strategic opportunities afforded by America's "unipolar moment". For the American hegemon it was important to use its massive (military) procurement and R&DP dollars wisely to preserve its dominant position in the A&D industry well into the 21st century. In retrospect, one can of course argue that the unprecedented consolidation process in the American A&D sector was bound to occur anyway and would have happened even without US government intervention:

*"Today, the industry is stronger than it would have been absent consolidation, albeit not without major challenges remaining. Not only has the government benefited greatly, so did the shareholders. Sadly, the burden was borne by that large number of very loyal, able employees who paid the price of the restructuring as the industry downsized and their jobs vanished. [...] Perhaps the greatest irony is that it was inevitable that much of this restructuring would occur sooner or later, anyway."*¹³⁸¹

The sequencing of events on both sides of the Atlantic clearly indicates that large-scale A&D industry consolidation was driven by the US, with the Europeans lagging behind and essentially confined to a largely reactive role. The unique status of the US A&D industry as *the* strategic industry sector *par excellence* – one that remains largely closed off even to America's NATO allies, including Britain – is powerfully illustrated by the fact that major transatlantic M&A deals took place in many non-strategic business sectors during the 1990s. European companies moved to

¹³⁸⁰ Schmitt (2002)

¹³⁸¹ Augustine (2006)

acquire or merge with major US companies – including Chrysler, BankersTrust, and VoiceStream – and were ultimately able to overcome all obstacles (political, regulatory, or otherwise) to successfully conclude their M&As. In other words, the A&D business is arguably the one major industry sector where large-scale, full-fledged transatlantic M&A merger of equals involving US prime contractors and their European counterparts have never even been attempted because they would have most certainly been blocked by either the US government or lawmakers on Capitol Hill. In that sense, the US A&D industry – despite the undeniable pressures of globalization embodied by increasing internationalisation and cross-border collaboration that have become even more apparent in recent years – remains to this day a unique, strategic industry sector with enormous relevance for American national security and military-technological leadership in the world.

The closest that the Clinton administration – or any US administration for that matter – came to supporting a full-fledged transatlantic A&D merger was when the Pentagon’s senior leadership (primarily Deputy Defense Secretary Hamre) contemplated a potential NGC-BAe link-up as an alternative to the blocked NGC-LMC merger. In the end, however, this really bold idea never materialised. In my interview with Hamre, he emphasised repeatedly that the Pentagon, in principle, had been “open” and “receptive” to such a transatlantic deal. In the end, according to Hamre, the surprise BAe-GEC-Marconi merger announced in January 1999 spelled the end of the envisioned NGC-BAe tie-up. Once BAe Systems had been formed, a full-fledged transatlantic merger with NGC was no longer feasible, since rival US companies (primarily Boeing and LMC) would have strongly lobbied against the creation of such a powerful competitor.

In Dr. Hamre’s view, a NGC-BAe merger (potentially followed by other US-UK / transatlantic A&D deals) would have been the most effective step to prevent the potential emergence of a protectionist and antagonist “Fortress America” vs. “Fortress Europe” scenario. It is doubtful, however, whether even the strong backing by a handful of senior Pentagon officials would have been enough to overcome the deep-seated hostility and scepticism within Congress (and the State Department) vis-à-vis full-fledged A&D mergers with European companies, even one with such an excellent security track record such as BAe. But even if the envisioned NGC / BAe deal had come to fruition, it would most likely have done little, if anything, to pave the way for a full-fledged merger between other American mega-primes and their Continental European counterparts. US realist / neo-mercantilist concerns about the potential national security risks associated with A&D industrial cooperation with mainland Europe were even much greater than those related to working with UK companies.

In Europe, the transnational EADS merger can also be explained and interpreted by a predominantly realist analytical framework. By pooling their major A&D assets into one company, France, Germany, and Spain were trying to foster the creation of an economically and technologically competitive European champion that would be able to survive the onslaught of the emerging American mega-primes. It is important to differentiate between the interests and motivations of European corporate leaders and their political counterparts. For the key French and German private sector A&D executives driving the EADS deal (the Lagardère Group's Jean-Luc Lagardère and DaimlerChrysler's Juergen Schrempp), the merger was above all about improving their relative international competitiveness by gaining the critical mass necessary to realise economies of scale that could only be reached by going beyond the confines of the respective French or German "national champions". Their primary motivations were business-driven, focused on maximising corporate profits and shareholder value.

Lagardère and Schrempp each wanted to join forces and "balance" against the US mega-primes to avoid being permanently relegated to the status of much smaller, technologically inferior A&D subcontractors for the Americans. This kind of "technology-gap fever" was essentially the primary motivation behind earlier catch-up efforts led by the EC and the relevant industry associations, which put the issue of Europe's threatened competitiveness (again) on political radar screens in the mid-1990s. According to neo-realism, international tensions, rivalries, and conflicts among sovereign states are not merely played out in the "high politics" arena of traditional military security. Neo-realism adopts a much broader analytical approach to inter-state competition for power, influence, and security. In particular, it recognises that the "low politics" of economics and technology are important shapers of state motivations and capabilities in the anarchic international system. From a realist / neo-mercantilist perspective, a country's A&D industry is arguably a unique strategic sector, sitting right at the intersection of national security ("high-politics") and business / economics / technology ("low politics"). In recent decades, the industry's strategic position has been further strengthened by the growing importance of dual-use technologies relevant for military security as well as economic power and international competitiveness, with the two latter factors being key sources of national power and greatness in a globalised world economy.

Neither the French nor the German business leaders involved in the creation of EADS had any interest in seeing this transnational merger foster the emergence of a "Fortress America" vs. "Fortress Europe" confrontation. Escalating protectionism on both sides of the Atlantic would have severely hurt EADS's bottom line. A&D industry leaders in Germany and even France (let alone the UK) shared a strong desire to gain access to the lucrative American defence procurement

market. From the private sector's perspective, the Franco-German EADS merger must therefore be seen as a potential stepping stone towards achieving more, closer, and above all more balanced transatlantic A&D industrial cooperation with America and its mega-primes. For Europe's business executives, the much-hoped-for benefits of closer collaboration with America (including potential transatlantic mergers of equals) were access to the lucrative US defence market and its state-of-the-art technologies. The business leaders driving the EADS deal forward were not mere puppets or agents of their respective national governments. For the executives involved, joining forces to create EADS and to collectively gain the critical mass necessary to compete with the American mega-primes was a matter of survival. Taken individually, the French, German, and Spanish A&D "national champions" were much smaller than Boeing, LMC or NGC. Even if Washington had authorised full-fledged transatlantic mergers, these link-ups could never have been balanced merger of equals because of significant size differences between the respective European and US firms. In this situation, combining several of the European "national champions" to create EADS seemed to be the best – if only – way forward.

To put the EADS merger into its proper European and transatlantic context, one must also analyse the interests and motivations of the political actors involved. Paris and Berlin (as well as Madrid) had to approve this unprecedented full-fledged transnational link-up in a strategic sector of such vital importance for their countries' respective national security. Several factors both external and internal to the EU spurred the bloc's two leading powers – the Franco-German engine – to venture into a political, strategic, and military territory (i.e., the EADS merger) where neither one of them, nor any other countries in the world, had gone before. It is important to differentiate between external and internal political factors pertinent to the creation of EADS. Externally, the end of the Cold War had drastically reduced Europe's strategic dependence on the US. During the 1990s, with the Soviet threat gone and America emerging as the world's sole superpower, one could witness an increase in transatlantic tensions over a number of issues, ranging from the ICC and the Kyoto Protocol to the French-led attempt to build an EU security and defence capability autonomous of NATO. The ESDP effort, in particular, raised American suspicions that Europe was trying to position itself as a counterweight and political-strategic competitor to Washington. In trade and business, after all, US and European companies were already competing head-on in a vast range of sectors, including, very importantly, the A&D industry (Airbus vs. Boeing, etc.).

Beginning in the 1990s, French-led ESDP ambitions and fundamental transatlantic differences over the rules and constraints imposed by international law and multilateral organisations put the Old Continent at odds with the American superpower. At the external level, it was therefore relatively

easy for key EU members like France and Germany to come to think of America as “the other” – that is, the crucial if not indispensable element in any collective identity-building process. Transatlantic political differences with Washington, coupled with the preponderance of US power in the international system, naturally called for selective European counterbalancing against the American hegemon. Here again, realism provides the most appropriate analytical framework to explain (Continental) European anti-hegemonic counter-balancing actions vis-à-vis the US superpower during the 1990s. For sure, neither Paris nor Berlin had the ambition or capacity to turn the EU into an all-out strategic / military competitor to the US. Even extremely far-reaching neo-Gaullist aspirations notwithstanding, such an ambitious full-fledged counterbalancing project would have been certainly doomed to fail. However, the unwillingness and inability by Paris and Berlin to transform the EU into an all-out strategic / military competitor rivalling the US did not mean that the two countries were not able to get their act together when core national security and economic interests – i.e., the need to maintain capable, technologically advanced and internationally competitive A&D companies (including their respective national champions as well as Airbus) on their territory – were threatened by the American mega-primers. From the perspective of Europe in general, and of that of France and Germany in particular, the rapid ethnocentric consolidation of the US A&D industry (especially in the context of the BMD merger) seemed to be part of America’s ambition to preserve its post-Cold War superpower status and prevent the rise of any potential peer competitors (including its European NATO allies).

The perceived competitive threat posed by the BMD merger was compounded by the fact that any weakening of Europe’s (relative) economic and technological position in the international A&D industry was bound to have a corresponding negative impact on its ability to act collectively as an independent security and defence policy player (that is, outside of NATO if necessary). For example, the Kosovo War in the spring of 1999 served as a powerful reminder of Europe’s dramatic military and technological deficits compared to the US and subsequently made the strengthening of the Continent’s A&D industrial capabilities an important priority for policymakers in Paris, Berlin, London, and beyond. In this context, it is noteworthy how the governments of the major EU arms-producing countries (LoI members France, Germany, Italy, Spain, the UK, and later Sweden) repeatedly emphasised the crucial role played by the A&D industry in terms of providing the underlying basis for the power-projection capabilities necessary to conduct EU-led security and defence operations abroad. In the context of the RMA debate during the 1990s, airpower was seen as an indispensable element of network-centric warfare in the future. In April 1998 the defence ministers of France, Germany, Italy, Spain, and the UK issued a Joint Statement confirming that “a strong, competitive and efficient defence industry is a key element of European security and

identity as well as of the European scientific and technological base”.¹³⁸² In their July 1998 LoI, all six European countries even agreed to “accept mutual interdependence and the possibility of abandoning industrial capacity”. The American hegemon, in contrast, would never have signed off on such a sweeping statement; for Washington it was of paramount importance to maintain unmatched technological superiority in all relevant sectors with a maximum degree of industrial independence and autonomy – even vis-à-vis close Western allies. In the A&D industry, “high politics” and “low politics” are inextricably intertwined.

On the internal European level, the creation of EADS also reflected the fact that during the 1990s, key EU members like France and Germany had made great strides in terms of advancing Europe’s economic and political integration. For example, the founding members of the Eurozone – which, interestingly, included the two EADS partners France and Germany, but not the UK – decided to create a common European currency; an unprecedented step that required the pooling of national sovereignties and the corresponding acceptance of major political, economic, and financial interdependencies. In fact, even the launch of the Euro can at least partly be interpreted from a realist perspective, namely as a Franco-German-led attempt to provide the necessary macro-economic and financial framework to improve the EU’s competitiveness compared to other major regional blocs in the world – notably the US.

The great political importance attached by Paris and Berlin to the creation of EADS was also illustrated by the fact that French Prime Minister Jospin and German Chancellor Schroeder participated in the signing of the EADS founding agreements in Strasbourg – a city symbolic of Franco-German reconciliation and European integration – in October 1999. In early December 1999, Spanish Prime Minister Aznar was again joined by his Franco-German counterparts on the occasion of CASA’s entering EADS. The fact that top government leaders from France, Germany, and Spain were present at the creation of EADS underscores the important political dimension of this unprecedented transnational A&D merger. EADS was not a “normal” cross-border M&A transaction in Europe. For sure, one could argue that the direct EADS shareholdings of the French and Spanish governments were the reason why Prime Ministers Jospin and Aznar participated at the signing ceremony for the new company. However, when French and Dutch flag carriers Air France and KLM announced their merger in 2004, neither the French nor the Dutch prime ministers were present.¹³⁸³

¹³⁸² Annex A, Joint Statement of 20 April, LoI

¹³⁸³ As a result of this merger, the French government’s stake in Air France dropped from 54.4 to 44 percent.

Finally, realism can also account for BAe's decision to pull out of the merger negotiations with DASA and to join forces with GEC-Marconi instead. According to realist theory, there are two basic strategies to deal with a hegemonic power in the international system. The first approach is to try to balance against the hegemon, namely by forging countervailing alliances with like-minded states in the international arena; the second strategy is to bandwagon with the hegemon, that is, to support the hegemonic power in an attempt to safeguard one's own survival or to share in the hegemon's spoils of conquest. From BAe's perspective, agreeing to a full-fledged merger with the German and French "national champions" would have been tantamount to attempting to balance against the American hegemon. In particular, the eventual participation of France in a British-German UK-DASA tie-up would have risked raising serious suspicions in Washington about the trustworthiness and ultimate political orientation of the UK's biggest A&D company. GEC-Marconi's Tracor acquisition had demonstrated that UK firms were granted unprecedented access to America's defence industrial base because of the UK-US "special relationship". A full-fledged BAe merger with one of its Continental European counterparts would have dealt a serious blow to the company's efforts to expand into the American A&D market. It is interesting to note that Tony Blair's pro-EU government preferred that BAe join forces with the German and French "national champions" rather than merge with GEC-Marconi. Ultimately, however, the BAe leadership – without being over-ridden by government direction – decided otherwise and opted for the creation of a UK "hypernational champion" instead. Clearly, the Blair government was not following the dictates of realist theory.

In realist terms, BAe's decision is tantamount to bandwagoning with the US hegemon. For BAe, the hoped-for benefits of staying on good terms with the Americans – i.e., improved access to the vast US defence procurement market, etc. – outweighed the anticipated benefits derived from a potential pan-European German-Franco-UK A&D tie-up. Rather than joining an emerging European alliance to balance against the American hegemon, BAe's leadership reasoned that it was better off if it stayed clear of Continental "entanglements" and pursued a decidedly US-focused corporate strategy instead. After all, it was the American superpower – and not European countries like France or Germany – that would have the necessary resources to award lucrative procurement deals worth hundreds of billions of dollars in the future. BAE System's subsequent decision to sell its 20 percent stake in Airbus is further evidence of the company's major strategic reorientation and focus on the US market. Given BAE's successful transformation into one of the top US defence contractors, a 20-percent stake in Airbus – a company widely criticised in America for its alleged improper reliance on European government subsidies – could have created perceived conflict of interest issues and / or raised potential doubts about the national security trustworthiness of the

British firm. By selling its 20-percent stake in Airbus, BAE left no doubt about the fundamental priorities driving its corporate strategy: America first, Europe second. The EADS merger, in contrast, was driven by a different logic: Europe first, America potentially second (in terms of a transatlantic merger-of-equals with a US mega-prime).

By analysing the different consolidation processes in the American and European A&D industries during the 1990s, this thesis provides new, relevant insights into the potential for international competition and cooperation, both among states and companies. States compete with each other for power, wealth, status, prestige, etc. in the international system (“high politics”). Companies compete with each other for profits, markets, innovative technologies, etc. in the globalised economy (“low politics”). A&D companies are unique in the sense that they sit at the intersection of both political worlds. The A&D industry’s relative performance and technological sophistication has a direct impact on the national security and economic competitiveness of its respective home countries.

This thesis also examined the question as to which actors – national governments or private-sector companies – were the driving forces behind the A&D industrial consolidation processes in America and Europe. In the US, it was the government, led by the Pentagon, which took the lead in convening the 1993 “Last Supper” and convincing the assembled business leaders that they had no choice but to “consolidate or die”. Washington facilitated the consolidation processes by relaxing anti-trust restrictions and absorbing some of the M&A related adjustment costs. In America, the government played a crucial role in initiating the consolidation process; afterwards, however, it was up to the privately owned A&D companies to work out the details: who merges with whom? Who sheds which business areas, etc.? While the US government did little to micromanage the actual consolidation process during the 1990s, the Pentagon stepped in again after a new leadership there felt that the “urge to merge” had gone too far and that it was time to rein in the private sector to maintain a certain minimum level of competition among different US mega-primes. As a result, the proposed LMC-NGC mega-merger was blocked; a sudden change of heart on the part of Washington causing surprise and dismay among the business leaders involved. The decision also marked the end of the “merger mania” era in the American A&D industry.

In Europe during the 1990s, in contrast, the competitive threat posed by the rapidly consolidating American mega-primes was first recognised by the A&D companies themselves. Relevant industry associations and the EC began to frame the issue as part of the Old Continent’s long-standing concern about a (widening) “technology gap” vis-à-vis the US; an urgent issue that required a

coordinated response to ensure the continued independence and survival of the European A&D industrial base. The private sector took the lead in defining the problem and putting it on Europe's political radar screen. Earlier types of "technology gap fever" had already struck the Old Continent back in the 1960s, 1970s, and 1980s without causing any major transnational mergers in the A&D sector. In this context, the Airbus consortium stands out as the most successful, if only, collective European response to "*le défi américain*". During these earlier times, the challenge was primarily defined in economic-technological, i.e., civilian terms. In the 1990s, in contrast, the new American challenge also acquired a deeper strategic dimension: a competitive European A&D industrial base was seen as an indispensable element of a stronger, more capable EU that can autonomously safeguard its international security interests even without American backing.

While the negotiations about the potential transnational consolidation of the European A&D sector (e.g., EADS, BAe-DASA, DASA-CASA) were initiated and driven by private-sector executives, it is also clear that the talks would not have taken place and could not have been concluded successfully (in the case of the EADS merger) without the political backing of the respective national governments. It is fair to say that Paris, Berlin, London, or Madrid would have intervened (either openly or behind the scenes) to block a cross-border consolidation transaction involving their "national champions" that was deemed harmful to their national security interests. It was only after Europe's key governments had recognised that "business as usual" was no longer an option that full-fledged transnational A&D mergers like EADS were seriously contemplated by the private-sector executives. Also, Jean-Luc Lagardère and Juergen Schrempp would not have been interested in forming EADS if it had not been for the French government's decision to at least partially privatise Aérospatiale. Here again, real progress on private-sector-led A&D industrial consolidation required the appropriate political framework (i.e., the green light on partial privatisation from Paris).

This thesis conclusion provides not only a summary of its analytical findings, but it also identifies suitable areas for further academic research. The first question that merits in-depth analysis concerns EADS's post-merger integration and the extent to which Paris and Berlin have attempted to exercise national political influence over the European aerospace giant. France's government, which maintains a direct 13-14 percent stake in the company, has been particularly vocal in terms of its involvement (critics would say "interference") in strategic EADS management matters, including trying to decide which French or German executives should be nominated for key leadership positions within the EADS / Airbus group. As a result, Berlin has repeatedly felt compelled to push back to make sure that Paris does not engineer a silent take-over of EADS that

would impose (French) political and strategic priorities over commercial decisions. To this day, EADS insiders readily acknowledge that the company is still sharply divided along national lines. As so often with large-scale international M&A transactions, cultural differences rank among the biggest and most stubborn obstacles to effective post-merger integration. In the case of EADS, things are made even more difficult by the company's strategic importance and the fact that Paris and Berlin are suspiciously watching each other's every move to make sure the other side does not gain undue influence or control over the firm. There can be no doubt that the Franco-German political infighting at EADS has left the company at a serious disadvantage compared to its more unified and streamlined ethnocentric rivals.

The second area for further academic research concerns the political backlash in America against on-going European efforts to penetrate the US defence procurement market. In recent years, European A&D companies seem to have made some progress in terms of successfully competing for important American procurement deals. In January 2005, the Pentagon selected a joint consortium formed by Anglo-Italian helicopter maker AgustaWestland and LMC over its American competitor Sikorsky to build the next-generation Marine One helicopter for the US President. At the time, the US\$1.7 billion landmark deal was primarily interpreted as an important victory for Prime Minister Tony Blair and his Italian counterpart Silvio Berlusconi, both of whom had supported the Bush administration in the controversial 2003 Iraq War. The jury is still out as to whether transatlantic defence procurement has been transformed from a "one-way street" into a real "two-way street" where European companies have a real shot at securing major, multi-billion dollar deals.

The Pentagon's decision in February 2008 to award a US\$35 billion refuelling tanker contract to a transatlantic consortium led by NGC-Airbus could have easily been interpreted as the most visible sign yet that the protectionist "Fortress America" mentality that was so prevalent in Washington for so long was finally coming to an end. However, ousted rival Boeing launched a massive political lobbying campaign on Capitol Hill against "the French tanker" and also filed a protest with the independent Congressional watchdog GAO. The GAO's non-binding report published in July 2008 found "that the Air Force had made a number of significant errors that could have affected the outcome of what was a close competition between Boeing and [NGC]."¹³⁸⁴ As a result, the GAO recommended that the "Air Force reopen discussion with the offerers, obtain revised proposals, re-evaluate the revised proposals, and make a new source selection decision, consistent with the

¹³⁸⁴ GAO (July 2008) p. ii

GAO's decision"¹³⁸⁵. Just a few weeks after the GAO report, Defense Secretary Gates announced that the Pentagon would conduct a new "fast-tracked" KC-X competition and announce the winner by the end of 2008. That deadline passed and it is now up to the more protectionist-minded Obama administration to make the ultimate decision about the urgently needed KC-X program. Feeling that the Obama administration had established new KC-X selection criteria that clearly favoured Boeing, NGC pulled out of the tanker competition in March 2010, while EADS is still weighing whether to launch another Pentagon tanker bid. As it happens, Boeing is now headquartered in Chicago, the political home of President Obama. And even if Airbus were to win the competition a second time around, the multi-billion dollar funding would still need to be approved by Congress. Given that protectionist Democrats and Republican national security hawks are powerful players on Capitol Hill, closer transatlantic defence industrial integration is likely to remain an elusive goal for years to come.

The third and final potential research area concerns the impact of the BRIC¹³⁸⁶ countries' political, economic, and military rise on the competitive dynamics shaping the A&D industry in America and Europe. China has made it a national priority to create technologically sophisticated and internationally competitive A&D companies that will boost the country's on-going transition to great-power status. In particular, Beijing is attempting to get access to leading Western technologies by demanding teaming and assembly arrangements with Airbus and Boeing as "deal sweeteners" for multi-billion dollar aircraft acquisitions in the rapidly expanding Chinese commercial airline market. Russia has also attempted to forge closer links with EADS / Airbus and Boeing. In 2006, then state-owned VTB bank acquired a five-percent stake in EADS "to seek technology-sharing partnerships and Airbus manufacturing work".¹³⁸⁷ France and Germany rejected Russian demands to get a seat on the EADS board and made it clear that they were not interested in a strategic partnership with the Russian A&D industry. In the meantime, Italy's Finmeccanica teamed up with Sukhoi to develop the regional Superjet 100 aircraft, with major subcontracting and consulting work performed by Boeing. Brazil's Embraer is already a major international player in the rapidly growing regional jet market; a position it could build on to help mount a collective international challenge to the Boeing-Airbus duopoly in the large commercial aircraft segment. In their aggressive competition for lucrative export opportunities abroad, Boeing and Airbus have in recent years been forced to provide unprecedented outsourcing and off-shoring opportunities to aerospace companies located in Japan, China, India, etc. This proliferation of state-of-the art Western technology (coupled with IP violations and / or industrial espionage) could soon help turn these

¹³⁸⁵ GAO (June 2008) p. 67

¹³⁸⁶ BRIC = Brazil, Russia, India, and China

aerospace firms into formidable peer competitors. Boeing and Airbus would be clearly worse off if they lost their current duopoly-style dominance in the large aircraft market to emerging rivals from the BRIC countries and beyond. Are the European and US aerospace industries in general, and Airbus and Boeing in particular, therefore finally moving closer together to better defend against new potential rivals? How will Western governments responding to protect their A&D companies against the growing investment clout of ultra-rich SWFs¹³⁸⁸ from the BRICs and elsewhere? The enormous political, military, economic, and technological power and prestige derived from the A&D industry will ensure that this strategic sector remains a uniquely important, high-stakes battlefield involving states and companies on a global scale.

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¹³⁸⁷ Robertson (2007)

¹³⁸⁸ SWF = Sovereign Wealth Fund

Annex

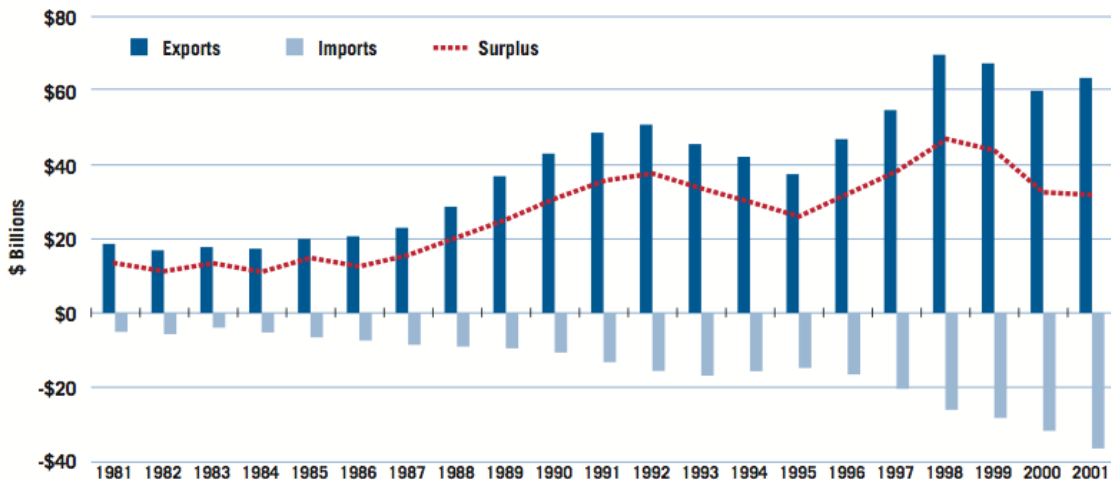
Table 1: Economic Weight of the US Aerospace Industry

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Civil Jet Imports (Millions of Dollars)	8,251	9,268	9,719	8,628	8,792	8,296	9,881	12,976	16,837
Civil Jet Exports	31,517	35,548	36,906	31,823	30,050	25,079	29,477	40,075	51,999
Surplus of Commercial Sector	23,266	26,280	27,187	23,195	21,258	16,783	19,596	27,099	35,162
Military Jet Imports	3,550	3,735	3,943	3,555	3,571	3,213	3,787	5,159	6,273
Military Jet Exports	7,566	8,239	8,111	7,596	7,322	7,991	10,792	10,299	12,072
Surplus of Military Sector	4,016	4,504	4,168	4,041	3,751	4,778	7,005	5,140	5,799
Total Aerospace Industries Surplus	27,282	30,784	31,355	27,236	25,009	21,561	26,601	32,239	40,961
Total Military Aircraft Shipments	1,053	911	753	954	766	816	558	511	418
Total Commercial Aircraft Shipments	2,268	2,181	1,790	1,630	1,545	1,625	1,662	2,269	3,122
Employment (in Thousands)	840.7	784.0	710.5	624.0	552.1	514.4	514.2	554.9	578.6

Sources:

- *Aerospace Industries Association (based on reports from member companies)*
- *General Aviation Manufacturers Association*
- *Department of Commerce's International Trade Administration*

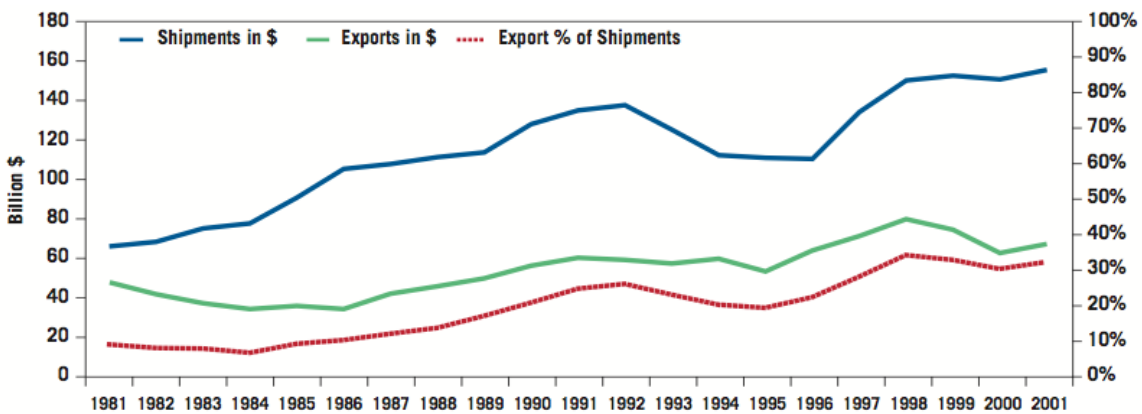
Table 2: US Aerospace Trade Balance 1981-2001*



* includes aircraft, missiles, space vehicles, and parts)

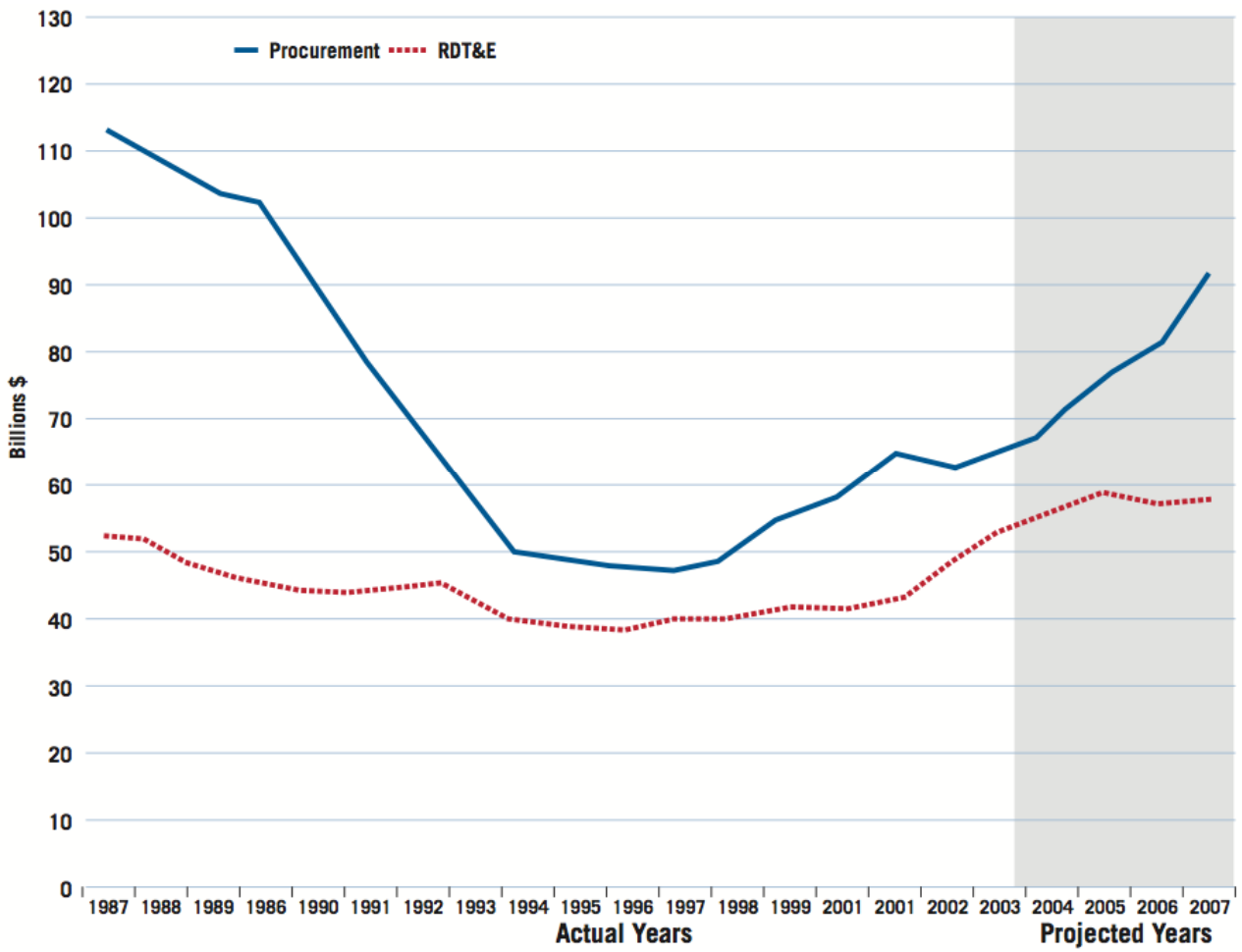
Source: Aerospace Industries Association

Table 3: US Aerospace Export Share of Production



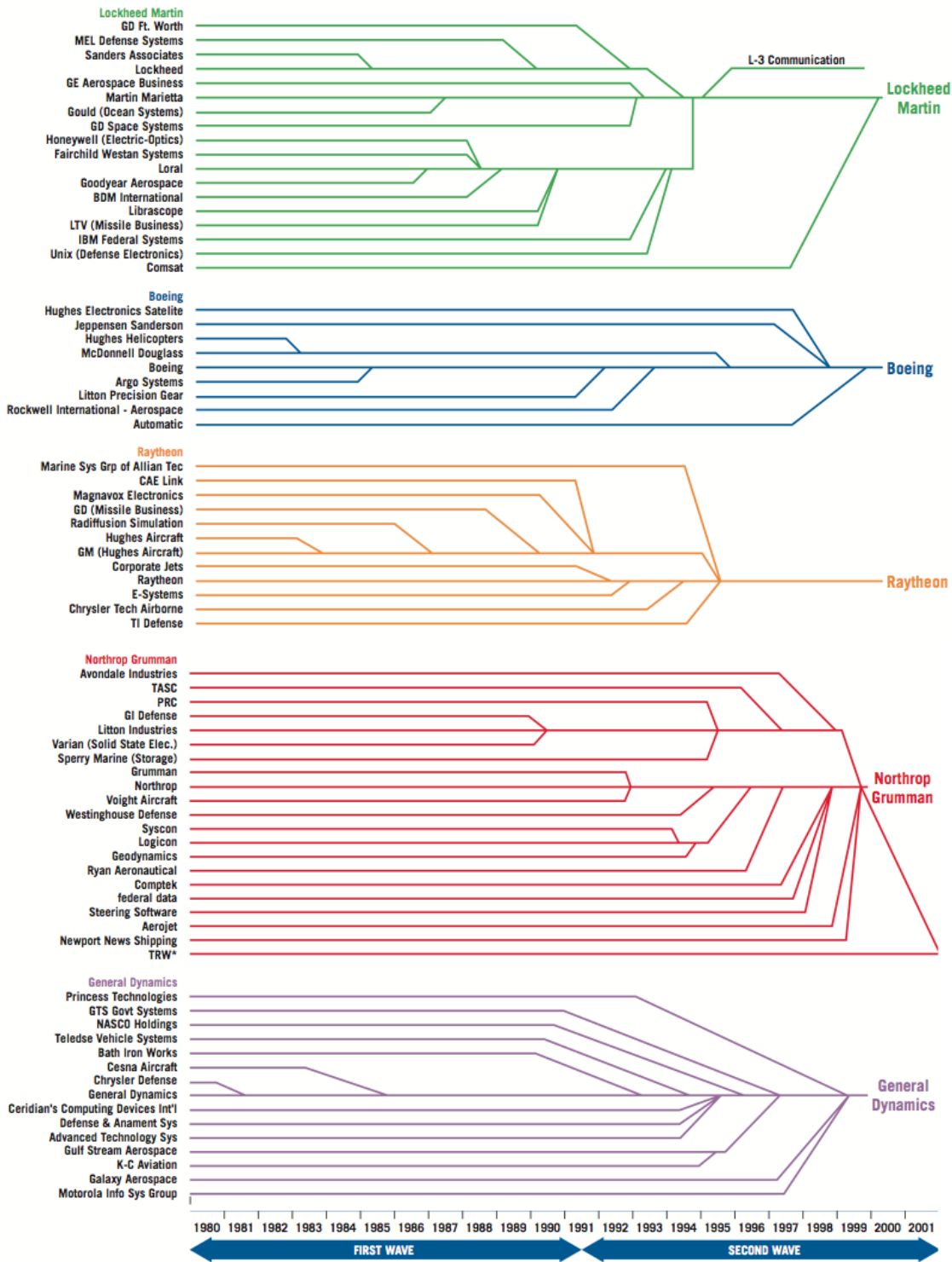
Source: Aerospace Industries Association

Table 4: FY1987-FY2007 DoD Budget Authority



Source: National Defence Budget Estimate for FY2003, Office of the USD (Comptroller)

Table 5: Consolidation in the US A&D Industry 1980-2001



* Merger Pending Approval

Source:
Commission on the Future of the United States Aerospace Industry (2002) p. 7-4

Interviews:

Cohen, Eliot, Robert E. Osgood Professor of Strategic Studies at the Paul H. Nitze School of Advanced International Studies (SAIS) at the Johns Hopkins University, author interview in Munich on 9 February 2007.

Cole, August, Defence Industry Reporter, The Wall Street Journal, various author interviews during 2008-2009.

Davis, James W., Chairman, Centre for Security Economics and Technology, University of St. Gallen, various author interviews during 2007-2010.

Enders, Tom, President and Chief Executive Officer of Airbus, author interview in Munich on 27 November 2009.

Gansler, Jacques S., former US Under Secretary of Defense for Acquisition, Technology and Logistics (1997-2001), author interview at the University of Maryland on 17 July 2007.

Hamre, John, former US Deputy Secretary of Defense in the Clinton administration (1997-2000), and current President and Chief Executive Officer of the Center for Strategic and International Studies (CSIS), author interview in Washington, DC on 10 May 2007.

Helm, Robert, Corporate Vice President, Government Relations, Northrop Grumman Corporation, various author interviews in Washington, DC and Munich during 2007-2010.

Hughes, Peter C., President, Croton Institute, various author interviews in Washington, DC during 2007-2010.

Jackson, Bruce, former Director of Global and Corporate Development at Lockheed Martin Corporation (1993-2002) and Founder of the "US Committee to Expand NATO", author interview in Washington, DC on 25 June 2009.

Kaminski, Paul G., former US Under Secretary of Defense for Acquisition and Technology (1994-1997), author interview in Washington, DC on 15 May 2007.

Niblett, Robin, former Executive Vice President of the Center for Strategic and International Studies (CSIS) (2001-2007), various interviews during 2006-2007.

Schmitt, Burkard, then-Deputy Director of the WEU Institute for Security Studies (ISS), author interview in Paris on 8 March 2001.

von Nordheim, Manfred, former Senior Advisor to the President and CEO of EADS North America, various author interviews during 2005-2009.

Bibliography:

Aboulafia, Richard, "Tough choices for France's aircraft industry", *Industry Insights*, (Reston, American Institute for Aeronautics and Astronautics, January 2001).

_____, "Transport Boom May Cool", *Aviation Week & Space Technology*, vol. 148, no. 2, 12 January 1998, p. 43.

Abrams, Fran, "MoD aids French to compete for defence contracts", *The Independent*, London, 12 June 2000, p. 9.

Adler, Emanuel, and Barnett, Michael (eds), "Security Communities" (Cambridge, Cambridge University Press, 1998).

Aérospatiale Matra (AM), Annual Report 1999, Paris, February 2000.

Agence France Presse (AFP), "US Warns EU About Galileo's Possible Military Conflicts", *Space Daily*, 18 December 2001.

_____, "Boeing Warns of EU-US Friction in Merger Plans with McDonnell Douglas", 13 May 1997.

Albright, Madeleine K., "The Right Balance Will Secure NATO's Future", *Financial Times*, 7 December 1998, p. 22.

Allègre, Claude, "Patriotisme économique", *L'Express*, Paris, 16 March 2006.

Andrews, Edward L., "Bank Giant: The Overview; Deutsche Bank Gets Bankers Trust for \$10 Billion", *The New York Times*, 1 December 1998, p. C1.

Angell, Norman, "The Great Illusion: A Study of the Relation of Military Power to National Advantage" (Alcester / Warwickshire, Obscure Press, 2006).

Anselmo, Joseph C., "Opposing Goals; Factions face off regarding provenance of metals in US military hardware", *Aviation Week & Space Technology*, vol. 164, no. 22, 29 May 2006, p. 40.

Art, Robert J., "Why Western Europe Needs the United States and NATO", *Political Science Quarterly*, vol. 111, no. 1 (New York / NY, The Academy of Political Science, Spring 1996) pp. 1-39.

_____, "Why We Overspend and Underaccomplish", *Foreign Policy*, vol. 6 (Washington, DC, Carnegie Endowment for International Peace, Spring 1972) pp. 95-114.

Asmus, Ronald D., "Saying Yes to France", *The Washington Post*, 29 October 2007, p. A15.

Associated Press (AP), "Fed Clears a Planned US-German Bank Merger", *The New York Times*, 21 May 1999, p. C22.

Augustine, Norman R., "Augustine's Laws" (New York, Penguin Books, 1983).

_____, "The Last Supper, Revisited", *Defense News*, 26 June 2006.

Aviation Week & Space Technology (AWST), Editorial, "Boeing Was Gracious, But Europe Must Learn To Compete", vol. 147, no. 4, 28 July 1997, p. 78.

_____, The Federal Trade Commission Last Week, vol. 147, no. 1, 28 July 1997, p. 18.

Babbin, Jed, "Ill Winds Over Washington", *The American Spectator*, March 2006, p. 28.

Barry, Charles, "NATO's Combined Joint Task Forces in Theory and Practice", *Survival*, vol. 38, no. 1 (London, Oxford University Press, Spring 1996) pp. 81-97.

BBC Monitoring Europe, „EU, France, Germany differences over Galileo financing ‘escalating’”, Text of report by independent German news magazine “SPIEGEL Online” website published on 5 November 2007.

Beer, Francis A., “Integration and Disintegration in NATO: Processes of Alliance Cohesion and Prospects for Atlantic Community” (Columbus / OH, Ohio State University Press, 1969).

Beidleman, Scott W., “GPS vs. Galileo: balancing for position in space”, *Astropolitics*, vol. 3, no. 2 (London, Taylor & Francis, July 2005) pp. 117-161.

Berler, Ron, “Saving the Pentagon’s Killer Chopper-Plane”, *Wired*, no. 13.07, July 2005.

Betts, Richard K., “Conflict After the Cold War: Arguments on Causes of War and Peace” (New York, Longman, 2002).

Bialos, Jeffrey P., “Fortresses and Icebergs – The Evolution of the Transatlantic Defence Market and the Implications for US National Security Policy” vol. I (Washington, DC, Centre for Transatlantic Relations, Johns Hopkins University, 2009).

_____, “Fortresses and Icebergs – The Evolution of the Transatlantic Defence Market and the Implications for US National Security Policy” vol. II (Washington, DC, Centre for Transatlantic Relations, Johns Hopkins University, 2009).

Bieler, Michael, “The European Response to the Challenge of American Consolidation in Civil Aeronautics” in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), “Strategic Issues in European Aerospace” (Surrey, Ashgate Publishing, 1999) pp. 113-122.

Blair, Tony and Chirac, Jacques, “Joint Declaration on European Defence” issued by British Prime Minister Tony Blair and French President Jacques Chirac at the British-French Summit in London on 25 November 1999.

_____, “Joint Declaration on European Defence” issued by British Prime Minister Tony Blair and French President Jacques Chirac at the British-French Summit at St. Malo on 4 December 1998.

Blitzinger, Richard A. “Towards A Brave New Arms Industry?”, *Adelphi Paper*, vol. 43, no. 356 (Oxford, Oxford University Press, 2003).

Boeder, Thomas L. and Dorman, Gary J., “The Boeing/McDonnell Douglas Merger: The Economics, Antitrust Law and Politics of the Aerospace Industry”, *The Antitrust Bulletin*, vol. 45 (Dobbs Ferry, Federal Legal Publications, Spring 2000) pp. 119-152.

Bolton, John R., “European Common Foreign, Security and Defence Policies – Implications for the United States and the Atlantic Alliance”, Statement before the Committee on International Relations, House of Representatives, 10 November 1999.

Braddon, Derek, “Civil / Defence Linkage in Aerospace: The Political Significance of a Strategic Industry” in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), “Strategic Issues in European Aerospace” (Surrey, Ashgate Publishing, 1999) pp. 81-90.

Braunschvig, David; Garwin, Richard L. and Marwell, Jeremy C., “Space Diplomacy”, *Foreign Affairs*, vol. 82, no. 4 (New York / NY, Council on Foreign Relations Press, July / August 2003) pp. 156-164.

Brooks, Stephen G., "Producing Security: Multinational Corporations, Globalisation, and the Changing Calculus of Conflicts" (Princeton / NJ, Princeton University Press, 2005).

Bruce, Peter, "Meeting the Challenge: The Emergence of Airbus as a Single Company" in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), "Strategic Issues in European Aerospace" (Surrey, Ashgate Publishing, 1999) op.cit. pp. 123-132.

Brzezinski, Zbigniew and Mearsheimer, John J., "Clash of the Titans", *Foreign Policy*, vol. 146 (Washington, DC, Carnegie Endowment for International Peace, January / February 2005) pp. 46-50.

Brzoska, Michael, "Trends in Global Military and Civilian Research and Development (R&D) and their Changing Interface" (Hamburg, Institut fuer Friedensforschung und Sicherheitspolitik an der Universitaet Hamburg). Presented in a workshop organised by the Manchester Institute of Innovation Research for the research network on Policies for Research and Innovation in the Move towards the European Research Area, entitled "Re-evaluating defence R&D and innovative dynamics", on 2-3 April 2007. http://www.ifsh.de/pdf/aktuelles/india_brzoska.pdf

Burt, Tim, and Lambert, Richard, "The Schrempp gambit: The chairman of DaimlerChrysler offers a passionate defence of his strategy and tells Tim Burt and Richard Lambert that he never envisaged the merger as a partnership of equals", *Financial Times*, London, 30 October 2000, p. 26.

Butterworth-Hayes, Philip, "Efficiency gains pay off in Europe", *Aerospace America*, American Institute for Aeronautics and Astronautics, January 2000.

Byman, Daniel L. and Waxman, Matthew C., "Kosovo and the Great Air Power Debate", *International Security* vol. 24, no. 4 (Cambridge / MA, MIT Press, Spring 2000) pp. 5-38.

Cable, Vincent, "What is International Economic Security?", *International Affairs*, vol. 71, no. 2 (London, Royal Institute of International Affairs, April 1995) pp. 305-324.

Callaghan, Jr., Thomas A., "U.S./European Economic Cooperation in Military and Civil Technology", (Washington, DC, Center for Strategic and International Studies, Georgetown University, 1975).

Calleo, David P., "Beyond American Hegemony: The Future of the Western Alliance" (New York / NY, Basic Books, 1987).

Cambon, Paul, "La fusion Matra-Aérospatiale: l'envol d'un géant", *Label France*, no. 36 (Paris, French Ministry of Foreign Affairs, July 1997).

Carayon MP, Bernard, "Intelligence économique, compétitivité et cohésion sociale", (Paris, French National Assembly, June 2003).

Carr, Edward H., "The Twenty Years Crisis, 1919-1939: An Introduction to the Study of International Relations" (London and New York / NY, Harper Torchbooks, 1964).

CASA, Annual Report 1999, Madrid, 2000.

Center for Strategic and International Studies (CSIS), Commission on Transatlantic Security and Industrial Cooperation in the Twenty-First Century, "The Future of the Transatlantic Defence Community" (Washington, DC, Center for Strategic and International Studies, 2003).

Chao, Pierre and Niblett, Robin, “Trusted Partners: Sharing Technology within the US-UK Security Relationship”, Working Paper prepared for the “CSIS Initiative For A Renewed Transatlantic Partnership”, (Washington, DC, Center for Strategic and International Studies, 26 May 2006).

Cherian, John, “The Boeing Deal”, *Frontline*, vol. 22, no. 11 (New Delhi, The Hindu, 21 May – 3 June, 2005).

China Business Information Network, “France, Germany Merge Aerospace, Defence Industries”, Chamber World Network, October 15, 1999, p. 1.

Chirac, Jacques and Schroeder, Gerhard, “Paris Declaration” issued by President Jacques Chirac and German Chancellor Gerhard Schroeder at the Franco-German Summit in Paris on 30 November 1999.

Chuter, Andy, “Augustine’s Vision”, *Flight International*, 16 July 1997 p. 34.

_____, “LMC And Northrop Grumman Agree To Join Forces”, *Flight International*, 9 July 1997, p. 5.

Clarke, Duncan, “Israel’s Unauthorised Arms Transfers”, *Foreign Policy*, vol. 99 (Washington, DC, Carnegie Endowment for International Peace, Summer 1995) pp. 89-109.

Clarke, Michael, “French and British Security: Mirror Images in a Globalised World”, *International Affairs*, vol. 76, no. 4 (London, Royal Institute of International Affairs, October 2000) pp. 729-739.

Cohen, Eliot A. , “Yes, It’s Anti-Semitic”, *The Washington Post*, 5 April 2006, p. A23.

_____, “NATO Standardisation: The Perils of Common Sense”, *Foreign Policy*, vol. 31 (Washington, DC, Carnegie Endowment for International Peace, Summer 1978) pp. 72-90.

Cole, Alistair, “France-German Relations” (London, Pearson Education, 2000).

Cole, August, “Senate Kills Funds for F-22 Fighters”, *The Wall Street Journal*, 22 July 2009, p. A5.

Coleman, Brian, “US May Retaliate if EU Rejects Boeing Merger”, *Wall Street Journal*, 18 July 1997, p. A2.

Commission on the Future of the United States Aerospace Industry, Final Report, Washington, DC, November 2002.

Cooling, B.F. and Gropman, Alan, “The History of the US Defence Industrial base from the American Revolution to the End of the Cold War”, in “US Defence Industrial Base: National Security Implications of a Globalised World”, a conference report on the Dwight D. Eisenhower National Security Series Symposium held at the Industrial College of the Armed Forces in Washington, DC on 2 June 2005 (edited by Lynne C. Thompson and Sheila R. Ronis); (Washington, DC, National Defence University Press, April 2006) pp. 1-10.

Cordesman, Anthony H. and Kaeser, Hans Ulrich, “America’s Self-Destroying Airpower: Becoming Your Own Peer Threat” (Washington, DC, Center for Strategic and International Studies, working draft version as of 16 December 2008).

Cornish, Paul and Edwards, Geoffrey, "Beyond the EU / NATO Dichotomy: The Beginnings of a European Strategic Culture", *International Affairs*, vol. 77, no. 3 (London, Royal Institute of International Affairs, July 2001) pp. 587-603.

Corrigan, Tracy, "European banks chase the pack in US: Consolidation in securities has left Deutsche and Dresdner behind, says Tracy Corrigan", *Financial Times*, London, 14 August 1998, p. 23.

Cragg, Anthony, "The Combined Joint Task Force concept: a key component of the Alliance's adaptation" *NATO Review*, vol. 44, no. 4 (Brussels, NATO, July 1996) pp. 7-10 (NATO web edition). <http://www.nato.int/docu/review/1996/9604-2.htm>

Crock, Stan; Schine, Eric and Borrus, Amy, "Defence's New Battlefield", *Business Week*, 22 January 1996, p. 40.

Daalder, Ivo H., "Europe and America Aren't Divorcing", *The Wall Street Journal Europe*, 10 December 1999.

DaimlerChrysler Aerospace AG (DASA), Annual Report 1999, Munich, February 2000.

DaimlerChrysler AG (DCX), Annual Report 1998, Stuttgart / Germany and Auburn Hills / USA.

Dassault, Serge, "Après l'achat de F16 par la Pologne; Quelle Europe?", *Le Figaro*, Paris, 14 January 2003.

Defense Science Board, "Final Report of the Defense Science Board Task Force on Globalisation and Security" (Washington, DC, Defense Science Board, December 1999).

_____, "The Defence Industrial and Technology Base", Final Report of the Defense Science Board 1988 Summer Study, vol. I (Washington, DC, Defense Science Board, October 1988).

Dempsey, Judy, "Accords with US 'Will Violate' ICC Treaty", *Financial Times*, 27 August 2002.

Deutsch, Karl W. (ed.), "Political community and the North Atlantic area; international organization in the light of historical experience" (Princeton / NJ, Princeton University Press, 1957).

Deutsch, Karl W. and Singer, J.D., "Multipolar Power Systems and International Stability", *World Politics*, vol. 16, no. 3 (Cambridge, Cambridge University Press, April 1964) pp. 390-406.

Deutsche Telekom AG (DT), SEC filing concerning the DT-VS deal, Washington, DC, 24 July 2000.

DiRita, Lawrence T.; Spring, Baker; and Luddy, John, "Thumps Down to the Bottom-Up Review", Backgrounder #957 (Washington, DC, The Heritage Foundation, 24 September 1993).

Dombrowski, Peter; Gholz, Eugene, and Ross, Andrew L., "Military Transformation and the Defense Industry After Next: The Defense Industrial Implications of Network-Centric Warfare", Newport Paper (Department of the Navy, September 2006).

Dowell, Earl H., "European aerospace figures hit new high", *Aerospace America*, American Institute for Aeronautics and Astronautics, September 2000.

Doyle, Michael, "Kant, Liberal Legacies, and Foreign Affairs, Part 1", *Philosophy and Public Affairs*, vol. 12, no. 3 (Fall 1983), pp. 205-232. and "Kant, Liberal Legacies, and Foreign Affairs, Part 2" *Philosophy and Public Affairs*, vol. 12, no. 4 (Fall 1983), pp. 323-353.

Dragsdahl, Jorgen, "NATO Resists Pressures to Militarise Central Europe", BASIC Paper, no. 28 (London / Washington, DC, British American Security Information Council, July 1998).

Eisenhardt, Kathleen M., "Building Theories from Case Study Research", *The Academy of Management Review*, vol. 14, no. 4 (New York, Academy of Management, October 1989) pp. 532-550.

Eisenhower, Dwight D., televised presidential farewell address, 17 January 1961.

Ernsberger, Jr., Richard; Warner, Judith, and Theil Stefan, "A Fight With Two Winners", *Newsweek*, 28 July 1997 (Atlantic Edition) p. 44.

EUPolitix.com, "Galileo may be battle-ready by 2010", 11 March 2004.

European Aeronautic Defence and Space Company (EADS), Offering Memorandum, July 9, 2000.

European Commission (EC), Directorate-General for Trade, "United States Barriers to Trade and Investment" (Brussels, March 2006).

_____, Directorate-General for Energy and Transport, "The European project on radio navigation by satellite", Galileo information note (Brussels, 26 March 2002).

_____, Directorate-General for Economic and Financial Affairs, "Price and Cost Competitiveness: quarterly report on the price and cost competitiveness of the European Union and its member states", ECFIN/44/3/00-EN (Brussels, third quarter 2000).

_____, Directorate-General for Competition, "Commission Decision declaring a concentration compatible with the common market and the functioning of the EEA [EEA = European Economic Area] Agreement", Case No IV/M.877 – Boeing McDonnell Douglas, Council Regulation (EEC) No 4064/89 (Brussels, 30 July 1997).

_____, Delegation of the European Commission to Russia, Space Cooperation EU-Russia website portal: http://www.delrus.ec.europa.eu/en/p_229.htm

_____, Directorate-General for Transport, Galileo Programme website portal: http://ec.europa.eu/transport/galileo/programme_en.htm

European Council, Joint Action 2004/551/CFSP on the establishment of the European Defence Agency, (Brussels, Council of the European Union, 12 July 2004).

_____, Conclusions of the Presidency of the European Council Summit in Thessaloniki on 19-20 June 2003.

_____, Conclusions of the Presidency of the European Council meeting in Lisbon on 23-24 March 2000.

_____, II Common European Policy on Security and Defence, Conclusions of the Presidency of the European Council Summit in Helsinki on 10-11 December 1999.

_____, Declaration on Strengthening the Common European Policy on Security and Defence, Annex III of the Conclusions of the Presidency of the European Council Summit in Cologne on 3-4 June 1999.

European Defence Agency (EDA), The Code of Conduct on Defence Procurement, (Brussels, European Defence Agency, 21 November 2005).

_____, Steering Board Decision on an Intergovernmental Regime to Encourage Competition in the European Defence Equipment Market (Ixelles / Belgium, European Defence Agency, 21 November 2005).

European Security and Defence Assembly, ESDP Developments and the Headline Goal 2010, Reply to the Annual Report of the European Council (Paris, Assembly of WEU, 15 June 2005).

Financial Times, “US Investment Banks – Leaders of the pack are striding out abroad”, Survey – Global Investment Banking: Year End Review, London, 23 January 1998, p. 10.

Fingleton, Eamonn, “Boeing, Boeing... Gone: How an American titan clipped its own wings”, *The American Conservative*, 31 January 2005. <http://www.jpri.org/members/BoeingFingleton.pdf>

Finkelstein, Sydney, “The DaimlerChrysler Merger”, case study written for the Tuck School of Business (Hanover, NH, Dartmouth College, 2002).

Flight International, “US considers special import duties”, 5 August 1978, p. 393.

Fluendy, Simon, “The bluff that raked in GBP8 billion; How GEC played off rivals against each other in the fight for Marconi”, *Mail on Sunday*, 24 January 1999, p. 5.

Freedman, Lawrence D., “The Transformation of Strategic Affairs”, *Adelphi Paper*, vol. 45, no. 379 (Oxford, Oxford University Press, 2006).

_____, “The Special Relationship, Then and Now”, *Foreign Affairs*, vol. 85, no. 3 (New York / NY, Council on Foreign Relations Press, May / June 2006) pp. 61-73.

Gansler, Jacques S., “The US Defence Industrial Base: From the End of the Cold War to the Present”, in: “US Defence Industrial Base: National Security Implications of a Globalised World”, a conference report on the Dwight D. Eisenhower National Security Series Symposium held at the Industrial College of the Armed Forces in Washington, DC on 2 June 2005 (edited by Lynne C. Thompson and Sheila R. Ronis); (Washington, DC, National Defence University Press, April 2006) pp. 12-19.

Gantenbein, Douglas, “Memo to the President: How Boeing Can Stop Its Descent”, *Foreign Policy*, vol. 142 (Washington, DC, Carnegie Endowment for International Peace, May / June 2004) pp. 58-62.

Gardner, Anthony Laurence, “A New Era in US-EU Relations? The Clinton Administration and the New Transatlantic Agenda” (London, Avebury, 1996).

Gartzke, Ulf, “Sarkozy and Merkel: Europe’s New Couple?”, WorldWideStandard.com (blog of The Weekly Standard magazine), posted on 10 May 2007. http://www.weeklystandard.com/weblogs/TWSFP/2007/05/sarkozy_and_merkel_europes_new_1.asp

Gavacs, Jenny and Gee, Jack, “Looking Out For No. 1”, *Industry Week*, 20 October 1997, p. 113.

Ghez, Jeremy and Larrabee, F. Stephen, “France and NATO”, *Survival*, vol. 51, no. 2 (London, Routledge, April-May 2009) pp. 77-90.

Gholz, Eugene and Sapolsky, Harvey M., “Restructuring the US Defense Industry” *International Security*, vol. 24, no. 3, (Cambridge / MA, MIT Press, Winter 1999/2000) pp. 5-51.

- Giegerich, Bastian, "Navigating differences: transatlantic negotiations over Galileo", *Cambridge Review of International Affairs*, vol. 20, no. 3 (London, Routledge, September 2007) pp. 491-508.
- Gilpin, Robert, "War and Change in World Politics" (Cambridge, Cambridge University Press, 1981).
- Gleason, Michael P., "Galileo: Power, pride, and profit. The relative influence of realist, liberal, and ideational factors on the Galileo satellite programme", PhD dissertation, The George Washington University, Washington, DC, submitted on 31 January 2009.
- Gnesotto, Nicole, preface to Burkard Schmitt, "From cooperation to integration: defence and aerospace industries in Europe", *Chaillot Paper*, no. 40 (Paris, WEU Institute for Security Studies, July 2000)
- _____, preface to Stanley R., Stanley R. Sloan, "The United States and European defence", *Chaillot Paper*, no. 39 (Paris, WEU Institute for Security Studies, April 2000).
- Goldfarb, Michael, "The Untimely Demise of the F-22 – A triumph for the military-industrial complex.", *The Weekly Standard*, vol. 14, no. 45, 17 August 2009.
- Golich, Vicki L., "From competition to collaboration: the challenge of commercial-class aircraft manufacturing", *International Organization*, vol. 46, no. 4 (Cambridge / MA, MIT Press, Autumn 1992) pp. 899-934.
- Goodman, Peter s. "Takeover By German Firm Tests Free Trade; Outcry on Hill Over VoiceStream Deal", *The Washington Post*, Washington, DC, 7 September 2000, p. E01.
- Gow, David, "Thomson nabs Racal for [GBP]1.3 billion; Deal creates third player in Europe", *The Guardian*, London, 14 January 2000, p. 27.
- _____, "BAe becomes honorary American", *The Guardian* (London), 12 November 1999, p. 28.
- Graesslin, Juergen, "Juergen Schrempp and the Making of an Auto Dynasty" (New York, McGraw-Hill, 2000).
- Grant, Robert P., "Transatlantic Armament Relations Under Strain", *Survival*, vol. 39, no. 1 (London, Oxford University Press, Spring 1997) pp. 111-137.
- _____, "France's New Relationship with NATO", *Survival*, vol. 38, no. 1 (London, Oxford University Press, Spring 1996) pp. 58-80.
- Gray, Bernard, "Europe lags US in alliance-making", *Financial Times*, 30 August 1996, p. 16.
- _____, "An elusive moving target", *Financial Times*, 14 May 1996, p. 13.
- _____, "Survey of Aerospace", *Financial Times*, 12 June 1995, p. X.
- Gray, Iain G., "Can FLA Bring About a New Approach to Defence Procurement in Europe?" in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), "Strategic Issues in European Aerospace" (Surrey, Ashgate Publishing, 1999) pp. 145-164.
- Gribben, Roland, "BAE lands arms deal for a new generation", *The Daily Telegraph*, London, 19 August 2006, p. 28.
- Grieco, Joseph M., "Anarchy and the Limits of Cooperation: a Realist Critique of the Newest Liberal Institutionalism", *International Organization* vol. 42 no. 2 (Summer 1988) pp. 485-507.

_____, "The Concorde SST and Change in the British Policy", *World Politics*, vol. 31, no. 4 (Cambridge, Cambridge University Press, July 1979) pp. 518-538.

Gritsch, Maria, "The Nation-State and Economic Globalisation: Soft Politics and Increased State Autonomy?", *Review of International Political Economy*, vol. 12, no. 1, (London, Taylor & Francis, Ltd., February 2005) pp. 1-25.

Guay, Terrence R. and Callum, Robert L., "The transformation and future prospects of Europe's defence industry", *International Affairs*, vol. 78, no. 4 (London, Royal Institute of International Affairs, October 2002) pp. 757-776.

Haas, Ernst B., "Beyond the Nation-State: Functionalism and International Organization" (Stanford, California, Stanford University Press, 1964).

_____, "The Uniting of Europe: Political, Economic and Social Forces, 1950-1957" (Stanford, California, Stanford University Press, 1958).

Hall, Ben and Tait, Nikki, "Paris emphasises shareholder role", *Financial Times*, 16 January 2010, p. 10.

Hamilton, Dan and Quinlan, Joseph, "Partners in Prosperity: The Changing Geography of the Transatlantic Economy", (Washington DC, Johns Hopkins University Press, 2004).

"The Harbour Report 1996", Oliver Wyman. <http://www.oliverwyman.com/ow/automotive.htm>

Harrison, Joan, "A Giant Merger Of Two Survivors: Lockheed and Martin Marietta Aim to Stay At the Frontier of Aerospace Technology", *Mergers & Acquisitions*, vol. 29, no. 4 (New York, SourceMedia, January / February 1995), p. 44.

Harrison, Michael, "Clinton Gives BAE Green Light to Bid for US Defence Firms", *The Independent*, London, 12 November 1999, p. 22.

_____, "Blair 'furious' over BAe's [GBP]7 [billion] takeover of Marconi; Shares plunge on fears that further defence consolidation in Europe will be delayed", *The Independent*, London, 20 January 1999, p. 16.

_____, "'UK first' deal that could set Europe at war; News Analysis: France doesn't like it, and Germany is simply livid", *The Independent*, London, 20 January 1999, p. 16.

Hayward, Keith, "The Globalisation of Defence Industries", *Survival*, vol. 42, no. 2 (London, Oxford University Press, Summer 2000) pp. 115-132.

_____, "The World Aerospace Industry: From Internationalisation to Globalisation" in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), "Strategic Issues in European Aerospace" (Surrey, Ashgate Publishing, 1999) pp. 3-14.

_____, "Airbus: Twenty Years of European Collaboration", *International Affairs*, vol. 64, no. 1 (London, Royal Institute of International Affairs, Winter 1987-1988) pp. 11-26.

_____, "International Collaboration in Civil Aerospace" (London, Pinter, 1986).

Heisbourg, François, "The European-US Alliance: Valedictory Reflections on Continental Drift in the Post-Cold War Era" *International Affairs*, vol. 68, no. 4 (London, Royal Institute of International Affairs, October 1992) pp. 665-678.

Hollings, Ernst, letter by the Democratic Senator of South Carolina to FCC Chairman William E. Kennard, Washington, DC, 28 June 2000.

Holmes, Kim, “US-European Strategic Bargains: Old and New”, lecture at The Heritage Foundation in Washington, DC on 18 September 1998.

Howorth, Jolyon, “Britain, France, and the European Defence Initiative”, *Survival*, vol. 42, no. 2 (London, Oxford University Press, Summer 2000) pp. 33-55.

Hufbauer, Gary C., former Deputy Assistant Secretary of the Treasury for International Trade and Investment Policy in the Carter administration, email to author on 4 January 2009.

_____, Statement before the Committee on Ways and Means, Subcommittee on Trade, US House of Representatives, 14 July 1978.

Hufbauer, Gary C. and Schott, Jeffrey J., “The Soviet-European Gas Pipeline: A Case of Failed Sanctions”, in Theodore H. Moran, *Multinational Corporations: The Political Economy of Foreign Direct Investment* (Lexington, Mass., D.C. Heath, 1985), chapter 11.

Hundley, Richard O., “Past Revolutions, Future Transformations”, (Santa Monica / CA, RAND Corporation, 1999).

Hunter, Robert E., “European Common Foreign, Security and Defence Policies – Implications for the United States and the Atlantic Alliance”, Statement before the Committee on International Relations, House of Representatives, 10 November 1999.

Huntington, Samuel, “Why International Primacy Matters”, *International Security* vol. 17, no. 4 (Cambridge / MA, MIT Press, Spring 1993) pp. 68-83.

_____, “The US – Decline or Renewal?”, *Foreign Affairs*, vol. 67, no. 2 (New York, Council on Foreign Relations Press, Winter 1988/89) pp. 76-96.

Ingrassia, Paul, “DaimlerChrysler: The Divorce”, *The Wall Street Journal*, New York City, 21 February 2007, p. A17.

International Institute for Strategic Studies (IISS), *The Military Balance*, vol. 105, no.1 (London, Oxford University Press, 2005).

_____, *The Military Balance*, vol. 104, no.1 (London, Oxford University Press, 2004).

_____, *The Military Balance*, vol. 103, no. 1 (London, Oxford University Press, 2003).

_____, *The Military Balance*, vol. 102, no. 1 (London, Oxford University Press, 2002).

_____, *The Military Balance*, vol. 99, no.1 (London, Oxford University Press, 1999).

International Trade Administration (ITA), “US Aerospace Industry Trends: Shipments of Complete US Aircraft, 1971-2006”, US Department of Commerce (Washington DC, US Government Printing Office, 20 July 2006).

Jakubyszyn, Christophe, “L’offensive sans precedent de l’industrie de l’armement americaine; Beneficiant des commandes du Pentagone et de la division des stratégies europeennes, Lockheed Martin, Boeing, Raytheon et Northrop Gruman tentent de prendre un avantage decisif sur leurs concurrents du Vieux Continent. La nouvelle guerre en Irak pourrait accroître leur avance.”, *Le Monde*, Paris, 19 March 2003.

_____, “Ambiguités sur les ambitions de l’Etat actionnaire; Les Allemands ont dû accepter le maintien d’une participation de l’Etat français”, *Le Monde*, 18 October 1999.

James, Barry, “US Out of Line on Global Positioning, EU Says; Washington said to Fear Use of Galileo by Enemy in a War”, *The International Herald Tribune*, Paris, 19 December 2001, p. 1.

Jepperson, Ronald L., Wendt Alexander and Katzenstein, Peter J., "Norms, Identity, and Culture in National Security" in Katzenstein, Peter J. (ed.), "The Culture of National Security: Norms and Identity in World Politics" (New York City, Columbia University Press, 1996) pp. 33-75.

Jervis, Robert, "Realism, Neoliberalism, and Cooperation: Understanding the Debate", *International Security*, vol. 24, no. 1 (Cambridge / MA, MIT Press, Spring 1994) pp. 42-63.

Joint Statement by the President of the Republic and the French Prime Minister, the Chancellor of the Federal Republic of Germany and the Prime Minister of the United Kingdom, Restructuring of the European Aerospace and Defence Electronics Industry, 9 December 1997.

Jones, Adam, "Europe cries foul as New BAe emerges", *The Times*, London, 20 January 1999.
_____, "BAe admits dilemma over possible merger deal", *The Times*, London, 4 December 1998.

Kapstein, Ethan B., "Allies and Armaments" *Survival*, vol. 44, no. 2 (Oxford University Press, Summer 2002) pp. 141-155.

_____, "Towards an American arms trade monopoly?" *Foreign Affairs*, vol. 73, no. 3 (New York, Council on Foreign Relations Press, May / June 1994) pp. 13-19.

_____, "International Collaboration in Armaments Production: A Second-Best Solution", *Political Science Quarterly*, vol. 106, no. 4 (New York, The Academy of Political Science, Winter, 1991-1992) pp. 657-675.

Katzenstein, Peter J. (ed.), "The Culture of National Security: Norms and Identity in World Politics" (New York City, Columbia University Press, 1996).

Keller, William W. and Nolan, Janne E., "The Arms Trade: Business As Usual?", *Foreign Policy*, vol. 109 (Washington, DC, Carnegie Endowment for International Peace, Winter 1997-1998) pp. 113-125.

Kennedy, Paul, "The Rise and Fall of the Great Powers" (New York, Random House, 1987).

Keohane, Robert S., "After Hegemony" (Princeton, Princeton University Press, 1984).

Keohane, Robert S. and Nye, Joseph S., "Power and Interdependence: World Politics in Transition" (Boston / MA, Little, Brown and Company, 1977).

Khadige, Beatrice, "Bush set to kick off European tour with Iraq ally Poland", Agence France Presse – English, Warsaw, 29 May 2003.

Kirkpatrick, David, "The Rising Unit Costs of Defence Equipment: The Reasons and Results", *Defence and Peace Economics*, vol. 6, no. 4, (London, Routledge, 1995) pp. 263-288.

Klare, Michael T., "The Arms Trade in the 1990s: Changing Patterns, Rising Dangers", *Third World Quarterly*, vol. 17, no. 5 (London, Taylor & Francis Group, December 1996) pp. 857-874.

Klass, Philip J., "Sanders Will Give BAE Systems Dominant Role in Airborne EW", *Aviation Week & Space Technology*, vol. 153, no. 5, 31 July 2000, p. 74.

Klein, Joel, "Anticipating the Millennium: International Antitrust Enforcement at the End of the Twentieth Century", Annual Proceedings of the Fordham Corporate Law Institute's International Law and Policy Conference (New York, Fordham Corporate Law Institute, 1999).

Kolodziej, Edward A., "Making and Marketing Arms: The French Experience and Its Implications for the International Systems (Princeton, Princeton University Press, 1987).
_____, "France and the Arms Trade", *International Affairs*, vol. 56, no. 1 (London, Royal Institute of International Affairs, January 1980) pp. 54-72.

Korb, Lawrence J., "Merger Mania: Should the Pentagon Pay for Defence Industry Restructuring?", *The Brookings Review*, vol. 14, no. 3 (Washington DC, The Brookings Institution Press, Summer 1996) pp. 22-25.

Kovacic, William E., "Transatlantic Turbulence: The Boeing-McDonnell Douglas Merger and International Competition Policy", *Antitrust Law Journal* vol. 68 (2001) pp. 805-873.

Kraar, Luis, "Boeing Takes a Bold Plunge to Keep Flying High", *Fortune*, 25 September 1980, p. 79.

Krugman, Paul R., "The US Response to Foreign Industrial Targeting", in: Paul R. Krugman, Carlos F. Diaz-Alejandro, and Robert Z. Lawrence: *Brookings Papers on Economic Activity*, vol. 1984, no. 1 (Washington, DC, The Brookings Institution, 1984).

Kramer, Frank D., testimony before the US Senate Foreign Relations Committee, 9 March 2000.

Krauthammer, Charles, "The Unipolar Moment", *Foreign Affairs*, vol. 70, no. 1 (New York, Council on Foreign Relations Press, America and the World, 1990/91) pp. 23-33.

Kupchan, Charles A., "In Defence of European Defence: An American Perspective", *Survival*, vol. 42, no. 2 (London, Oxford University Press, Summer 2000) pp. 16-32.

_____, "Empire, Military Power, and Economic Decline", *International Security*, vol. 13, no. 4 (Cambridge / MA, MIT Press, Spring 1989) pp. 36-53.

Labaton, Stephen, "Communications Lobby Puts Full-Court Press on Congress", *The New York Times*, New York City, 24 October 2000, p. A1.

_____, "Behind-The-Scenes Jockeying Intensifies in Deutsche Telekom Deal", *The New York Times*, 24 July 2000, p. C1.

_____, "International Business; FCC Promises Close Scrutiny Of German Bids", *The New York Times*, 21 July 2000, p. C1.

Larres, Klaus, "West Germany and European Unity in US Foreign Policy, 1960-1990", *Cercles*, vol. 5 (2000) pp. 127-145.

Lawrence, Philip, "Europe vs. America: Strategic Trade in Civil Aeronautics" in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), "Strategic Issues in European Aerospace" (Surrey, Ashgate Publishing, 1999) pp. 27-62.

Le Boucher, Eric, "Etat d'urgence pour l'industrie de défense française", *Le Monde*, 10 July 1997.

Le Coeur, Philippe and Rocco, Anne Marie, "Denis Ranque remplace Marcel Roulet à la tête de Thomson-CSF; Le gouvernement a privilégié un candidat interne au groupe de défense", *Le Monde*, 20 January 2000.

Letter of Intent (LoI) between 6 Defence Ministers on Measures to facilitate the Restructuring of the European Defence Industry, signed by The Minister of Defence of the French Republic, the Federal Minister of Defence of the Federal Republic of Germany, the Minister of Defence of the Republic of Italy, the Minister of Defence of the Kingdom of Spain, the Minister of Defence of the Kingdom of Sweden and the Secretary of State for Defence of the United Kingdom of Great Britain and Northern Ireland in London on 6 July 1998.

Lewandowski, Bill, interview “on the future of the US aerospace supplier base” conducted by Alan MacPherson and David Prichard at the US Aerospace Industries Association in Washington, DC on 23 March 2004. Referenced in: “Boeing’s Diffusion of Commercial Aircraft Technology to Japan: Surrendering the US Industry for Foreign Financial Support”, *Journal of Labour Research*, vol. 28, no. 3 (New York, Springer New York, Summer 2007) p. 559.

Lewis, James Andrew, “Galileo and GPS: From Competition to Cooperation”, (Washington, DC, Center for Strategic and International Studies, June 2004).

Lindsey, Robert, “A New Lift for McDonnell Douglas”, *The New York Times*, 18 March 1984, p. 1.

Little, Allison, “Civil servant helps French take on their British rivals”, *The Express*, 12 June 2000.

Lockheed Martin Corporation, Annual Report 2007 (Bethesda / Maryland, 28 February 2008).

Lorell, Mark A.; Lowell, Julia and Moore, Richard M., “Going Global: US Government Policy and the Defence Aerospace Industry” (Santa Monica / CA, Rand Corporation, 2003).

Lorenz, Andrew and Woodhead, Michael, “BAe weathers Franco-German flak”, *Sunday Times* (London), 17 October 1999.

Luttwak, Edward, “Disarming the world’s economies”, (Washington, DC, Center for Strategic and International Studies, unpublished CEO Paper, 1990). Quoted in: Vincent Cable, “What is International Economic Security?”, *International Affairs*, vol. 71, no. 2 (London, Royal Institute of International Affairs, April 1995) p. 308.

MacPherson, Alan and Pritchard, David, “Boeing’s Diffusion of Commercial Aircraft Technology to Japan: Surrendering the US Industry for Foreign Financial Support”, *Journal of Labour Research*, vol. 28, no. 3 (New York, Springer New York, Summer 2007) pp. 522-566.

Mann, Paul, “US Regains Export Lead”, *Aviation Week & Space Technology*, vol. 147, no. 8, 25 August 1997, p. 21.

Martel, Daniel, “Airbus Industrie: Un Moteur de l’Intégration Européenne?” (Geneva, Department of Political Science, University of Geneva, 2000).

Mastanduno, Michael, “Do Relative Gains Matter? America’s Response to Japanese Industrial Policy”, *International Security*, vol. 16, no. 1 (Cambridge / MA, MIT Press, Summer 1991) pp. 73-113.

Mathiopoulos, Margarita and Gyarmati, István, “Saint Malo and beyond: toward European defence”, *Washington Quarterly*, vol. 22, no. 4 (Washington, DC, Center for Strategic and International Studies, Autumn 1999) pp. 65-76.

Maynard, Michelle, "Daimler considers sale of Chrysler unit; American arm to eliminate 13,000 jobs", *The International Herald Tribune*, Paris, 15 February 2007, p. 11.

McDougall, Walter A., "Space-Age Europe: Gaullism, Euro-Gaullism, and the American Dilemma", *Technology and Culture*, vol. 26, no. 2 (Baltimore, Johns Hopkins University Press, April 1985) pp. 179-203.

McGuire, Steven, "Airbus Industries: Conflict and Co-operation in US-EC Trade Relations", (St. Anthony's College, Oxford University Press, 1999).

McInnes, Colin, "Labour's Strategic Defence Review", *International Affairs*, vol. 74, no. 4 (London, Royal Institute of International Affairs, October 1998) pp. 823-845.

Mearsheimer, John J., "The Future of the American Pacifier", *Foreign Affairs*, vol. 80, no. 5 (New York, Council on Foreign Relations Press, September / October 2001) pp. 46-61.

_____, "Back to the Future: Instability in Europe After the Cold War", *International Security*, vol. 15, no. 1 (Cambridge / MA, MIT Press, Summer 1990) pp. 5-56.

Mearsheimer, John J. and Walt, Stephen M., "The Israel Lobby and US Foreign Policy", KSG Faculty Research Working Paper Series RWP06-011 (Cambridge / MA, Harvard University's John F. Kennedy School of Government, March 2006).

_____, "The Israel Lobby", *London Review of Books*, vol. 28, no. 6, 23 March 2006, pp. 3-12.

Mecham, Michael, "Deutsche Aerospace Wants to Grow Out of Its 'Junior Partner' Role", *Aviation Week & Space Technology*, vol. 132, no. 23, 4 June 1990, p. 23.

Menon, Anand, "France, NATO and the Limits of Independence, 1981-97: The Politics of Ambivalence" (Houndmills, Basingstoke, Hampshire, Macmillan, 2000).

Menon, Anand; Forster, Anthony and Wallace, William, "A common European defence?", *Survival*, vol. 34, no. 3 (London, Oxford University Press, Autumn 1992) pp. 98-118.

Merriam, Sharan B. (ed.), "Qualitative Research in Practice: Examples for Discussion and Analysis", (San Francisco / CA, Jossey-Bass, 2002).

Michel, Leo, Senior Research Fellow, Institute for National Strategic Studies, National Defense University, Washington, DC. Email sent to author on 26 November 2007.

_____, "NATO's 'French Connection': *Plus ça change...?*", Institute for National Strategic Studies (Washington, DC, National Defense University, 13 April 2007).

Milosch, Mark S. "Modernizing Bavaria: the politics of Franz Josef Strauss and the CSU, 1949-1969", (Berghahn Books, New York, 2006).

Mintz, Alex and Stevenson, Randolph T., "Defence Expenditures, Economic Growth, and the 'Peace Dividend': A Longitudinal Analysis of 103 Countries", *The Journal of Conflict Resolution*, vol. 39, no. 2 (Thousand Oaks / CA, Sage Publications, Inc., June 1995) pp. 283-305.

Mintz, John, "How a Dinner Led to a Feeding Frenzy; With Cuts on the Way, Defence Executives Were Told to Combine, Conquer at 'Last Supper' in '93", *The Washington Post*, 4 July 1997, p. G01.

_____, "Pentagon Assailed on Merger Aid; Hill Critics Seek End of Payments to Firms", *The Washington Post*, 28 July 1994, p. D9.

Mitrany, David, "A Working Peace System" (Chicago, Quadrangle Press, 1966).

Moerth, Ulrika, "Organizing European Cooperation – The Case of Armaments" (Oxford, Rowman & Littlefield Publishers, 2003).

Moran, Theodore H., "An Economics Agenda for Neorealists, *International Security*, vol. 18, no. 2 (Cambridge / MA, MIT Press, Autumn 1993) pp. 211-215.

_____, "The Globalization of America's Defence Industries: Managing the Treat of Foreign Dependence", *International Security*, vol. 15, no. 1 (Cambridge / MA, MIT Press, Summer 1990) pp. 57-99.

_____, *Multinational Corporations: The Political Economy of Foreign Direct Investment* (Lexington / MA, DC Heath, 1985).

Moran, Theodore H. and Mowery, David C., "Aerospace", *Daedalus*, Searching for Security in a Global Economy, vol. 120, no. 4 (Cambridge / MA, published by MIT Press on behalf of American Academy of Arts & Sciences, Fall 1991) pp. 135-154.

Morgenthau, Hans J., "Politics Among Nations: The Struggle for Power and Peace" (New York, Knopf, 5th edition 1973).

Morocco, John D., "EC Outlines Path For Consolidation", *Aviation Week & Space Technology*, vol. 147, no. 14, 6 October 1997, p. 24.

_____, "Boeing, EU Resolve Dispute Over Merger", *Aviation Week & Space Technology*, vol. 147, no. 4, 28 July 1997, p. 22.

_____, "Saab Debuts JAS 39B in Uphill Export Fight", *Aviation Week & Space Technology*, vol. 143, no. 15, 9 October 1995, p. 60.

_____, "Uncertain US Military Needs Hamper Industry Restructuring", *Aviation Week & Space Technology*, vol. 143, no. 24, 17 June 1991, p. 62.

Mowle, Thomas S., "Allies at Odds? The United States and the European Union" (New York, Palgrave Macmillan, October 2004).

Muradian, Vago, "BAE To Divest Portions Of LMC Unit In Exchange For DoJ Approval", *Defense Daily International*, 22 September 2000.

_____, "Pentagon Mulls Overseas Sale of Lockheed's Sanders Unit; Deal May Test Limits" *Defense Daily International*, 16 June 2000.

_____, "BAe-GEC To Complete Merger Today: More Deals Sought", *Defence Daily*, 30 November 1999.

National Academy of Engineering (eds.), "The Competitive Status of the US Civil Aviation Manufacturing Industry: A Study of the Influences of Technology in Determining International Industrial Competitive Advantage" (Washington, DC, The National Academies Press, 1985).

National Defense University, Mobilization Concept Development Center, "US Industrial Base Dependence / Vulnerability" (Washington, DC, NDU Press, 1987).

Nau, Henry, "Collective Responses to R&D Problems in Western Europe: 1955-1958 and 1968-1973", *International Organization*, vol. 29, no. 3 (Cambridge / MA, MIT Press, Summer 1975) pp. 617-653.

_____, "International Politics and International Technology", (Baltimore / MD, Johns Hopkins University Press, 1974).

Neuman, Stephanie G., "Defence Industries and Global Dependency", *Orbis*, vol. 50, no. 3 (Philadelphia, Foreign Policy Research Institute, Summer 2006), pp. 429-451.

"New Framework for the US-India Defence Relationship", signed in Arlington, Virginia (USA) on 28 June 2005 by the US Secretary of Defense and the Indian Minister of Defence.

Newhouse, John, "The Sporty Game" (New York, Alfred A. Knopf, 1982).

Nicoll, Alexander, "US Defence Restructuring, further consolidation possible", *Financial Times*, 3 September 1998, p. 10.

North Atlantic Treaty Organization (NATO), Strategic Concept issued by the NATO heads of state and government participating in the meeting of the North Atlantic Council in Washington, DC on 24th April 1999.

_____, "Rome Declaration on Peace and Cooperation", issued by the NATO heads of state and government participating in the meeting of the North Atlantic Council in Rome on 7-8 November 1991.

_____, "Declaration on a transformed North Atlantic Alliance", issued by the NATO heads of state and government participating in the North Atlantic Council meeting in London on 6 July 1990.

Nuttall, Simon J., "European Foreign Policy" (New York, Oxford University Press, 2000).

Nye, Jr., Joseph R., "Bound to Lead: The Changing Nature of American Power" (New York, Basic Books, 1990).

O'Brien, Timothy L., and Treaster, Joseph B., "Shaping a Colossus: The Overview; In Largest Deal Ever, Citicorp Plans Merger with Travelers Group", *The New York Times*, 7 April 1998, p. A1.

O'Brien, Timothy L., and Holson, Laura M., "German Deal Seen For No. 8 US Bank", *The New York Times*, 21 November 1998, p. A1.

Oden, Michael, "Cashing In, Cashing Out, and Converting: Restructuring of the Defence Industrial Base in the 1990s" in: Ann R. Markusen and Sean S. Costigan, "Arming the Future: A Defence Industry for the 21st Century" (New York, Council on Foreign Relations Press, 1999) pp. 74-105.

Omestad, Thomas, "Selling off America", *Foreign Policy*, vol. 76 (Washington, DC, Carnegie Endowment for International Peace, Autumn 1989) pp. 119-140.

Pages, Erik R., "Responding to Defence Dependence: Policy Ideas and the American Defence Industrial Base", (Westport, CT, Praeger, 1996).

Parkhe, Arvind, "US National Security Export Controls: Implications for Global Competitiveness of US High-Tech Firms", *Strategic Management Journal*, Vol. 13, No. 1 (Hoboken / NJ, John Wiley & Sons, Ltd., January 1992) pp. 47-66.

Patton, Michael Quinn, "Quality in qualitative research: Methodological principles and recent developments", invited address to Division J of the American Educational Research Association, Chicago, April 1985.

Pavitt, Keith, "Technology in Europe's future", Research Policy I (Brighton, Sussex: University of Sussex, Science Policy Research Unit, 1972)

Pearlstein, Steven, "And Then There Were...3; The Industry's Last Big Merger Provokes a Consolidation Cost-Benefit Debate", *The Washington Post*, 14 July 1997, p. F05.

_____, "Building Empires in Electronics; Lockheed-Loral Deal Shows Defence Firms' Shift", *The Washington Post*, 9 January 1996, p. C01.

_____, "Hard Sell for US Arms; Weapons Makers Feel Same Competitive Pressures as Other Global Industries", *The Washington Post*, 7 April 1991, p. H1.

Pearlstein, Steven and Swardson, Anne, "U.S. Gets Tough to Ensure Boeing, McDonnell Merger; Retaliation Plan in Works as Europe Threatens", *The Washington Post*, Washington, DC, 17 July 1997, p. C01.

Pedersen, Thomas, "Germany, France and the Integration of Europe: a Realist Interpretation" (London, Pinter, 1998).

Potomac Institute for Policy Studies, "TRP Development Study", (Arlington, VA, 2004).

Powell, Robert, "Anarchy in international relations theory: the neorealist-neoliberal debate", *International Organization*, vol. 48, no. 2 (Cambridge / MA, MIT Press, Spring 1994) pp. 313-344.

_____, "Absolute and Relative Gains in International Relations Theory", *The American Political Science Review* vol. 85, no. 4 (December 1991) pp. 1303-1320.

Press, Daryl G., "The Myth of Air Power in the Persian Gulf and the Future of Warfare", *International Security*, vol. 26, no. 2 (Cambridge / MA, MIT Press, Fall 2001) pp. 5-44.

Prodi, Romano, interview in *La Repubblica*, 19 April 2003.

Reuters, "Unlikely Allies Fight Trade Bill", *The New York Times*, 6 October 2000, p. C2.

_____, "International Business; Europe warns US on Phone Proposal", *The New York Times*, New York City, 26 July 2000, p. C3.

_____, "European Experts Oppose Boeing Deal", *The New York Times*, 17 July 1997, p. D8.

_____, "Military Business Sale to Loral is Completed", *The New York Times*, 6 May 1995, p. 37.

Reuters and Associated Press, "French senate report calls for restructuring at EADS", *The International Herald Tribune*, Paris, 27 June 2007.

Reuters and Bloomberg report, "Grumman gives nod to Northrop offer", *The Financial Post*, 5 April 1994. p. 10.

Richardson, Lloyd M., "Now, Play the India Card", *Policy Review* (Stanford / CA, Hoover Institution, October & November 2002) pp. 19-37.

Risse-Kappen, Thomas, "Collective Identity in a Democratic Community: The Case of NATO" in: Peter J. Katzenstein (ed.), "The Culture of National Security: Norms and Identity in World Politics" (New York City, Columbia University Press, 1996) pp. 357-399.

Roberts, Adam, "NATO's 'Humanitarian War' over Kosovo", *Survival*, vol. 43, no. 3 (London, Oxford University Press, Autumn 1999) pp. 102-123.

Robertson, David, "VTB sells EADS stake to another Russian bank", *The Times*, London, 28 December 2007.

Robertson, George, NATO Secretary General quoted in: “NATO’s Defence Capabilities Initiative”, NATO Handbook (NATO, Brussels, 2001) pp. 50-51.

_____, Speech by the NATO Secretary General to the Annual Session of the NATO Parliamentary Assembly in Amsterdam on 15 November 1999.

Rodman, Kenneth A., “Sanctions at Bay? Hegemonic decline, multinational corporations, and US economic sanctions since the pipeline case”, *International Organization*, vol. 49, no. 1 (Cambridge / MA, MIT Press, Winter 1995) pp. 105-137.

Rodman, Peter, “European Common Foreign, Security and Defence Policies – Implications for the United States and the Atlantic Alliance”, Statement before the Committee on International Relations, House of Representatives, 10 November 1999.

Rohde, Joachim; Taylor, Trevor, Schmidt, Peter, “The role of the armaments industry in supporting the preparation and conduct of military operations” in: Centre for European Policy Studies, Third meeting of the CEPS Working Party on Future Cooperation among European Defence Industries, Brussels 1997.

Ruecker, Kirsten, “Military Build-up in Central and Eastern Europe: NATO Membership for Sale”, BASIC Paper, no. 22 (London / Washington, DC, British American Security Information Council, July 1997).

Rutten, Maarte, (editor), “From St. Malo to Nice – European defence: core documents” *Chaillot Paper* (Institute for Security Studies of WEU, Paris, May 2001).

Salter, Malcolm S., “Turbulent Skies: Airbus vs. Boeing” Harvard Business School Case no. 0-386-193 (Cambridge / MA, Harvard Business Publishing, 1987).

Sandholtz, Wayne, “High-Tech Europe – The Politics of International Cooperation” (Berkeley / Los Angeles / Oxford, University of California Press, 1992).

Sanger, David E., “Germans Approve New plan To Pay Holocaust Victims”, *The New York Times*, 10 February 1999, p. A10.

Scales, Jr., Robert H., “Culture-Centric Warfare” (US Naval Institute Proceedings, October 2004).

Schake, Kori; Bloch-Lainé, Amaya and Grant, Charles, “Building a European Defence Capability”, *Survival*, vol. 41, no. 1 (London, Oxford University Press, Spring 1999) pp. 20-40.

Schmid, John, “Is VoiceStream Worth the Price?; Drop in Deutsche Telekom’s Stock Shows Investors Are Concerned”, *The International Herald Tribune*, Paris, 25 July 2000, p. 11.

Schmitt, Burkard, “The European Union and armaments: Getting a bigger bang for the Euro”, *Chaillot Paper*, no. 63 (Paris, EU Institute for Security Studies, August 2003).

_____, “European Armaments Cooperation – Core Documents”, *Chaillot Paper*, no. 59 (Paris, EU Institute for Security Studies, April 2003).

_____, “European and Transatlantic Defence-Industrial Strategies”, background paper prepared for the IISS/CEPS European Security Forum, Brussels, 25 November 2002.

_____, “From cooperation to integration: defence and aerospace industries in Europe”, *Chaillot Paper*, no. 40 (Paris, WEU Institute for Security Studies, July 2000).

- Sennott, Charles M., “Arms Deals Criticized as Corporate Welfare”, *The Boston Globe*, 14 January 2003, p. A1.
- Sevastopulo, Demetri, “Pentagon fears BAE leak of fighter secrets”, *Financial Times*, US edition, 2 May 2008, p. 2.
- Shichor, Yitzhak, “Israel’s Military Transfers to China and Taiwan”, *Survival*, vol. 40, no. 1 (London, Oxford University Press, Spring 1998) pp. 68-91.
- Sims, Calvin, “Northrop Bests Martin Marietta to Buy Grumman”, *The New York Times*, 5 April 1994, p. 1 + 6.
- Skapinker, Michael and Tucker, Emma, “Boeing Warns of Trade War if Merger Is Blocked”, *Financial Times*, 14 May 1997, p. 1.
- Skoens, Elisabeth and Wulf, Herbert, “The Internationalisation of the Arms Industry”, *Annals of the American Academy of Political and Social Science*, vol. 535, no. 1, September 1994, pp. 43-57.
- Sloan, Stanley R., Stanley R. Sloan, “The United States and European defence”, *Chaillot Paper*, no. 39 (Paris, WEU Institute for Security Studies, April 2000).
- _____, “Managing the NATO Alliance: Congress and Burdensharing”, *Journal of Policy Analysis and Management*, vol. 4, no. 3 (Hoboken / NJ, John Wiley & Sons, Spring 1985) pp. 396-406.
- Snyder, Glenn H., “Alliances, balance, and stability”, *International Security*, vol. 45, no. 1 (Cambridge / MA, MIT Press, Winter 1991) pp. 121-142.
- Sorkin, Andrew Ross, and Romero, Simon, “Deutsche Telekom To Pay \$50 Billion For US Company”, *The New York Times*, 24 July 2000, p. A1.
- Spanier, John W., “Games Nations Play: Analyzing International Politics” (New York, Praeger Publishers, 3rd edition 1978).
- Sparaco, Pierre, “EADS Completes Europe’s Long-Awaited Restructuring”, *Aviation Week & Space Technology*, vol. 153, no. 4, 24 July 2000, p. 103.
- _____, “Dassault Reaffirms Its Independence”, *Aviation Week & Space Technology*, vol. 152, no. 9, 28 February 2000, p. 41.
- _____, “BAe-DASA Merger Feared by France”, *Aviation Week & Space Technology*, vol. 149, no. 23, 7 December 1998, p. 36.
- _____, “Airbus Aggressively Seeks Equal Footing With Boeing”, *Aviation Week & Space Technology*, vol. 148, no. 12, 23 March 1998, p. 49.
- _____, “EU Leaders Promote Restructuring Initiatives; Three European governments are urging their aerospace industries to move ahead now on consolidation”, *Aviation Week & Space Technology*, vol. 147, no. 24, 15 December 1997, p. 22.
- _____, “Airbus Fights Back in US-Europe Rivalry”, *Aviation Week & Space Technology*, vol. 146, no. 26, 23 June 1997, p. 20.
- Spiegel, Peter, “The Americas: FBI approves Deutsche Telekom deal – Security problems resolved”, *Financial Times*, London, 18 January 2001, p. 4.
- _____, “International Economy: FBI highlights concern over foreign takeovers: National security fears dog company acquisition plans”, *Financial Times*, London, 11 January 2001, p. 9.
- _____, “Telekom clears hurdle in US”, *Financial Times*, London, 27 October 2000, p. 13.

_____, “Telekom faces FCC hurdle on US\$45 billion deal”, *Financial Times*, London, 11 October 2000, p. 1.

Stevenson, Richard W., “Will Aerospace Be the Next Casualty?”, *The New York Times*, 15 March 1992, Sec. 3, pp. 1, 6.

Stork, Joe and Wenger, Martha, “US Aid to Israel: The Censored GAO Report”, *MERIP Reports*, no. 117, Debt and Development (Washington, DC, Middle East Research and Information Project, September 1983) pp. 28-30.

Stumbaum, May-Britt U., “Risky Business? The EU, China, and dual-use technology”, *Occasional Paper*, no. 80 (Paris, EU Institute for Security Studies, August 2003).

Srinivasan, Kalpana and Associated Press, “Takeover Advances Under Hill Fire; Hollings, Others Try To Stop Foreign Voice Stream Deal”, *The Washington Post*, Washington, DC, 8 September 2000, p. E03.

Srivastava, Siddharth, “India’s Fighter Wars: Competition heats up for New Delhi’s largest defence deal”, *Asia Sentinel*, 24 August 2009.

Talbott, Strobe, “America’s Stake in a Strong Europe”, speech to the Royal Institute of International Affairs in London on 7 October 1999.

Taverna, Michael A., “European finance ministers approve Galileo funding plan”, *Aerospace Daily & Defence Report*, 27 November 2007, vol. 224, no. 40, p. 3.

_____, “European Challenger”, *Aviation Week & Space Technology*, vol. 159, no. 10, 8 September 2003, p. 61.

_____, “Europe Declares Satnav Independence”, *Aviation Week & Space Technology*, vol. 156, no. 13, 1 April 2001, p. 24.

Taylor, Phillip, “Weapons Standardization in NATO: Collaborative Security or Economic Competition?”, *International Organization*, vol. 36, no. 1 (Cambridge / MA, MIT Press, Winter 1982) pp. 95-112.

Taylor, Simon, “Obituary – François Lamoureux”, *EuropeanVoice.com*, 31 August 2006.

Taylor, Trevor, “Defence Industries in International Relations”, *Review of International Studies*, vol. 16, no. 1 (Cambridge, Cambridge University Press, January 1990) pp. 59-73.

Thales Group, “From the origins of the company in 1893 to 2009”.
http://www.thalesgroup.com/Group/About_us/History/

The Boeing Company (Boeing), “About Us: Boeing in China – Overview”, Boeing corporate website. The document is no longer online but was accessed on November 15 2007:
<http://www.boeing.com/companyoffices/aboutus/boechina.html>

_____, Annual Report 2004 (Chicago, 25 February 2005).

_____, Annual Report 1999 (Seattle, 28 February 2000).

_____, Annual Report 1997 (Seattle, 28 February 1998).

_____, “Boeing Responds to European Commission Statement of Objections to Merger”, press release (Seattle, 21 May 1997).

_____, “Boeing, Rockwell Aerospace and Defence Units To Merge”, press release (Seal Beach, California, December 5, 1996).

The Boeing Company and McDonnell Douglas Corporation (Boeing & MDC), Joint Proxy Statement / Prospectus (Seattle, 20 June 1997).

The Daily Telegraph, London, “Germany considers buying ‘Golden Share’ in EADS”, 7 August 2007, p. 2.

The Department of Defense of the United States of America and the Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland (US DoD & UK MoD), “US-UK Declaration of Principles for Defence Equipment and Industrial Cooperation”, signed by US Defense Secretary William S. Cohen and the UK Secretary of State for Defence, Geoffrey Hoon, on 5 February 2000.

The Economist, “Odd Industry Out”, London, 18 July 2002.

_____, “Eppur si muove—or maybe not”, US edition, 1 June 2002.

_____, “Schrempp’s Last Stand”, US Edition, 1 March 2001.

_____, “A farewell to arms makers”, London, 20 November 1997.

_____, “America Says No”, London, 16 June 1966.

The Independent, London, “French sign MoD terms for Racal”, 13 June 2000, p. 17.

_____, “Outlook: Defence”, 23 December 1998, p. 11.

The New York Times, “Computers Denied To France By US”, 21 May 1966, p. 38.

The White House, “2006 National Security Strategy of the United States” (Washington, DC, US National Security Council, March 2006).

Thompson, Kenneth W., “The Study of International Politics a Survey of Trends and Developments”, in *The Review of Politics*, vol. xiv (Indiana: University of Notre Dame, 1952) pp. 433-467.

Thornton, David W., “The US Drive for Aeronautical Supremacy” in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), “Strategic Issues in European Aerospace” (Surrey, Ashgate Publishing, 1999) pp. 63-80.

_____, “Airbus Industrie: the Politics of an International Industrial Collaboration” (London, Macmillan, 1995).

Tolchin, Martin, “Agency on Foreign Takeovers Wielding Power”, *The New York Times*, 24 April 1989, p. D6.

Turner, Mike, Speech by the then-CEO of BAE Systems to the Washington Economic Club on 10 May 2006.

UK House of Commons, Eighth Report by the Select Committee on Defence, London, 9 July 2003.

UK Ministry of Defence (MoD), “Strategic Defence Review”, Presented to Parliament by the Secretary of State for Defence by Command of Her Majesty (London, UK Ministry of Defence, July 1998).

Usborne, David and Godsmark, Chris, “£5bn Lockheed deal creates defence goliath”, *The Independent*, London, 4 July 1997, p. 24.

US Arms Control and Disarmament Agency, “World Military Expenditures and Arms Transfers 1967-1976” (Washington, DC, US Government Printing Office, 1978).

US Congressional Office of Technology Assessment (OTA), “Multinationals and the National Interest: Playing by Different Rules”, OTA-ITE-569 (Washington, DC, US Government Printing Office, September 1993).

_____, “Lessons in Restructuring Defence Industry: The French Experience – Background Paper”, OTA-BP-ISC-96, (Washington, DC, US Government Printing Office, June 1992).

_____, “Competing Economies: America, Europe, and the Pacific Rim” (Washington, DC, US Government Printing Office, October 1991).

_____, “Arming Our Allies: Cooperation and Competition in Defence Technology”, OTA-ISC-448 (Washington, DC, US Government Printing Office, May 1990).

_____, “Holding the Edge: Maintaining the Defence Technology Base”, OTA-ISC-420 (Washington, DC, US Government Printing Office, April 1989).

US Congressional Research Service (CRS), Richard F. Grimmett, “Conventional Arms Transfers to Developing Nations, 2001-2008” (Washington DC, US Government Printing Office, 4 September 2009).

_____, Christopher Bolkcom, “Civil Air Reserve Fleet (CRAF)”, Congressional Research Service, (Washington DC, US Government Printing Office, 18 October 2006).

US Defence Security Service Counterintelligence Office, “2006 Technology Collection Trends in the US Defence Industry” (Alexandria, VA, Defence Security Service, 20 June 2006).

_____, “2001 Technology Collection Trends in the US Defence Industry” (Alexandria, VA, Defence Security Service, 2001).

US Department of Defense (DoD), “Security Controls Over Joint Strike Fighter Classified Technology”, classified report by the Pentagon Inspector General, D-2008-056 (Washington, DC, US Department of Defense, 6 March 2008). The declassified / redacted version of this report can be found online at: <http://pogoarchives.org/m/ns/dod-ig-report-20080306.pdf>

_____, “Quadrennial Defense Review Report” (Washington, DC, US Department of Defense, 6 February 2006).

_____, “Transformation Planning Guidance” (Washington, DC, US Department of Defense, June 2003).

_____, “DoD Briefing on US/UK Defence Cooperation” by Kenneth H. Bacon, Assistant Secretary of Defense for Public Affairs, James Bodner, Principal Deputy Under Secretary of Defense for Policy, and Al Volkman, Deputy Under Secretary of Defense for International Cooperation, and Pete Verga, Deputy Under Secretary of Defense for Policy Support, on 8 February 2000.

_____, “The Bottom-Up Review: Forces For A New Era”, Report by Secretary of Defense Les Aspin (Washington, US Department of Defense, 1 September 1993).

_____, “Bolstering Defence Industrial Competitiveness”, Report to the Secretary of Defense by Robert B. Costello, Under Secretary of Defense for Acquisition (Washington, DC, US Department of Defense, July 1988).

US Department of State (DoS), Bureau of European and Canadian Affairs, “Report to the Congress on the Enlargement of the North Atlantic Treaty Organization: Rationale, Benefits, Costs and Implications”, (Washington, DC, US Government Printing Office, 24 February 1997).

_____, “Report of Audit: Department of State Defense Trade Controls”, report by State Department inspector general Sherman Funk (Washington, DC, US Government Printing Office, March 1992).

US Federal Communications Commission (FCC), “Memorandum Opinion and Order Approving Deutsche Telekom/VoiceStream/Powertel Transfers of Control”, (Washington, DC, US Government Printing Office, 27 April 2001).

_____, Office of the Chairman, “FCC Responses to 28 June 2000 inquiries from The Hon. Ernest F. Hollings et al.”, (Washington, DC, US Government Printing Office, 20 July 2000).

US Federal Reserve Board (Fed), “Approval of the proposal of Deutsche Bank AG, Frankfurt am Main, Federal Republic of Germany, to acquire Bankers Trust Corporation, New York, New York (‘BT Corp’), and thereby acquire all of the banking and non-banking subsidiaries of BT Corp”, New York City, 20 May 1999.

US Federal Trade Commission (FTC), Prepared Statement by FTC Chairman Robert Pitofsky before the United States Senate Committee on the Judiciary, Subcommittee on Antitrust, Business Rights, and Competition, (Washington, DC, US Federal Trade Commission, 24 July 1997).

_____, Letter Regarding the Proposed Acquisition of McDonnell Douglas Corporation by The Boeing Company, File No. 971-0051 (Washington, DC, US Federal Trade Commission, 1 July 1997).

_____, Statement by FTC Commissioner Mary L. Azcuenaga in “The Boeing Company”, File No. 971-0051 (Washington, DC, US Federal Trade Commission, 1 July 1997).

US Government Accountability Office / US General Accounting Office (GAO), “Defense Acquisitions – Charting a Course for Lasting Reform”, statement of Paul Francis, Managing Director, Acquisition and Sourcing Management, Testimony before the Committee on Armed Services, House of Representatives (Washington, DC, US Government Printing Office, 30 April 2009).

_____, Report to Congressional Committees, “Defence Acquisitions: Assessments of Selected Weapons Programmes”, (Washington, DC, US Government Printing Office, March 2009), “Highlights” page.

_____, “Air Force Procurement – Aerial Refuelling Tanker Protest”, statement of Daniel I. Gordon, Deputy General Counsel, Testimony before the Air and Land Forces Subcommittee, Committee on Armed Services, House of Representatives (Washington, DC, US Government Printing Office, 10 July 2008).

_____, US Government Accountability Office, “Decision – Matter of: The Boeing Company” (Washington, DC, Government Printing Office, 18 June 2008).

_____, Report to the United States Senate Committee on Armed Services, “Defence Trade Data”, (Washington, DC, US Government Printing Office, 2006).

_____, General Accounting Office, “Defence Industry Consolidation: Competitive Effects of Mergers and Acquisitions”, Testimony Before the Subcommittee on Acquisition and Technology, Committee on Armed Services, US Senate (Washington, DC, US Government Printing Office, March 1998).

_____, Report to the Secretary of Defense, “Defence Trade: European Initiatives to Integrate the Defence Market”, (Washington, DC, US Government Printing Office, October 1997).

_____, “European Aeronautics: Strong Government Presence in Industry Structure and Research and Development Support”, Report for the Subcommittee on Technology, Environment and Aviation of the Committee on Science, Space and Technology in the House of Representatives (Washington, DC, US Government Printing Office, March 1994).

_____, “Industrial Base: Significance of DoD’s Foreign Dependence”, Report to the Chairman, Subcommittee on Technology and National Security, Joint Economic Committee, US Congress (Washington, DC, US Government Printing Office, January 1991).

_____, “Industrial Base: Adequacy of Information on the US Defence Industrial Base”, Report to the Chairman, Subcommittee on Legislation and National Security, Committee on Government

Operations, US House of Representatives (Washington DC, US Government Printing Office, November 1989).

_____, “Improper Lobbying Activities by the Department of Defense on the Proposed Procurement of the C-5B Aircraft” (Washington, DC, US Government Printing Office, 29 September 1982).

US House of Representatives (House), Expressing the sense of the House of Representatives regarding the interference of the European Commission in the merger of the Boeing Company and McDonnell Douglas, House Resolution 191, 105th Congress, Washington, DC, 21 July 1997.

_____, Committee on Armed Services, “The Ailing Defence Industrial Base: Unready for Crisis”, Defence Industrial Base Panel Report, 96th Congress, 2nd session, (Washington, DC, US Government Printing Office, 1980).

US International Trade Commission (ITC), “Competitive Assessment of the US Large Civil Aircraft Aerostructures Industry”, Investigation No. 322-414, Publication 3433, June 2001, ch. 7-6.

US Senate (Senate), Expressing the sense of the Senate regarding United States policy toward the North Atlantic Treaty Organization and the European Union, in light of the Alliance’s April 1999 Washington Summit and the European Union’s June 1999 Cologne Summit, Senate Resolution 206, 106th Congress, Washington, DC, 28 October 1998.

_____, Expressing the sense of the Senate on the European Commission’s handling of the Boeing / McDonnell Douglas merger, Resolution 108, 105th Congress, Washington, DC, 16 July 1997.

van Eekelen, Willem F., “The Parliamentary Dimension of Defence Procurement: Requirements, Production, Cooperation, and Acquisition”, *Occasional Paper*, no. 5 (Geneva, Geneva Centre for the Democratic Control of Armed Forces – DCAF, March 2005).

van Herpen, Marcel H., “France: Champion of a Multipolar World” *The National Interest*, vol. 2, issue 19, 14 May 2003.

van Scherpenberg, Jens, “Transatlantic Competition and European Defence Industries: A New Look at the Trade-Defence Linkage”, *International Affairs*, vol. 73, no. 1 (London, Royal Institute of International Affairs, January 1997) pp. 99-122.

Védrine, Hubert, “Into the Twenty-First”, speech at the opening of a conference hosted by the Institut Français des Relations Internationales (IFRI) in Paris on 3 November 1999.

Velocci, Jr., Anthony L., “Market Realities Driving New Order in Aerospace”, *Aviation Week & Space Technology*, vol. 146, no. 11, 17 March 1997, pp. 44-46

_____, “New Identity Emerging At Northrop Grumman”, *Aviation Week & Space Technology*, vol. 144, no. 2, 8 January 1996, p. 332.

_____, “Megamerger Points To Industry’s Future”, *Aviation Week & Space Technology*, vol. 141, no. 10, 5 September 1994, pp. 36-38.

Vlachos-Dengler, Katia, “Off Track? The Future of the European Defence Industry” (Santa Monica / CA, RAND Corporation, 2004).

Vlasic, Bill and Stertz, Bradley A., “Taken for a Ride: How Daimler-Benz Drove off with Chrysler” (New York, HarperCollins Publishers, 2001).

Walker, William, “Nuclear Order and Disorder”, *International Affairs*, vol. 76, no. 4 (London, Royal Institute of International Affairs, October 2000) pp. 703-724.

_____, "International collaboration in civil aerospace", *International Affairs*, vol. 63, no. 2 (London, Royal Institute of International Affairs, Spring 1987) p. 302.

Walker, William and Gummett, Philip, "Britain and the European Armaments Market", *International Affairs*, vol. 65, no. 3 (London, Royal Institute of International Affairs, Summer 1989) pp. 419-442.

Waltz, Kenneth, "Theory of International Politics" (Reading / Massachusetts, Addison-Wesley, 1979).

Wall, Robert, "Polish F-16 Deal May Ease Path to JSF", *Aviation Week & Space Technology*, vol. 158, no. 1, 6 January 2003, p. 24.

Wall, Robert and Taverna, Michael A., "Navigating Hurdles; US and Europe ink agreement on coexistence of GPS and Galileo", *Aviation Week & Space Technology*, vol. 160, no. 26, 28 June 2004, p. 31.

Wallace, William and Phillips, Christopher, "Reassessing the special relationship", *International Affairs*, vol. 85, no. 2 (London, Royal Institute of International Affairs, March 2003 2009) pp. 263 ; 267.

Wallace, William and Zielonka, Jan, "Misunderstanding Europe", *Foreign Affairs*, vol. 77, no. 6 (New York, Council on Foreign Relations Press, Nov / Dec 1998) pp. 65-79.

Walt, Stephen M., "The Ties That Fray: Why Europe and the United States are Drifting Apart", *The National Interest*, no. 54 (Washington, DC, Winter 1998) pp. 3-11.

_____, "The Origins of Alliances" (Ithaca / NY, Cornell University Press, 1987).

Walters, Joanna, "GEC seeks partner. Please join the queue; After years of jaw, jaw, the global defence industry is finally prepared for action", *The Observer*, 3 January 1999, p. 3.

Warwick, Graham, "Augustine's Vision", *Flight International*, 16 July 1997.

Watts, Barry D., "The US Defense Industrial Base: Past, Present and Future" (Washington, DC, Center for Strategic and Budgetary Assessments, 2008).

Wendt, Alexander, "Anarchy is what States make of it: The Social Construction of Power Politics", *International Organization*, vol. 46, no. 2 (Cambridge / MA, MIT Press, Spring 1992) pp. 391-426.

Wessner, Charles, interview "on the leakage of US commercial aircraft technology to overseas sources" conducted by Alan MacPherson and David Prichard at the US Aerospace Industries Association in Washington, DC on 23 March 2004. Quoted in: "Boeing's Diffusion of Commercial Aircraft Technology to Japan: Surrendering the US Industry for Foreign Financial Support", *Journal of Labour Research*, vol. 28, no. 3 (New York, Springer New York, Summer 2007) p. 559.

Western European Union (WEU), Petersberg Declaration of the Western European Union (WEU) adopted by the WEU Council of Ministers in Bonn on 19 June 1992.

Whitfield, Robert, "Consolidation in European Aerospace: A UK Perspective" in: Philip Lawrence, Derek Braddon, and Paul Dowdall (eds), "Strategic Issues in European Aerospace" (Surrey, Ashgate Publishing, 1999) pp. 103-112.

Willcock, John, "DASA remains prime target for BAe merger", *The Independent* (London), 31 December 1998, p. 21.

Williams, Roger, "The International Political Economy of Technology", in Susan Strange (ed), "Paths to International Political Economy" (London, Allen and Unwin, 1984) pp. 70-71.

Witney, Nick, interview with the CEO of the European Defence Agency published in "Catalyst for Cooperation: European Defence Agency presses on to forge closer ties among member militaries and create more 'bang' for the euro", *Aviation Week & Space Technology*, vol. 162, no. 26, 27 June 2005, p. 62.

Wohlforth, William C., "The Stability of a Unipolar World", *International Security*, vol. 24, no. 1 (Cambridge / MA, MIT Press, Summer 1999) pp. 5-41.

Yin, Robert K., "The Case Study Crisis: Some Answers", *Administrative Science Quarterly*, vol. 26, no. 1 (Ithaca / NY, Cornell University Press, March 1981), pp. 58-65.

_____, "Case Study Research: Design and Methods", Applied Social Research Methods Series, vol. 5 (Thousand Oaks / CA, Sage Publications, 1994).

Zakheim, Dov S. and Kadish, Ronald T., "One-Stop Defence Shopping", *The Washington Post*, 28 April 2008, p. A15.

Zuckerman, Laurence, "Loral Plans to Pay \$800 Million In Deal for Unisys Military Units", *The New York Times*, 22 March 1995, p. 1.

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