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Security Policy in the European Union and the United States through the issue of their Defence Expenditures

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This article aims to clarify how the level of defence expenditures affected security policy in the post-World War II Europe and the United States till the present day. We first analyze theoretically the issue of a nation's power through its defence outlays. We then proceed to the examination of how security policy was formulated during Cold War and afterwards for both Europe and the United States through their defence expenditures. By comparing European to United States defence budgets ceilings we found that the European military capabilities are undermined by the low level of the defence budget which is provided by the European Union member states as a whole, as well as by the lack of homogeneity in military means. By contrast, we noticed that the historically large US defence expenditures were one of the major reasons for the US global hegemony during Cold war and afterwards. We also examine the implications that defence expenditures have on military industry, macroeconomic performance and geopolitics and the correlation that arises among them.

Keywords: Security Policy, Defence Expenditures, European Union, United States, Defence Industry, Public Economics.

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Introduction

Security policy is a very important factor of a nation's strength as it determines considerably its political independence and social stability. Security policy is not just the implementation of a nation's deterrence policy so as to protect its human capital and infrastructure but also it is the way of preservation and protection of a society's values and principles by external threats or challenges. However, in order to be credible and plausible, security policy needs effective armed forces, which consequentially means that their efficiency is determined predominantly by the level of a nation's defence expenditures.

The need for powerful armed forces had already been noted since ancient times. Power, for Thucydides, is expressed through military means and measured through military capabilities.¹ The 5th century A.D. latin author Vegetius suggested to the Roman emperors "si vis pacem, para bellum", which means "if you wish for peace, prepare for war". Niccolò Machiavelli, in accordance with Thucydides and Vegetius proposes that force is related to military capabilities, while the 18th century King of Prussia, Frederick the Great had come to the conclusion that "diplomacy without credible armed forces is like music without instruments."² Finally, the famous Prussian General and war theorist, Carl von Clausewitz, in his *On War* suggests that "war is merely the continuation of policy by other means".³

The correlation between security and military capabilities is also corroborated by modern scholars of international relations. Some examples include Edward Carr who in his *Twenty Years Crisis* proposes that military strength plays the crucial role for the formation of international relations, a thesis consistent with Frederic the Great's ideas.⁴ Another leading representative of the "classical realist" school of international relationships, Hans Morgenthau, admits that military strength is the predominant (but not the only) factor for the political power of a nation.⁵

The major contribution of our analysis in this paper is that we examine how defence expenditures affected security policy in both Europe and the United States. Although

1. Thucydides, Benjamin Jowett, *The History of the Peloponnesian War*, New York, Prometheus Books, 1998, p. 169.
2. Vegetius, Michael D. Reeve, *Epitoma Rei Militaris*, Oxford, Oxford Classical Texts, 2004, Book III ; Niccolò Machiavelli, *The Prince*, Oxford, Oxford University Press, 2005, p. 28 ; Jeremy Blackham and Gwyn Prins, "Why Things Don't Happen: Silent Principles of National Security", *The RUSI Journal*, Vol. 155, No. 4, August-September, 2010, p. 21.
3. Andreas Herberg-Rothe, *Clausewitz's Puzzle, The Political Theory of War*, Oxford, Oxford University Press, 2007, pp. 139-144.
4. Edward H. Carr, *The Twenty Years Crisis 1919-1939: An Introduction to the Study of International Relations*, New York, Palgrave Macmillan, 2001, pp. 102-134.
5. Hans Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, New York, McGraw-Hill Humanities Social, 1993, pp. 30-34.

we acknowledge that this is hardly an approach that fully justifies by its own the ways which security policy is shaped by states globally, we do think however that the issue of defence expenditures is of major importance when a state intends to implement its grand strategy, a major implication of which, includes its security policy. In the first chapter we further analyze the issue of a nation's power based on military spending. Our findings, both theoretical and empirical indicate that military spending can have negative or positive implications not only in geopolitics but also in other aspects of a nation's grand strategy, like economic performance.

In the second chapter, we show that defence expenditures had a key role for the configuration of post-World War II (WWII) security policy for both the European nations and the United States. The vacuum of power that was created by the destruction of Europe due to the Third Reich's struggle for domination made Europeans desperate for a new collective system of security against a new emerging threat: Soviet expansionism. But it was obvious that a new stable and capable European security system needed credible armed forces and thus, a large amount of defence expenditures that Europeans could not afford to undertake only by themselves.

As a consequence, the intervention of the United States in Europe via NATO became a necessary precondition. However, as we further show in this part of our analysis, defence outlays seemed not to be the only priority for the implementation of the European security policy since the end of the Cold War era, as EU member states were primarily get used to other aspects of security, such as, the institutional evolution of the European security policy in order to manipulate more effectively the new emerging post-Cold War issues such as, conflict prevention, humanitarian missions, etc.

In the third chapter we briefly analyse the implications and the motives behind US intervention in global affairs, focusing mainly on their European aspect. Then, we focus on the vast level of the American defence expenditures since 1945 to the present day that led to the creation of the American political and military hegemony globally. Then, in the fourth part we proceed to the comparison between European to American security policy mainly through the issue of their defence expenditures. We noticed that the European security policy is characterized by inefficiencies in military means due to the low level of homogeneity among the EU's armed forces.

We also found that the large amount of the US defence expenditures comparing to those of their European allies produces positive consequences for the US defence industry, predominantly in aeronautics, which thanks to heavy Research and Development (R&D) government funding and the huge American defence market, it achieves economies of scale, in antithesis to the small EU member states national markets. However, we finally show that a negative side-effect of the excessive US defence expenditures has to do with the deterioration of the economy's performance, a situation that forced the Obama's Government to make plans to reduce the American defence budget for the 2011-2020 period, especially war expenses and new weapons procurement, a policy which diverges significantly from the ex-president Bush's "offensive" Grand Strategy.



The Theoretical Background of the Defense Expenditures

As we have already said, security policy needs effective armed forces so as to be credible and plausible. However, we argue that military power is dependent on the level of the defence expenditures a nation intends to afford. At this point we should mention that we acknowledge that military power is not only measured by the level of defence expenditures in absolute figures, but another crucial determinant of military power has to do with the efficient management of a nation's budgetary resources that are channeled for defence purposes.⁶ This thesis is also explained by Polachek and Seiglie, who argue that the efficient utilization of defence expenditures augments national security.⁷

The importance of military power (here seen through defence expenditures) is also acknowledged by many modern authors too. Ray Cline presented his "Equation of Power" according to which, the power of a nation is determined by the sum of its economic and military strength, - a thesis also supported by Paul Kennedy-, as well as by the size of its population, multiplied by the aggregate result of its strategic goals and the will of the political leadership to implement the national strategy.⁸ Robert Gilpin asserted that military power is strongly determined by the strength of a nation's economy, by the level of its population and by technological and institutional changes.⁹ Kenneth Waltz agrees with the above authors and adds that except military capability and economic strength, the power of a nation is also based on its ability to create international alliances.¹⁰

John Mearsheimer, who introduced the theory of "offensive realism" argues that states in their struggle to ensure their survival, seek regional dominance through military strength so as "to be much more powerful than all the other states in the system". Mearsheimer, like the scholars above, acknowledges that power is determined by the strength of a nation's armed forces and the level of its defence expenditures.¹¹ Finally, Liddell Hart in his *Real War* provides an "ideological" diastasis to military power. He argues that except the "psychological" impact which has to do with "esprit de corps", which under certain circumstances can be a great stimulus to the war effort, he also acknowledges the issues of ethics to war: He argues that "the stimulus of a great moral impulse to action is necessary, a deep-rooted belief in the policy for which citizens are called to fight".¹²

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6. Michael Brozka presents an extended catalogue of the allocation of defence budgets that comprises of many different subdivisions which, apart from the procurement budget for new weaponry, also include payment to soldiers, military schools, hospital services to veterans, pensions etc. It is obvious that if a nation is not efficient in the manipulation of these subdivisions, defence expenditures increase even if the quality of security they provide is not maximized in terms of efficiency. See Michael Brzoska, "World Military Expenditures", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 1995, pp. 48-49.
 7. Solomon W. Polachek and Carlos Seiglie, "Trade, Peace and Democracy: An Analysis of Dyadic Dispute", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 2007, p.1030.
 8. Ray S. Cline, *World Power Assessment: A Calculus of Strategic Drift*, Colorado, Westview Press, 1975, p. 124; Paul Kennedy, *The Rise and the Fall of the Great Powers*, New York, Vintage Books, 1989, p. 439.
 9. Robert Gilpin "The Theory of Hegemonic War", *Journal of Interdisciplinary History*, Vol. 18, No.4, Spring 1988, pp. 599-605.
 10. Kenneth Waltz, *Theory of International Politics*, Reading, Addison-Wesley, 1979, pp. 116-128.
 11. For the theory of "offensive realism" see John J. Mearsheimer, *The Tragedy of Great Power Politics* W. W. Norton & Company, New York, 2003. For a more recent view that correlates a nation's power with military capabilities see John J. Mearsheimer, "The Gathering Storm: China's Challenge to US Power in Asia", *Chinese Journal of International Politics*, Vol. 3, 2010a, pp. 385-388.
 12. B.H. Liddel Hart, *The Real War*, Boston, New York, Little Brown and Company, 1963, pp. 51-52.

On the other hand, many scholars have attempted to measure the relationship between defence expenditures and economic performance. Since the Cold War, empirical evidence proved that defence expenditures have both positive and negative impact on growth. Some scholars claim that although defence expenditure is regarded as “unproductive expenditure” they instead produce positive spin off effects on growth.¹³ By contrast, other empirical studies have shown a negative relationship between defence outlays and growth.¹⁴ However, the results of such kinds of studies depend on different chronological sample periods while some pivotal parameters such as, socio-economic structure, the type of government etc., are different from state to state.¹⁵ Recent empirical studies have also confirmed the positive or the negative relationship between defence expenditures and economic growth while others found no affection of defence expenditures to economic growth.¹⁶

By the overall analysis we deduce that the level of defence expenditures plays a pivotal role for the determination of a nation’s power (here meaning power in geopolitics and foreign relations as well as macroeconomic prosperity). In the following two chapters we will show how defence expenditures conditioned European security since 1945 to nowadays and how the level of defence outlays contributed to the post war establishment of the American hegemony in geopolitics during and after Cold war.

Defence Expenditures and Security Policy Decisions in Europe since 1945 to the Present

In order to understand the post-WW2 relationship between security policy and defence expenditures in Europe and the United States we must first take a brief look to the parameters that formulated security and peace from the Cold War era to the present.

From the WEU and NATO to the CFSP

The socioeconomic and political environment under which post-WWII Europe must made a new start was undeniably grim and uncertain. Europe was in a tragic condition due to the ex-

13. See among others, Emil Benoit, “Growth and Defense in Developing Countries”, *Economic Development and Cultural Change*, Vol. 26, No. 2, January 1978, pp. 271-280 ; Saadet Deger and Ron Smith, “Military Expenditure and Growth in LDCs”, *Journal of Conflict Resolution*, Vol. 27, No. 2, June 1983, pp 351-352 ; Saadet Deger and Somnath Sen, “Military Expenditure and Developing Countries”, in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 1995, p. 279.
14. See among others, David Lim, “Another Look at Growth and Defense in Less Developed Countries”, *Economic Development and Cultural Change*, Vol. 31, No. 2, 1983, pp. 377-384 ; James H. Lebovic and Ashfaq Ishaq, “Military Burden, Security Needs, and Economic Growth in the Middle East”, *Journal of Conflict Resolution*, Vol. 31, No.1, March 1987, pp. 121-123 ; Michael D. Ward and David R. Davis, “Sizing Up the Peace Dividend: Economic Growth and Military Spending in the United States, 1948-1996”, *American Political Science Review*, Vol. 86, No. 3, September 1992, p. 754.
15. Abdur R. Chowdhury, “A Causal Analysis of Defense Spending and Economic Growth”, *Journal of Conflict Resolution*, Vol. 35, No. 1, March 1991, pp. 94-95 ; J. Paul Dunne and Eftychia Nikolaidou, “Military Spending and Economic Growth in Greece, Portugal and Spain”, October 2005, <http://carecon.org.uk/DPs/0510.pdf>. Accessed 31 June 2011.
16. See among others, Christos Kollias, George Manolas and Suzanna-Maria Paleologou, “Defence Expenditure and Economic Growth: A Causality Analysis” *Journal of Policy Modeling*, Vol. 26, No. 5, p. 568 ; Uk Heo, “The Relationship Between Defense Spending and Economic Growth in the United States”, *Political Research Quarterly*, Vol. 63, No. 4, 2010, pp. 760-767. For the negative effects or the subliminal positive impact of defence expenditure on growth see J. Paul Dunne, “Military Spending and Economic Growth in Sub Saharan Africa”, School of Economics, University of the West of England, Bristol and SALDRU, University of Cape Town, February, February 2010, p. 10. For the neutral relationship between defence expenditures and growth see Eric S. Lin and Hamid E. Ali, “Military Spending and Inequality: Panel Granger Causality Test”, *Journal of Peace Research*, Vol. 46, No. 5, September 2009, pp. 682-683.



tensive catastrophes in infrastructure and loss of its manpower. Forty million soldiers and civilians died during WWII and the production stopped in many Western European countries, in Soviet Union and Japan.¹⁷ Via a series of defense and military agreements Europeans attempted to create a gradual pan-European defense identity to guarantee their protection against the emerging Soviet threat. On 17 March 1948 Belgium, France, Luxembourg, the Netherlands and the UK agreed on the creation of the Western Union. Its main purpose was mutual assistance between its member states in case any country of the alliance was under attack.¹⁸

But it was obvious that against the new emerging threat, the Soviet expansionism, the European nations seemed too weak to undertake an effective and credible security strategy only by their own. John Ikenberry argues that it was the post-WWII European governments that actually called for the projection of the US power into Europe in order to use its dominant position to ensure the survival and the stability of their socioeconomic and political structures. Thus Ikenberry argues that US hegemony in Europe was largely "an empire by invitation" whose main purpose was to use its dominant position to guarantee an orderly and peaceful international system, based on economic cooperation and international trade exchanges, a situation similar to what Great Britain did in the 19th century.¹⁹

Under those circumstances, on 4 April 1949, the North Atlantic Treaty Organisation (NATO) was formed by US, Canada and their European allies with the view to defend each member state of the alliance mainly from the Soviet danger and to prevent any possible future German hegemonic aspirations. In 1952 NATO proceeded to its first enlargement by accepting both Greece and Turkey.²⁰ However, a serious dispute between USA and France was raised because of the US intention to rearm and incorporate West Germany into NATO structures as a means of reducing the American burden for the protection of Europe from a possible Soviet threat by anchoring the new federal republic to the western sphere of influence.²¹

Under these circumstances, a year later than the establishment of NATO, French politicians came up with a new innovative idea based on the Pleven Plan which proposed the creation of the European Defense Community (EDC), a military pan-European organisation which it could mobilize an 100.000-man army comprised by military units from Belgium, France, West Germany, Italy, Luxembourg and the Netherlands. With such a plan the new West Germany's army would be subjected to a "supranational command".²² The EDC treaty was signed in 27 May 1952 by the above states but finally was rejected by the French National Assembly in August 1954 as well as by the UK government and thus, it never came to fruition.²³

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17. See Robert D. Schulzinger, *U.S. Diplomacy Since 1900*, New York, Oxford University Press, 1998, pp. 199-200.
 18. Robert E. Hunter, *The European Security and Defense Policy: NATO's Companion or Competitor?* Santa Monica, RAND Europe, National Defense Research Institute, 2000, pp. 7-9.
 19. John Ikenberry, "Rethinking the Origins of American Hegemony", *Political Science Quarterly*, Vol. 104, No. 3, Autumn, 1989, pp. 375-391.
 20. See Jomana Amara, "NATO Defense Expenditures: Common Goals or Diverging Interests? A Structural Analysis", *Defence and Peace Economics*, Vol. 19, No.6, December 2008, pp. 450-451 ; Seth G. Jones, "The European Union and the Security Dilemma", *Security Studies*, Vol. 12, No. 3 Spring 2003, p.115.
 21. Michael Creswell, "Between the Bear and the Phoenix: The United States and the European Defense Community 1950-54," *Security Studies*, Vol. 11, No. 4, Summer 2002, p. 90.
 22. *Ibid.*, 102-103.
 23. However, US were in favour of EDC in case it could be incorporated into NATO structure as a means of a further integration of the European post war security system. See Ronald R. Krebs, "Exchange: A Debate Miscast-Or What Can We Learn From the Case of the EDC?" *Security Studies* Vol. 11, No. 3, Spring 2002, p. 192.

It is obvious that the rejection of the Pleven Plan meant that the Europeans were not yet mature enough to accept a supranational pan-European defence organisation.²⁴ However, in 1955 with the decisive intervention of the US, West Germany became a new member of both NATO and the Western Union which was renamed, the Western European Union (WEU).²⁵ Furthermore, in 1970 European Political Cooperation (EPC) was established so as to strengthen European political integration. However, EPC remained stagnant for the next fifteen years.²⁶

This stagnation must be attributed to the unwillingness of the European NATO member states to promote EPC as Europeans were feeling comfortable enough from the guaranteed security that the US via NATO provided them.

Table 1: NATO Members Defence Budgets as a Percentage of the GDP, 1949-1989

Country	1949 - 1954	1955 - 1959	1960- 1964	1965- 1969	1970- 1974	1975- 1979	1980- 1984	1985- 1989
Belgium	4.0	3.6	3.4	3.1	2.9	3.2	3.2	2.8
Canada	5.3	5.3	3.9	2.7	2.1	2.0	2.0	2.1
Denmark	2.5	3.0	2.8	2.7	2.2	2.3	2.4	2.0
France	7.2	7.0	6.0	5.0	3.9	3.8	4.0	3.8
Greece	5.7	5.1	4.1	4.2	4.7	6.8	6.6	5.8
Italy	4.0	3.5	3.0	2.9	2.5	2.1	2.1	2.3
Luxembourg	2.1	2.2	1.21	1.1	0.8	1.0	1.2	1.0
Netherlands	5.1	5.1	4.4	3.8	3.1	3.1	3.0	2.8
Norway	3.7	3.5	3.3	3.6	2.9	2.8	2.7	2.9
Portugal	3.8	4.1	6.0	6.7	6.9	4.0	3.4	2.8
Spain	-	-	-	-	-	-	2.3	2.2
Turkey	4.3	3.8	3.9	3.6	3.3	4.3	3.8	3.4
UK	8.2	7.3	6.2	5.5	5.2	5.0	5.0	4.7
United States	8.9	8.9	8.0	8.0	6.5	4.9	5.6	6.0
West. Germany	4.9	3.8	4.4	4.0	3.5	3.4	3.4	3.0
Average	4.9	4.7	4.3	4.0	3.6	3.4	3.4	3.2

Source: Jens Ringsmose, "NATO Burden-Sharing Redux: Continuity and Change After the Cold War", *Contemporary Security Policy*, Vol. 31, No. 2, August 2010, p. 322.

24. A similar idea about a pan-European military defence core was also edited by the French politicians during the Gaullist era (1959-1969) when the so called Fouchet plan was under discussion by Europeans during the 1958-63 period. This plan proposed the replacement of NATO by a pan-European military defence core, the abolition of the Atlantic Alliance, with France to be the undisputable military and political leader on it. See Seth G. Jones, "The European Union and the Security Dilemma", (note 20). However, as with the case of the EDC, De Gaulle's attempt to replace the hegemonic presence of the US in Europe became a pipe dream since it was evident that no European nation at that time was eager to replace NATO's efficient guarantee of protection for a dubious pan-European autonomous security alliance being guided by France.
25. Thomas G. Patterson, *On Every Front: The Making and Unmaking of the Cold War*, New York, W. W. Norton, 1992, p. 194.
26. Jones, "The European Union and the Security Dilemma", (note 20), pp. 135-138.



As a consequence, like with the cases of EDC in 1950-54 and the Fouchet Plan in 1958-1963, they didn't seem eager enough to sacrifice neither their national defence strategies in favour of a supranational pan-European defence structure, nor to spend more money on their defence. US commitments to NATO gave their European allies the privilege to act more or less as "free-riders", which means, they could have access to "consume" a product – in our case security- in which their contribution was smaller than the American one not only in absolute numbers but also as a percentage of the national Gross Domestic Product (GDP).

As Table 1 shows, for all the Cold War period the United States undertook the greatest defence burden from all their NATO allies ranging from 8.9 per cent for the 1949-1954 period to 6 per cent, as the Cold War tension was steadily decreasing during and after the 1985-1989 period. Table 1 shows that except the United States and the two major military powers of Europe, France and the United Kingdom, the other European NATO member-states systematically spent less on their defence compared to their strong allies. Their overall contribution did not exceed 3 per cent of GDP for the 1985-89 Cold War period.²⁷

As a result, due to the free-rider behavior through NATO, it was not until 1985 when the European security policy was driven to a new dynamic prospect. In that year with the Single European Act (SEA), European Union member states codified European Political Cooperation obviously expressing their intention to act under a more collective strategy on security issues.²⁸ Finally, in 1988 a more coordinated collaboration was established between France and Germany to run in parallel with the European Monetary Union and security policy issues that drove to the pivotal Maastricht Treaty Agreement in 1991.

By the overall analysis for the 1945-1991 period we can argue that the great deficiencies in military terms of the post WWII European military structure, made the intervention of the US in Europe through NATO a necessary prerequisite. The guaranteed protection that NATO offered to its European members made them less eager to develop an autonomous European security identity. But this great dependence on US capabilities, that mainly based on their large defence budgets, made European security policy more all less to be shaped according to the American Cold War military doctrines and political will.

It also seems obvious to us that the failure of the European attempts (primarily French, through the Pleven and Fouchet plans) for the creation of an autonomous European security

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27. See Jens Ringsmose, "NATO Burden-Sharing Redux: Continuity and Change After the Cold War", *Contemporary Security Policy*, Vol. 31, No. 2, August 2010, pp. 321-323. Kollias, Manolas and Paleologou, "Defence Expenditure and Economic Growth" (note16), p. 555 verify Ringmose's estimations as they show that the defence burden of the EU-15 member states was 2.9 per cent of GDP during 1985-1989 period. Slightly different figures are given by Paul Dunne. According to him, during 1985-89, the last period of the Cold War, the US were spending 6.3 per cent of their GDP for defence although its NATO European allies were spending as a whole 3.3 per cent of their GDP, which is slightly more than the half of the American defense budget. See Paul Dunne, "The Defense Industrial Base", in Keith Hartley and Todd Sandler (eds), *Handbook of Defense Economics* Amsterdam: North Holland, 1995, pp. 411-414.
28. Stephanie S. Anderson and Thomas R. Seitz, "European Security and Defense Policy Demystified, Nation-Building and Identity in the European Union", *Armed Forces and Society*, Vol. 33, No. 1, October 2006, pp. 27-28.

structure, even in a form of a replacement of NATO, means that Europe's room for maneuver in a US dominated world was very narrow. We finally show that one major reason for this, was the inability of the Europeans to improve their deterrence capabilities through military means due to their comparatively lower to the US defence expenditures as a means of "power extension".

Towards the Post-Cold War Institutional Evolution of the ESDP

With the end of the Cold War era Europeans decided that "the time for Europe had come". Thus, with the Maastricht Treaty (signed on 7 February 1992) the European Economic Community (EEC) was renamed the European Union (EU) which meant that Europeans viewed the EU not only as an organism for economic growth but also as a union for further political and institutional integration. Furthermore, on 5 November 1993, France, Germany and Belgium created the "Eurocorps" that comprised military units of these three states. Eurocorps principal aim was to take part in the so called "Petersberg missions" such as rescue, peacekeeping and disarmament.²⁹

However, the optimistic views about a more prosperous post war security environment were put into question due to the low efficiency of the European Security mechanisms to prevent conflict or at least, to alleviate the negative impact of the numerous war atrocities and crimes against humanity, like the civil wars in Somalia 1992-93, in Bosnia 1992-95, a war within the European continent, or the genocide of Rwanda in 1994. Even during the Kosovo crisis most EU members of NATO conceded that they still lacked in military infrastructure intended for crisis management operations.³⁰

But according to our view, the inabilities of the EU member states to respond effectively in those cases made also obvious the changing nature of military power itself that shifted from a perception of a pure military prevalence in the battlefield during Cold War, to a more complex set of parameters, like humanitarian and peacekeeping missions that included and made necessary the establishment of a more coordinated framework for collaboration among the EU members that simultaneously were members of both NATO and the WEU. Thus, the above incidents made the establishment of the European Security and Defence Policy (ESDP) in 1999, a necessary prerequisite with the view to reform and improve military capabilities among European Union member states and to enhance European security policy integration.³¹

But although EU member states proceeded to the gradual institutional evolution of ESDP by creating new institutions such as, the European Rapid Reaction Force, the EU Battlegroups (BG's), the Political and Security Committee, the European Union Military Committee (EUMC), the European Satellite Center, the Organisation Conjointe de Cooperation en matiere d'Arme-

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29. See Jonathan Clarke, "The Eurocorps: A Fresh Start in Europe" *Cato Institute Foreign Policy Briefing*, No. 21 December 1992, pp. 2-6, in <http://www.cato.org/pubs/fpbriefs/fpb021.pdf>. Accessed in 15 March, 2012.
30. Anderson and Seitz, "European Security and Defense Policy Demystified" (note 28).
31. Christopher Reynolds, "Military Capability Development in the ESDP: Towards Effective Governance?" *Contemporary Security Policy*, Vol. 28, No. 2, August 2007, p. 357.



ment (OCCAR) and the European Defence Agency (EDA), their military potential remained low for two key reasons:³²

Firstly, because EU member states political will to make these institutions functional was not enough and secondly, due to the major reduction of the EU member states defence expenditures as a consequence of the end of the Cold War era. According to estimations, EU defence expenditures as a whole did not exceed 2.1 per cent of GDP for the whole 1990-1999 post-Cold War period and remained low for all the 2000-2010 period too. European NATO members defence outlays as a whole did not exceed 1.7 per cent of the GDP for the year 2008 comparing to the 4 per cent of GDP of the US.³³ Thirdly, the EU low defence budget resulted to major shortages in equipment in sectors such as aerial transportation, telecommunications, satellite systems and C4I.³⁴

However, it seems optimistic the fact that as a result of all these prodigal agreements for the institutional integration of EU military capabilities since December 2003, EU has successfully launched 19 peacekeeping operations. In 2010 EU was the second largest provider in peacekeeping missions running 12 from a total of 52 (whereas United Nations were conducting 20 and NATO 3) with 4606 deployed staff.³⁵ It is also estimated that a series of significant deliveries in military equipment which are on schedule for the 2008-2013 period, like the pan-European strategic transportation aircraft, the A400M, the UK's new communication satellite system, the Skynet 5, and the introduction of the pan-European navigation satellite system, will dramatically increase EU's military capabilities.³⁶

First Conclusions

In this part of the analysis it became obvious that during the Cold War era European security policy was absolutely dependent on NATO, being focused on the effective treatment of the

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32. The European Rapid Reaction Force (ERRF), set in 1999, was an ambitious plan, mainly pushed by the French in the early stages of ESDP, according to which, ERRF could be able within 60 days to deploy 50.000-60000 troops capable of handling effectively crisis management operations and sustaining peace keeping missions, the so called "Petersberg Tasks" for a year. See Hunter, *The European Security and Defense Policy*, (note 18) However, the whole concept did not materialize in its original guise mainly because member states were finally unable to provide the required number of troops according to the plans, as well as to respond in critical issues like, where these troops could be equipped, supplied, deployed, rotated etc. However, the failed attempt for ERRF seems to have been compensated by the 2004's EU member-states agreement for the establishment of the EU Battlegroups. This was a, primarily anglo-german, plan under which rapidly deployed European forces, could perform –even autonomously to NATO- peacekeeping missions internationally. However EU Battlegroups haven't deployed somewhere so far. See Claudia Major and Christian Molling, "EU Battlegroups: What Contribution to European Defense?" *SWP Research Paper*, RP 8, German Institute for International and Security Affairs June, 2011. OCCAR is an armament's agency created in 1996, involving France, Germany, Italy and the UK while the EDA's main purpose like OCCAR is to enforce European defense industry integration and to contribute in bolstering EU military capabilities. See Frank Slijper, "The Emerging EU Military-Industrial Complex Arms Industry Lobbying in Brussels," *TNI Briefing Series No. 2005/1*, Transnational Institute, May 2005, and Keith Hartley, "The Future of the European Defence Policy: An Economic Perspective", *Defence and Peace Economics*, Vol. 14, No. 2, April 2003, p.107.
33. Fabio Liberti, "Defence Spending in Europe: Can We Do Better Without Spending More?", *Policy Paper No. 46*, Institute for International and Strategic Relations (IRIS). 2011, p.16.
34. Kristin Archick and Paul Gallis, "NATO and the European Union", *Congressional Research Service*, January 2005, pp. 13-15.
35. Peacekeeping missions under the auspice of EU have been launched in FYROM (Operation Concordia), Bosnia-Herzegovina (Operation Althea), Kosovo, Congo (Operation Artemis), Somalia, Georgia and Chad etc. See Stockholm International Peace Research Institute (SIPRI), *SIPRI Yearbook 2009 Summary: Armaments, Disarmament and International Security*, Oxford, Oxford University Press 2009, 6-7.
36. Barry R. Posen, "European Union Security and Defense Policy: Response to Unipolarity?", *Security Studies*, Vol. 15, No. 2, April–June 2006, p. 180.

Soviet threat. During the 1992-2010 period European leaders decided the establishment of a series of new institutions to promote the further evolution of the ESDP, such as the Battle-groups, OCCAR and EDA.³⁷ But as EU member states are still keep their defence expenditures very low, they face major shortages in equipment and thus, European security policy is still dependant on NATO in infrastructure in some crucial aspects like aerial transportation, so as to accomplish a variety of its humanitarian and peacekeeping missions.

US Security Policy: From the Cold War Era towards the 21st century

With the end of WWII the US became the only western military power able to defend effectively the so called "free world" from the Soviet "iron curtain". However, before any intervention to Europe, United States tried during 1945-50 period to establish a postwar liberal multi-lateral system for economic cooperation among nations that could be based on international trade and free market economy as its centerpiece. The main American grand strategy objective behind this was the reconstruction of the world economy with the US, being a global leader, a "liberal hegemon".³⁸ Under this concept, the GATT and the WTO, as well as APEC, NAFTA, and the OECD, which came as a result of the Bretton-Woods agreements, can be seen as mechanisms for achieving these goals. So, when post WWII Europe is concerned, it seems that the major goal for the US policymakers was to establish a strong and economically integrated Europe being able to stand on its own in global affairs.³⁹

The Price for American Global Hegemony

A basic prerequisite for the implementation of such a plan was an economic aid package for the recovery of the European ravaged economies.⁴⁰ Thus, via the Marshall Plan, during 1948-1951 the US transferred approximately 13.2 billion dollars for the recovery of the European economies from which 3.2 billion were distributed to the UK, 2.7 to France, 1.5 to Italy and 1.4 to West Germany. Thanks to the Marshall Plan, most western European nations achieved

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37. In this point we have to acknowledge that a more integrated analysis on European security policy must have also included issues like the role of Turkey and the Cyprus question and its impact on closer cooperation between the EU and NATO. Also, we could provide a more extensive analysis on the attempts by the EU to become autonomous by the US. However, such issues need an extensive analysis through a variety of different sub-cases, something we think that it could make our analysis to diverge from its main goal, which is the interpretation of EU Security policy through their defence expenditures.
 38. See G. John Ikenberry, G.J. "America's Liberal Grand Strategy: Democracy and National Security in the Post-war era", in M. Cox, G.J. Ikenberry, and T. Inoguchi (eds), *American Democracy Promotion: Impulses, Strategies, and Impacts*, Oxford, Oxford University Press, 2001, pp. 103-126.
 39. See G. John Ikenberry, "Power and Liberal Order: America's Postwar World Order in Transition" *International Relations of the Asia-Pacific*, Vol. 5, 2005, pp. 133-152. GATT is the acronym for the General Agreement on Tariffs and Trade, WTO for World Trade Organization, APEC for Asia-Pacific Economic Cooperation, NAFTA for North American Free Trade Agreement and OECD for the Organization for Economic Co-operation and Development. For the motives behind American intervention to Europe see also Robert J. Art, "The United States, The Balance of Power, and World War II: Was Spykman Right?", *Security Studies*, Vol. 14, No. 3, July-September 2005, pp. 368-373.
 40. Under this perspective, it is easy to understand why United States fully supported the post WWII early European attempts for promoting European economic and political integration. It seems that the attempts which led to the creation of the European Coal and Steel Community (ECSC) in 1951 and the European Economic Community (EEC) in 1957 through the persistency of great visionaries, such as Jean Monnet, were based on the wise strategy that through economic collaboration, the gradual political integration and unification of Europe could be achieved. It also seems that the founders of the ECSC and EEC used the economic integration "as a means of promoting their political interests by other means" if we interpret their policies through Carl Von Clausewitz's views presented in his *On War*. See Andreas Herberg-Rothe, *Clausewitz's Puzzle*, (note. 3).



rapid economic growth by wiping out the negative effects of WWII's resulting economic recession.⁴¹

However, the American plan for a liberal hegemony in Europe at least in its first post war years failed because of the extensive deregulation of the European socioeconomic order that caused during WWII.⁴² Moreover, major defence weaknesses of states throughout western Europe and Japan convinced US policymakers in the latest years of 1940s that their contribution to their defence against the Soviet rising tide was bounded.⁴³ But the adoption of the Truman doctrine under which US extended their geopolitical intervention globally⁴⁴ was accompanied by a large increase of the US military expenditures so as to protect their allies against the Soviet expansionism.

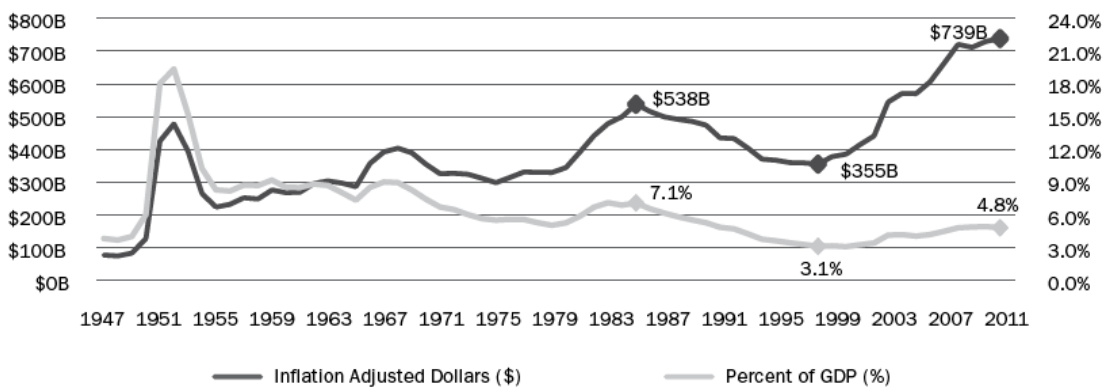
The US spent 12.4 billion dollars for the economic support of Europe through the Marshall Plan, 69.5 for the Korean War, 22.3 for their commitments to NATO, 172.2 for the war in Vietnam and the total US economic and military aid to allied nations came up to 382 billion dollars for the 1946-1987 period. In addition, the World Bank which was heavily funded by the US, subsidized those nations friendly to the US with the large number of 273 billion during the Cold War era.⁴⁵ As figure 1 shows, during the 1947-1989 period the economic price for the American defence expenditures globally, was particularly high, especially during war periods.

Furthermore, during the 1980s the intention of the US president Ronald Reagan to launch an antiballistic protection system against the Soviet nuclear ballistic missile capabilities, caused a new arms race between USA and the USSR, most known as "Star Wars" that precipitated the collapse of the Soviet Union mainly due to its poor economic performance and thus, entailed the end of the Cold War.⁴⁶ As we have shown previously, during 1985-1989, the last period of the Cold War, the US were spending 6.3 per cent of their GDP for defence although its NATO European allies were spending as a whole approximately 3.0 per cent, which is slightly more than half of the American defence budget.

By the overall analysis of this part of the paper we are driven to a major assumption relative to the thesis of our case study: That the theoretical correlation between geopolitical power and military expenditures we presented in the first chapter finds its verification with the US Cold war geopolitical hegemony. However, the price for the US military dominance was economically speaking, detrimental. As a result of the arms race between the USA and the USSR, the US macroeconomic figures deteriorated and it gradually became one of the greatest debt-ridden nations. This situation was interpreted by some scholars as an "erosion of American Power".⁴⁷

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41. For the positive impact that the Marshall plan had on post WWII European economic growth see Branford De Long and Barry Eichengreen, "The Marshall Plan: History's Most Successful Structural Adjustment Program", *Working Paper No. 3899*, National Bureau of Economic Research, October 1991.
 42. John Ikenberry, "Rethinking the Origins of American Hegemony", (note 19), p. 385.
 43. Benjamin O. Fordham, "Domestic Politics, International Pressure and the Allocation of American Cold War Military Spending", *Journal of Politics*, Vol. 64, No. 1, February 2002, pp. 66-67.
 44. See Michael Cox, "From the Truman Doctrine to the Second Superpower Détente: The Rise and the Fall of the Cold War", *Journal of Peace Research*, Vol. 27, No.1, February 1990, pp. 25-31.
 45. Patterson, *On Every Front*, (note 25), p192.
 46. Peter Wallenstein, "American-Soviet Détente: What Went Wrong?", *Journal of Peace Research*, Vol. 22, No. 1, March 1985, pp. 1-8.
 47. See Kennedy, *The Rise and the Fall*, (note 8), pp. 432-437 ; Patterson, *On Every Front*, (note 25), pp. 189-220.

Figure 1: Funding of the US Defence Expenditures During 1946-2011 Period in Billions of FY2011 Dollars and as a Percentage of the Nominal GDP



Source: Todd Harrison, "Analysis of the Fiscal Year 2011 Defence Budget Request", *Center for Strategic and Budgetary Assessments*, 2010, p. 13.

From the Pax Americana to 11 September 2001 and the "War on Terror"

The collapse of the Soviet empire in 1991 created a new unipolar security system with the US remaining the only global superpower. The post-Cold war trend for global disarmament affected the US too. US defence expenditures reduced from 503.6 billion dollars on average during 1981-1990, the last period of Cold war, to 392.8 during 1991-2000 but after the 2001 terrorist attacks they increased steadily to 579.6 for the 2001-2009 period.⁴⁸

US continued to preserve their military presence in allied territories globally and in some cases they were forced under specific circumstances to display their huge military strength, like in Iraq in 1991, and in the 1999 Kosovo crisis, as well as to be engaged in humanitarian missions like in Somalia, in 1994, a fact that also approves the changing nature of military power itself, which is not determined only by military capabilities and strength. Not only NATO did not disembody but also expanded through two main enlargements in 1999 (Poland, Czech Republic and Hungary) and in 2004 (with ex-Soviet satellites Estonia, Latvia, Lithuania and also Romania, Slovenia and Slovakia).⁴⁹

However, the trend to reduce defence budgets terminated abruptly due to the 11 September 2001 terrorist attacks mainly in New York which caused the death of 3000 civilians. These terrorist attacks entailed the replacement of Cold War strategies like "containment" and "deterrence" with the doctrine of "preemptive action" against terrorism.⁵⁰

As Figure 2 presents, after the strike the US government undertook a new "crusade against terrorism" that caused their defence expenditures during the 2000-2009 period to skyrocket. The US defence budget as a percentage of the annual GDP jumped from 3.1 to 4.9 per cent of GDP for the 2000-2009 period, an increase at about 60 per cent.⁵¹ After 9/11, the US govern-

48. The figures we provide here are based on annual defence budget data provided by Sharp T. (2009). "Fiscal Year 2010 Pentagon Defense Spending Request: February "Topline", *The Centre for Arms Control and non-Proliferation*, pp. 4, 12.

49. Amara, "NATO Defense Expenditures," (note 20), p. 449.

50. Jeffrey W. Knopf, "Wrestling with Deterrence: Bush Administration Strategy After 9/11" *Contemporary Security Policy*, Vol. 29, No. 2, August 2008, p. 229.

51. *The Military Balance*, North America, London, Routledge Taylor & Francis Group, 2010, pp. 22-23. The major increase in military spending for the same period is also verified by other reliable sources too: See Travis Sharp, "Fiscal Year 2010" (note 48), pp. 4-12 and, SIPRI Yearbook 2009 (note 35), pp. 6-7.

ment launched a campaign against Afghanistan (2001), and Iraq (2003) and some other anti-terrorist operations that burdened the US defence budget with a further 1.024 trillion dollars during the 2001-2010 period.⁵²

Figure 2: US Defence Expenditures During 2000 - 2009 Period (in Billion Dollars)



Source: Steven M. Kosiak, "US Defence Budget Options and Choices for the Long Haul", *Center for Strategic and Budgetary Assessments*, 2008, p. 7.

Comparing European to American Defence Strategy Through the Issue of their Defence Expenditures

As far as the military capability is concerned measured here by the level of defence outlays, US defence expenditures for the fiscal year 2011 rose to 712 billion dollars, a figure which is equivalent to 22 per cent of the total national budget and to 4.8 per cent of GDP.⁵³ Table 2 presents the 10 larger defence spenders globally (in billion dollars) for 2010 from which it can be easily understood why the US still preserves their military supremacy in the 21st century: According to the table, the United States spent 698 billion dollars for defence in 2010, a number which is much higher compared to China in second place (119 billion) and United Kingdom (59.6 billion) in the third.⁵⁴

The rest of the European and Asian nations like the France and Saudi Arabia had substantially lower defence outlays compared to those of the US. The United States were responsible for 43 per cent of global defence outlays for 2010 compared to 22 per cent for the European Union

52. *The Military Balance*, (note 51), p. 24. See also Daniel Masters and Robert M. Alexander, "Prospecting for War: 9/11 and Selling the Iraq Warp", *Contemporary Security Policy*, Vol. 29, No. 3, December 2008, p. 436.

53. Todd Harrison, "Analysis of the Fiscal Year 2011 Defense Budget Request", *Center for Strategic and Budgetary Assessments*, 2010, pp. 1-5.

54. See <http://www.sipri.org/yearbook/2009/05/05A>.

nations together.⁵⁵ In addition, the recent level of European defence expenditures as a whole summed approximately 1.7 per cent of GDP on average, which was less than half of the American number (4 per cent of GDP).⁵⁶ This unwillingness by the EU to spend more on their defence can be explained by the "Theory of Alliances" first introduced by Olson and Zeckhauser. According to their empirical study about NATO members, they found that within an Alliance, larger industrialized nations bear disproportionate shares of defence burden compared to their less developed and smaller allies.⁵⁷

Table 2: The First 10 Military Spenders in the World in 2010 (in billion Dollars)

Rank	Country	Spending	World
1	United States:	698	43
2	China:	[119]	[7.3]
3	United Kingdom:	59.6	3.7
4	France:	59.3	3.6
5	Russia:	[58.7]	[3.6]
6	Japan	54.5	3.3
7	Saudi Arabia:	45.2	2.7
8	Germany:	[45.6]	[3.0]
9	India	41.3	2.5
10	Italy	[37.0]	[2.3]
World Total:		1630	

[] = SIPRI estimate

Source: SIPRI Yearbook 2011 Summary: Armaments, Disarmament and International Security, *Stockholm International Peace Research Institute*, Oxford, Oxford University Press, 2011.

We believe that the reasons for European nation's denial to share greater defence burden within NATO can be ascribed mainly to the end of the Cold War as well as to the changing nature of military power which tends to focus on humanitarian missions and conflict prevention. Other reasons may include the austere measures of the EU's Stability and Growth Pact which does not allow extraordinary fiscal expenses and the EU's commitments for the economic support of Eastern European states, like Poland.⁵⁸ Finally, the demographic crisis in Europe, that according to some estimations, may escalate approximately in the 2035-50 period will potentially cause problems to pension and social security systems, which means that it will further squeeze the European defence budgets.

55. Sharp "Fiscal Year 2010" (note 48), pp. 8-10. See, also *The Military Balance*, (note 51), pp. 462-472.
56. See Table II on Christos Kollias, "A preliminary Investigation of the Burden Sharing Aspects of a European Union Common Defense Policy", *Defence and Peace Economics*, Vol. 19, No. 4, August 2008, pp. 256.
57. Mancur Olson and Richard Zeckhauser, *An Economic Theory of Alliances*, Santa Monica, California, The RAND Corporation, 1966, pp. 1-3, 35-37.
58. For the European Stability and Growth Pact see Anthony Annett, et al., "Reforming the Stability and Growth Pact", *International Monetary Fund*, February 2005, pp. 2-5. For the EU commitments about the economic support of eastern European states see Mike Artis and Frederick Nilson, *The Economics of the European Union, Policy and Analysis*, Oxford, Oxford University Press, 2001, pp. 85-94.



But except for the reductions on defence spending due to the above reasons, another aspect that undermines European security policy compared to the US has to do with the structure of European defence itself, which is characterized by inefficiencies that inhibit its effectiveness compared to the US. EU Member States' armed forces use a variety of different types of weaponry that cause inefficiencies in combat terms and waste of money that increase the average cost of their maintenance.⁵⁹

By contrast, the US armed forces are characterized by homogeneity in military means in a sense that they use, in most cases, only a single type of weaponry for every kind of mission (for example M1 tanks instead of the variety of types of tanks used by Europeans, such as Leopards, Leclerc's, E2 Challengers, and even the older, M48's, T72's etc). This reality makes US armed forces more efficient than those of their European NATO allies, in terms of military performance. In this context it is also worthy to mention that the US armed forces personnel during 1990 were as high as 2,117,900 (with 1,613,600 as ready reserves) while 20 years later this ceiling had drastically cut down to 1,580,255 for active personnel (with 864,547 as ready reserves).⁶⁰

Reductions on US military personnel was the result of the post-Cold war changing nature of conflict. The need for armed forces able to respond in new kinds of threats such as asymmetric warfare, civil wars, insurrections, transnational terrorism, and rogue nations, or to effectively perform peacekeeping and conflict prevention missions, made a large amount of the conventional type of Cold war weaponry, like M1 tanks, unable to respond in these new kinds of challenges.⁶¹ Transformations in the structure of armed forces were also adopted by the EU member states. Since the end of Cold War, emphasis was given in substantial troop reductions, to smaller and more expeditionary-capable forces, to fewer units of more advanced and more expensive equipment, to a further increase pressure towards collaboration when it comes to the European defense industry and in short, replacing quantity with quality.⁶²

It seems that the major priority of the American and European post-Cold War military doctrines was to develop and use more sophisticated capital intensive weaponry, like stand-off cruise missiles, telescopic satellites, C4I etc, instead of the labour intensive structure of armed forces during Cold war. For instance, from the 693 billion dollars of the 2008 US defence budget, 139.033 were distributed among military personnel, 165.006 billion for procurement of new weaponry, 256.223 billion for military operations and maintenance, and 79.567 for Research and Development etc.⁶³

This means that the amount of money that the US spends on personnel is analogous to 20 percent, or otherwise, to the one fifth of their total defence budget. This figure is lower than those of their EU counterparts. While European defense budgets declined, from 255 billion euros in 2001 to 223 billion in 2008, (a negative compound annual growth rate of 1.9 percent)

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59. Keith Hartley, "Industrial Policies in the Defense Sector", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 1995, p. 462.
 60. For this figures and other relative issues see *The Military Balance*, The United States, London, Routledge Taylor & Francis Group, 1990, pp. 12-27 ; *The Military Balance*, 2010 (note 51), pp. 15-52.
 61. Todd Sandler and Keith Hartley, "Defense in a Globalized World: An Introduction," in *Handbook of Defense Economics* (eds). Todd Sandler and Keith Hartley, Amsterdam, North Holland, 2007, p. 618.
 62. Hofbauer et al. "European Defense Trends, Budgets, Regulatory Frameworks, and the Industrial Base" *Center for Strategic and International Studies*, 2010, pp. 3-11.
 63. See *The Military Balance*, 2010 (note 51), pp. 103-210.

defense budget intended for personnel increased from 74,000 euros in 2001 to 92,000 in 2008 (a compound annual growth rate of 3.1 percent). Figures for 2008 mean that 54 percent of the total European defense spending allocated for military personnel whereas, only 20 percent of the defense budgets spent on equipment (including research and development for major equipment programs).⁶⁴

Positive Spin-Off Effects for the Defence Industry

As many scholars argue, another aspect of the colossal annual US defence expenditures is the positive spin-off effects that they produce for the American defence industry and economy in general. Table 3 refers to a very characteristic branch of the defence industry, that of fighter aircrafts. It presents Research and Development (R&D) fighter costs and the total production number which includes national orders and exports.

Table 3 proves that the American aircraft industry can cover the R&D costs and make profit mainly due to the huge American internal defence market which is protected by foreign competitors thanks to American legislation. By contrast, European national industries cannot absorb the R&D cost and make reasonable profit because of the small orders they receive from the EU member states armed forces, a case that causes non-sufficient revenues for the European military industry. This obviously makes European fighter jets more expensive and consequently, less competitive to their American rivals in international markets.⁶⁵ So, the major advantage of the US defence firms is that they achieve economies of scale due to the large number of orders mainly made by US armed forces.⁶⁶

For instance, the proposed new US made 5th generation F35 stealth fighter will receive 2.443 orders from the US Air Force, US Navy and the Marines and is going to be developed mainly by one company, the Lockheed-Martin.⁶⁷ Thus, it will probably achieve economies of scale. This tremendous number excludes orders from US allies estimated at about 700.⁶⁸ This means a further increasing in the ceiling of the imminent orders to at least 3.173 aircrafts.⁶⁹ On the

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64. Hofbauer et al. "European Defense Trends" (note 62), p. 4.
65. Except perhaps BAE Systems, which had the second largest amount of arms sales in the world in 2009 with revenues as high as 33.250 million dollars, (with Lockheed-Martin being the first having achieved 33.430) and a very good position in arms sales within the US market. See Stockholm International Peace Research Institute (SIPRI), *SIPRI Yearbook 2011 Summary: Armaments, Disarmament and International Security*, Oxford, Oxford University Press 20011, p. 10.
66. However, we have to admit that on August 21, 2011, the EU Defence and Security Procurement Directive 2009/81/EC was signed. We consider it as a very hopeful prospective for the further integration of the European defence industry. This directive aims to facilitate the development of an EU defence equipment market that will increase industrial competition, reduce duplication and lower prices by creating an official framework for cross-border defence procurement within the EU. Thus, this directive revisits Article 346 of the Lisbon Treaty which was in favour of the further protection of the national EU defiance industries. See Jay Edwards "The EU Defence and Security Procurement Directive: A Step Towards Affordability?", *International Security Programme Paper ISP PP 2011/05*, 2011, p. 2-3.
67. Jonathan D. Caverley, "United States Hegemony and the New Economics of Defense", *Security Studies*, Vol. 16, No. 4, October–December 2007, p. 607.
68. Among the countries that have already chosen the new stealth F35 Lightning aircraft are, the United Kingdom, Israel and Turkey. See Jeremiah Gertler, "F-35 Joint Strike Fighter (JSF) Program: Background and Issues for Congress", *Congressional Research Service*, 2011, pp. 13-16. In other words, except the US, the F35 has been already selected by a number of nations with traditionally very powerful Air Forces in terms of military efficiency. We believe that this fact is an indication that the future sales potential of the proposed F35 fighter globally are very hopeful.
69. The initial plan was to product 3002 aircrafts for US needs as shown in Table 3 with an R&D rising up to 10.4 billion dollars. However, due to continuous rising of R&D costs production reduced to 2443 fighters to replace at about 1.200 F-16 fighters in 2030. (*ibid*, 17-19).



contrary, the multinational pan-European fighter, the Eurofighter Typhoon (EF2000) so far has received only a little more than 620 orders and the industrial share between the four producing companies varies between 14-37%, which according to our point of view, is not a good example of cost reduction. Table 3 also shows that the R&D costs of the European EF-2000 Typhoon collaboration program is more than twice the cost of the single R&D French Rafale B fighter project though their combat performance is approximately the same.⁷⁰ This means that European industrial collaboration projects are not always effective and financial resources for R&D are likely to be spoiled unproductively, as it happened with the case of the EF-2000 fighter aircraft.⁷¹

Table 3: R&D Cost and Order Analysis for the Main Fighter Aircrafts from USA and the EU

Aircraft	Country of Origin	R&D costs (£ billion)	National Output	Exports	Total Numbers
SAAB Gripen	Sweden	1.3	204	42	246
Dassault Rafale	France	6.1	294	-	294
EF-2000 Typhoon	United Kingdom Germany Italy Spain	13.8	620	90	710
JSF F35	USA	13.7	3002 (150 for UK)	2000 (projected)	5000 (approximately)
F16	USA	N/A	2250	1750	4000+
F18	USA	4.0	1363	401	1764
F22 Raptor	USA	15.2+	295	-	295

Source: Keith Hartley, "The Future of European Defence Policy: An Economic Perspective", *Defence and Peace Economics*, Vol. 14. No.2, 2003, pp. 107-115.

Another aspect of the American superiority on military applications is that the US government is heavily financing R&D on military projects that have been undertaken by American firms. After the Cold War, US governments and private firms, in antithesis to the rest of the world, increased their R&D on military applications. In 2004 the US were responsible for 70 per cent of the global national R&D expenditures (67.474 million dollars), followed by the EU budget as a whole (13.441 million), which was less than the one fifth of the US' large number. Western European nations slightly started to increase their budget for R&D after 2001 in absolute numbers.⁷²

70. Nickos Kyriazis and Ioannis-Dionysios Salavrakos, "Defense Procurement in Greece, A Cost-Benefit Analysis of Fighters for the Hellenic Air Force", paper presented at the 10th Annual International Conference on Economics and Security, Thessaloniki, 22-24 June 2006.

71. Hartley, "Industrial Policies in the Defense Sector" (note 59), pp. 474- 475. It is also estimated that in some cases industrial collaboration can lead to R&D cost increases as high as 140% or even 200% in comparison to national projects. See Keith Hartley, "The Arms Industry, Procurement and Industrial Policies" in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics* Amsterdam, North Holland, 2007, p. 1173.

72. Ibid, pp. 1152-1155.

It is obvious that R&D increases the quality of a product. That's why it has also been found that American fighters are qualitatively superior to their western European competitors for the same generation of aircrafts.⁷³ So, the combination of both better quality and lower prices proves why the US military market was responsible for the 44% of global orders in 2008. It also proves why seven American industrial giants like Lockheed-Martin, Boeing, Northrop-Grumman and Raytheon are among the first 10 companies of the military industry at the global level in terms of revenues classification, and why US-made military products are more preferable than those of their European counterparts.⁷⁴

Through the overall analysis in this part of the paper we have shown how defence expenditures affect positively the American industry in terms of both quality and profit. This is consistent with the findings of many scholars, we have already mentioned in the first part of our analysis that we find a positive relationship between defence expenditures and economic growth. However, we acknowledge that extended defence expenditures produce a negative impact on economic performance too, as historical data approve.

Negative Effects on the Economy:

From the George Bush's to Barack Obama's Grand Strategy

When on 20 January 2009, Barack Obama became the 44th president of the United States, he at once commissioned with the issue of handling the excessive US national debt. The deterioration of the American public debt caused the Obama Democratic Party government to implement a different approach not only through the manipulation of the issue of defence expenditures, but also through the overall American Grand Strategy.⁷⁵

According to ex-President Bush's defence planning, military expenditures were estimated to rise gradually during the 2010-2020 period from 656 billion dollars in 2010 to 813 in 2020, whereas the proposed total US defence outlays to fulfil the needs of the "war against terrorism" campaigns until 2013 would have cost to the American taxpayers the astronomical number of 1.3-1.8 trillion dollars!⁷⁶ However, the Obama administration decided to alter the previous Bush' defence policy by planning to cut down significantly US defence expenditures till 2020. According to the new government's planning, defence expenditures are estimated to rise as high as 670.6 billion dollars but with declining trend. These cuts mainly have to do with war assets and the further development of specific kinds of new weaponry.⁷⁷

In contrast to George Bush's administration, Barack Obama's policymakers' decision is to reduce gradually defence outlays from 4.8 to 3.1 as a percentage of GDP till 2020. This is believed to make future US governments capable of saving at about 1.5 trillion dollars so as to be able to further reduce a part of their future public debt.⁷⁸ Moreover, Obama's policymakers

73. Nickos Kyriazis and Ioannis-Dionysios Salavrakos, "Defense Procurement in Greece", (note 71), p. 391.

74. See also Hartley 2007, "The arms Industry Procurement" (note 70), p. 1141.

75. It is estimated that Public Debt will have been increased to more than 18.25 trillion dollars by the end of 2021, a figure which is going to be analogous to 97 per cent of GDP. See Congressional Budget Office, "Reducing the Deficit: Spending and Revenue Options", Washington D.C., Congress of the United States, 2011, pp. 3-4.

76. *The Military Balance*, (note 51) p.27.

77. Ibid, (note 51) ; Laicie Olson, "Fiscal Year 2012: Defense Spending Request Briefing Book", *Center for Arms Control and Non-Proliferation*, February 2011, pp. 1-12.

78. Brian MacDonald, "The Obama 2010 Defence Budget Request. Resource document", July 2009. <http://www.cda-cdai.ca/cda/uploads/cda/2009/03/4-09-obamadefencebudget2.pdf>. Accessed 20 July 2011.



decided to withdraw troops from Iraq by the end of December 2011 in order to reduce war expenses, a decision that has already been accomplished according to schedule. It is worthy to mention that the Iraq and Afghanistan campaigns burdened the US economy with additional 159.3 billion dollars just for the fiscal year 2011.⁷⁹

In addition, the new US government seems so follow a different approach as far as the manipulation of the Iran and North Korea cases are concerned contrary to the more "belligerent" policy of the previous Bush' administration. Obama's administration seems more willing for a diplomatic solution with those countries that –according to ex-President Bush' doctrines- consisted the "Axis of Evil" than to utilise the military option so as to destroy their possible nuclear installations. This policy of the government to more or less, settle all issues of geopolitical confrontation through diplomacy is also verified by the decision, on 17 September 2009, to rearrange the terms of deployment when it comes to the highly advertised "Missile Defence Umbrella" in Eastern Europe, after the strongly expressed concerns of Russia, a decision that is diametrically different to the previous Bush' administration doctrines.⁸⁰

Finally, even in the case of the recent war in Libya, the US did not decide to launch a full scale attack against the totalitarian regime of Muammar Gaddafi but to engage militarily only sea and airborne means. The fact that land troops were not deployed by the US in Libya to support the rebel troops against Gaddafi's regime, is an indication for us that the US did not want to be engaged in another new economically disastrous war campaign, like Iraq. Having all these facts in mind, we think that for the current US policy-makers, ideological concepts such as "War on Terrorism", and "Axis of Evil" seem to have faded significantly.

Seeing US security policy through Paul Kennedy's spectacles bearing in mind his classical masterpiece *The Rise and the Fall of the Great Powers*, we believe that the recent more moderate version of the US Grand Strategy launched by the Obama administration has to do with the erosion of the superpower's strength due to the deceleration of their economic performance that was affected critically by both American defence expenditures and the 2007-2009 financial crisis. According to our view, the deterioration of the General Government Debt ratio - which was at about 12.3 trillion dollars for 2010, being analogous to 83.9 per cent of GDP, but with an increasing trend⁸¹-makes any new full scale war campaign in countries like Iran and North Korea, a very complicated and uncertain issue.⁸²

So, we think that the new established more moderate US security policy in global affairs has definitely to do with the deterioration of the US economic performance that makes excessive defence expenditures simply not feasible.

79. Todd Harrison, "Analysis of the Fiscal Year 2011" (note 40), p. 1.

80. Steven A. Hildreth and Carl Ek "Long-Range Ballistic Missile Defense", Congressional Research Service, September 2009, p.1.

81. For the 2010 Gross General US Federal Debt see, Brian W. Cashell, "The Federal Government Debt: Its Size and Economic Significance", Congressional Research Service, February 2010, p. 2-10.

82. However, we have to acknowledge that US watch very carefully the evolution of the nuclear project of Iran and its denial to make the scientists of the international Atomic Energy Agency to have a full access on its progress so as to deter if possible, a "weaponised" version of its evolution. Recent estimations show that Israel is ready to exercise the military option against Iran's nuclear facilities whether the US or even the UK are going to participate in a raid or not. For all the military implication on an American strike to Iran See Alexander Wilner and Anthony Cordesman, "U.S. and Iranian Strategic Competition: The Gulf Military Balance", Center for Strategic and International Studies, November 2011, pp. 6-134.



Concluding Comments

The principal objective of this article is to examine how defence expenditures affected the post-World War II security policies in both Europe and the United States. To achieve this, we first analyzed the theoretical background of defence expenditures as a factor that determines a nation's power. Based in existing scholarship we found that there is a positive relationship between defence expenditures and geopolitical power, whereas defence expenditures affect either negatively or positively the economy of a nation.

Then, we analyzed the issue of defence expenditures with regard to the EU member states and the US separately. We found that during Cold war, the combination of both major military deficiencies and the lower defence budgets comparing to the US, made the intervention of the United States in Europe, a necessary prerequisite for its security policy. Post-Cold War EU's military structure is characterized by the lack of homogeneity comparing to the US, inefficiencies in military means, and by the unwillingness of Europeans to spend more so as to reorganize their armed forces more efficiently with the view to respond better in the challenges of the 21st century.

Then, we again tested the correlation between military expenditures and power potential for the US since 1945 to the present day. We found that our theoretical analysis that correlates defence expenditures and security policy is strongly verified when it comes to the post WWII US security policy and geostrategic potential. As many defence policy analysts believe, today there are very few adversaries to the US globally that either have the motives or the ability to challenge them militarily.⁸³ This American military dominance must be attributed, according to our findings, to the colossal amount of US defence expenditures during Cold War and afterwards, which is the real reason why the US still keep the scepter of global geopolitical hegemony.

Finally, except geopolitics, we analyzed how defence expenditures indirectly affect economic performance. We deduced that defence expenditures have a positive impact on the American defence industry as they produce economies of scale due to the vast American internal defence market. In contrast, the relatively small national defence markets of the EU member states and the inefficient industrial collaboration among them makes European military products more expensive and qualitatively inferior to their American counterparts. However, we found that a negative side-effect of the tremendous annual US defence budget has to do with the deterioration of the American economy's macroeconomic performance, specifically with the deterioration of the public debt ratio. We finally argued that this situation forced the Obama administration not only to make plans to reduce the American defence budget for 2011-2020 period but also, in antithesis to ex-president Bush's belligerent doctrines, to adopt a more moderate security policy profile.

By the overall analysis we noticed that both the EU and the US face in common constrains in excessive military spending due to increases on their public debt that erode their economic performance. We also noticed the gradually changing nature of military power, which is not

83. Andrew F. Krepinevich, "An Army at the Crossroads, Strategy for the Long Haul Series", *Center for Strategic and Budgetary Assessments*, 2008, pp.1-3. See also Mearsheimer, "The Gathering Storm" (note 11), p. 387.



only based on military supremacy but also in other factors as well, such as conflict prevention, peacekeeping missions etc. Under these circumstances, it seems at first that the better coordination in military means for both the EU and the US through NATO on security policy issues, could be necessary for two pivotal reasons: Firstly, it seems that the Euro-Atlantic partnership has been historically critical for the establishment of a peaceful post-Cold War security environment in Europe, as many scholars argue.⁸⁴ Secondly, collaboration through NATO could mean a more efficient management of the NATO members defence budgets as a whole, which it could lead to higher military efficiency with lower operational costs and thus, to the establishment of a more reliable and efficient security policy for both the EU and the US.⁸⁵

In this context, it seems that some new institutional arrangements such as merging the already in existence military formations, such as the Eurocorps and the EU Battlegroups into an integrated and efficient pan-European military formation that will act on behalf of the EU as a whole could be a productive choice. This transformation must also include the European defense industry that currently employs at about 750.000 personnel⁸⁶, as well as the gradual adoption of common military means of action by the EU member states armed forces in order to reduce their operational costs and achieve homogeneity in structure and thus, economies of scale.

Finally, having in mind the previous overall analysis which is mainly based on the theoretical framework which we developed in the first part of our analysis about the relationship between geopolitical power and military strength, we acknowledge that the issue of the proposed decreases of the American defence expenditures during the 2010-2020 period could have a major impact on their ability to extend their "imperial power" as a means of promoting peace, the rule of law, representative democracies and free markets, under a "liberal hegemony" approach, as many scholars argue.⁸⁷

However, this thesis that justifies US intervention and hegemonic profile in global affairs as a beneficial condition for global prosperity, is rejected by other scholars such as Robert Keohane, who thinks that instead of hegemony, cooperation and trust among nations could be the ideal situation for the post-unipolar world, while Kenneth Waltz, as we have already mentioned, emphasizes on effective international alliances.⁸⁸ Under this prospective, we think that a more "honest" and trustworthy cooperation based on the above ideas about international

84. See among others, John Mearsheimer, "Why is Europe Peaceful Today?" *European Political Science*, Vol. 9. 2010b, pp. 387-389.

85. However, we have to acknowledge that the issue of the continuity of the transatlantic relationship through NATO is still open at least in theoretical perspective. For instance, many theorists believe that the American presence in Europe after the demise of the Cold War has no reason for continuing. Other important issues that someone must have in mind when analyzing NATO's prospective towards the 21st century, may include an evaluation of NATO's efficiency as an organization, the possibility of an autonomous European military force even as a replacement of NATO, the curious tension in EU-NATO affairs, or the ways in which the European security policy must be revisited in case the US decide in the next years to give priority on their interests to the Pacific and elsewhere rather than Europe. We propose a further analysis of these and other related issues in a forthcoming paper.

86. See Herbert Wulf, "Will the European Defence Market Strengthen or Weaken the EU 's Foreign and Security Policy?" in Alyson JK Bailes, Sara Depauw and Tomas Baum (eds.), *The EU Defence Market: Balancing Effectiveness with Responsibility*, Drukkerij Artoos, Brussels, 2011, p. 24.

87. See Nial Fergusson, *Colossus : The Rise and Fall of the American Empire*, New York, Penguin Books, 2005; Jonathan Ikenberry, *Liberal Order and Imperial Ambition: Essays on American power and Post-war Order*, Cambridge, Polity Press, 2006.

88. Kenneth Waltz, *Theory of International Politics* (note 10); Robert Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, Princeton, Princeton University Press, 2005.



trade and cooperation through coordination of interests must be cultivated between the US and their allies like EU, the United Kingdom, Turkey, an emerging regional power and Israel in the Eastern Mediterranean, as well as with Pakistan, Japan and South Korea in south Asia and the Pacific and even, - a future friendly Iran as a regional actor in central Asia, etc.

Such a “convergence” of interests and common objectives seems mutually fruitful if it finally happens, as an alternative “after hegemony” option that, as we have analyzed so far, may come as a consequence due to the unavoidable forthcoming US defence decreases, including their implications when it comes to the preservation of global order on security issues. Such an issue could be further analyzed in detail including a variety of aspects in a future research.

However, we think that such kind of collaboration among the US and a “constellation” of strategic partners like the EU and the UK, may become feasible if it is mutually beneficial to all players. This means that such a relationship must seem capable enough to promote their economic prosperity as well as to face more effectively all kinds of new post-Cold War threats, like global terrorism, weapons of mass destruction proliferation etc. and thus creating a more stable and prosperous global security environment.



Bibliography

Jomana Amara, "NATO Defense Expenditures: Common Goals or Diverging Interests? A Structural Analysis", *Defence and Peace Economics*, Vol. 19, No. 6, December 2008, pp. 449-469.

Stephanie S. Anderson and Thomas R. Seitz, "European Security and Defense Policy Demystified, Nation-Building and Identity in the European Union", *Armed Forces and Society*, Vol. 33, No. 1, October 2006, pp. 24-42.

Anthony Annett, Jörg Decressin and Michael Deppler, "Reforming the Stability and Growth Pact", *International Monetary Fund*, February 2005, pp. 1-27.

Kristin Archick and Paul Gallis, "NATO and the European Union", *Congressional Research Service*, January 2005, pp. 1-24.

Robert J. Art, "The United States, The Balance of Power, and World War II: Was Spykman Right"? *Security Studies*, Vol. 14, No. 3, July–September 2005, pp. 365-406.

Mike Artis and Frederick Nilson, *The Economics of the European Union, Policy and Analysis*, Oxford, Oxford University Press, 2001.

Emil Benoit, "Growth and Defense in Developing Countries", *Economic Development and Cultural Change*, Vol. 26, No. 2, January 1978, pp. 271-280.

Jeremy Blackham and Gwyn Prins, "Why Things Don't Happen: Silent Principles of a National Security", *The RUSI Journal*, Vol. 155, No. 4, August-September, 2010, pp. 14-22.

Michael Brzoska, "World Military Expenditures", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 1995, pp. 46-65.

Edward H. Carr, *The Twenty Years Crisis 1919-1939: An Introduction to the Study of International Relations*, New York, Palgrave Macmillan, 2001.

Brian W. Cashell, "The Federal Government Debt: Its Size and Economic Significance", *Congressional Research Service*, February 2010, pp. 1-11.

Jonathan D. Caverley, "United States Hegemony and the New Economics of Defense", *Security Studies*, Vol. 16, No. 4, October–December 2007, pp. 597-613.

Abdur R. Chowdhury, "A Causal Analysis of Defense Spending and Economic Growth", *Journal of Conflict Resolution*, Vol. 35, No. 1, March 1991, pp. 80-97.

Jonathan Clarke, "The Eurocorps: A Fresh Start in Europe" *Cato Institute Foreign Policy Briefing*, No. 21 December 1992, in <http://www.cato.org/pubs/fpbriefs/fpb021.pdf>. Accessed in 15 March, 2012.

Ray S. Cline, *World Power Assessment: A Calculus of Strategic Drift*, Colorado, Westview Press, 1975.

Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, Washington D.C., Congress of the United States, 2011.

Michael Cox, "From the Truman Doctrine to the Second Superpower Détente: The Rise and the Fall of the Cold War", *Journal of Peace Research*, Vol. 27, No.1, February 1990, pp. 25-41.



Michael Creswell, "Between the Bear and the Phoenix: The United States and the European Defense Community 1950-54," *Security Studies*, Vol. 11, No. 4, Summer 2002, pp. 89-124.

Saadet Deger and Ron Smith, "Military Expenditure and Growth in LDCs", *Journal of Conflict Resolution*, Vol. 27, No. 2, June 1983, pp. 335-353.

Saadet Deger and Somnath Sen, "Military Expenditure and Developing Countries", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 1995, pp. 276-305.

Branford De Long and Barry Eichengreen, "The Marshall Plan: History's Most Successful Structural Adjustment Program", *Working Paper No. 3899*, National Bureau of Economic Research, Harvard University, and University of California at Berkeley, October 1991.

Paul Dunne, "The Defense Industrial Base", in Keith Hartley and Todd Sandler (eds), *Handbook of Defense Economics*, North Holland, Amsterdam, 1995, pp. 400-427.

J. Paul Dunne, "Military Spending and Economic Growth in Sub Saharan Africa", School of Economics, University of the West of England, Bristol and SALDRU, University of Cape Town, February, February 2010, pp. 1-13.

J. Paul Dunne and Eftychia Nikolaidou, "Military Spending and Economic Growth in Greece, Portugal and Spain", October 2005, <http://carecon.org.uk/DPs/0510.pdf>. Accessed 31 July 2011.

Jay Edwards "The EU Defence and Security Procurement Directive: A Step Towards Affordability?", *International Security Programme Paper ISP PP 2011/05*, 2011, pp. 1-20.

Nial Fergusson, *Colossus: The Rise and Fall of the American Empire*, New York, Penguin Books, 2005.

Benjamin O. Fordham, "Domestic Politics, International Pressure and the Allocation of American Cold War Military Spending", *Journal of Politics*, Vol. 64, No. 1, February 2002, pp. 63-88.

Jeremiah Gertler, "F-35 Joint Strike Fighter (JSF) Program: Background and Issues for Congress", *Congressional Research Service*, 2011, pp. 1-55.

Robert Gilpin 'The Theory of Hegemonic War', *Journal of Interdisciplinary History*, Vol. 18, No.4, Spring 1988, pp. 591-613.

Todd Harrison, "Analysis of the Fiscal Year 2011 Defense Budget Request", *Center for Strategic and Budgetary Assessments*, 2010, pp. 1-71.

B.H. Liddel Hart, *The Real War*, Boston, New York, Little Brown and Company, 1963.

Keith Hartley, "Industrial Policies in the Defense Sector", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 1995, pp. 460-487.

Keith Hartley, "The Future of the European Defence Policy: An Economic Perspective", *Defence and Peace Economics*, Vol. 14, No. 2, April 2003, pp. 107-115.

Keith Hartley, "The Arms Industry, Procurement and Industrial Policies" in Keith Hartley and



Todd Sandler (eds.), *Handbook of Defense Economics* Amsterdam, North Holland, 2007, pp. 1140-1174.

Uk Heo, "The Relationship Between Defense Spending and Economic Growth in the United States", *Political Research Quarterly*, Vol. 63, No. 4, 2010, pp. 760-770.

Steven A. Hildreth and Carl Ek "Long-Range Ballistic Missile Defense", *Congressional Research Service*, September 2009, pp. 1-27.

Joachim Hofbauer, Roy Levy, Gregory Sanders and Matthew Zlatnik "European Defense Trends, Budgets, Regulatory Frameworks, and the Industrial Base" *Center for Strategic and International Studies*, 2010, pp. 1-12.

Robert E. Hunter, *The European Security and Defense Policy: NATO's Companion or Competitor?* Santa Monica, RAND Europe, National Defense Research Institute, 2000.

G. John Ikenberry, "Rethinking the Origins of American Hegemony", *Political Science Quarterly*, Vol. 104, No. 3, Autumn, 1989, pp. 375-391.

G. John Ikenberry, G.J. "America's Liberal Grand Strategy: Democracy and National Security in the Post-war era", in M. Cox, G.J. Ikenberry, and T. Inoguchi (eds), *American Democracy Promotion: Impulses, Strategies, and Impacts*, Oxford, Oxford University Press, 2001.

G. John Ikenberry, "Power and Liberal Order: America's Postwar World Order in Transition" *International Relations of the Asia-Pacific*, Vol. 5, 2005, pp. 133-152.

Jonathan Ikenberry, *Liberal Order and Imperial Ambition: Essays on American power and Postwar Order*, Cambridge, Polity Press, 2006.

Seth G. Jones, "The European Union and the Security Dilemma", *Security Studies*, Vol. 12, No. 3, Spring 2003, pp. 114-156.

Paul Kennedy, *The Rise and the Fall of the Great Powers*, New York, Vintage Books, 1989.

Robert Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy*, Princeton, Princeton University Press, 2005.

Jeffrey W. Knopf, "Wrestling with Deterrence: Bush Administration Strategy After 9/11" *Contemporary Security Policy*, Vol. 29, No.2, August 2008, pp. 229-265.

Christos Kollias George Manolas and Suzanna-Maria Paleologou, "Defence Expenditure and Economic Growth in the European Union: A Causality Analysis", *Journal of Policy Modeling*, Vol. 26, No. 5, July 2004, pp. 553-569.

Christos Kollias, "A preliminary Investigation of the Burden Sharing Aspects of a European Union Common Defense Policy", *Defence and Peace Economics*, Vol. 19, No. 4, August 2008, pp. 253-263.

Steven M. Kosiak, "US Defence Budget Options and Choices for the Long Haul", *Center for Strategic and Budgetary Assessments*, 2008, p. 1-58.

Ronald R. Krebs, "Exchange: A Debate Miscast-Or What Can We Learn From the Case of the EDC?" *Security Studies* Vol. 11, No. 3, Spring 2002, p. 188-199.



Andrew F. Krepinevich, "An Army at the Crossroads, Strategy for the Long Haul Series", *Center for Strategic and Budgetary Assessments*, 2008, pp. 1-74.

Nickos Kyriazis and Ioannis-Dionysios Salavrakos, "Defense Procurement in Greece, A Cost-Benefit Analysis of Fighters for the Hellenic Air Force", paper presented at the 10th Annual International Conference on Economics and Security, Thessaloniki, 22-24 June 2006.

James H. Lebovic and Ashfaq Ishaq, "Military Burden, Security Needs, and Economic Growth in the Middle East", *Journal of Conflict Resolution*, Vol. 31, No.1, March 1987, pp. 106-138.

Fabio Liberti, "Defence Spending in Europe: Can We Do Better Without Spending More?", *Policy Paper 46*, Institute for International and Strategic Relations (IRIS), June 2011, http://www.notre-europe.eu/uploads/tx_publication/Policy46-F.Liberti-en.pdf. Accessed 1 August 2011.

David Lim, "Another Look at Growth and Defense in Less Developed Countries", *Economic Development and Cultural Change*, Vol. 31, No.2, 1983, pp. 377-384.

Eric S. Lin and Hamid E. Ali, "Military Spending and Inequality: Panel Granger Causality Test", *Journal of Peace Research*, Vol. 46, No. 5, September 2009, pp. 671-685.

Brian MacDonald, "The Obama 2010 Defence Budget Request. Resource document", <http://www.cda-cdai.ca/cda/uploads/cda/2009/03/4-09-obamadefencebudget2.pdf>. Accessed 20 July 2011.

Niccoló Machiavelli, *The Prince*, Oxford, Oxford University Press, 2005.

Claudia Major and Christian Molling, "EU Battlegroups: What Contribution to European Defense?", *SWP Research Paper*, German Institute for International and Security Affairs, June, 2011, pp. 1-36.

Daniel Masters and Robert M. Alexander, "Prospecting for War: 9/11 and Selling the Iraq Warp", *Contemporary Security Policy*, Vol. 29, No.3, December 2008, pp. 434-452.

John J. Mearsheimer, *"The Tragedy of Great Power Politics"* W. W. Norton & Company, New York, 2003.

John J. Mearsheimer, "Why is Europe Peaceful Today?" *European Political Science*, Vol. 9. 2010b, pp. 387-397.

John J. Mearsheimer, "The Gathering Storm: China's Challenge to US Power in Asia" *Chinese Journal of International Politics*, Vol. 3, 2010a, pp. 381-396.

Hans Morgenthau, *Politics among Nations: The Struggle for Power and Peace*, New York, McGraw-Hill Humanities Social, 1993.

Mancur Olson and Richard Zeckhauser, *An Economic Theory of Alliances*, Santa Monica, California, The RAND Corporation, 1966.

Laicie Olson, "Fiscal Year 2012: Defense Spending Request Briefing Book", *Center for Arms Control and Non-Proliferation*, February, 2011, pp. 1-12.

Thomas G. Patterson, *On Every Front: The Making and Unmaking of the Cold War*, New York, W. W. Norton, 1992.



Solomon W. Polachek and Carlos Seiglie, "Trade, Peace and Democracy: An Analysis of Dyadic Dispute", in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 2007, pp.1018-1039.

Barry R. Posen, "European Union Security and Defense Policy: Response to Unipolarity?", *Security Studies*, Vol. 15, No. 2, April-June 2006, pp. 149-186.

Christopher Reynolds, "Military Capability Development in the ESDP: Towards Effective Governance?" *Contemporary Security Policy*, Vol. 28, No. 2, August 2007, pp. 357-383.

Jens Ringsmose, "NATO Burden-Sharing Redux: Continuity and Change After the Cold War", *Contemporary Security Policy*, Vol. 31, No.2, August 2010, pp. 319-338.

Andreas Herberg-Rothe, *Clausewitz's Puzzle, The Political Theory of War*, Oxford, Oxford University Press, 2007.

Sandler T. and Hartley K. (2007). Defense in a Globalized World: An Introduction, in Keith Hartley and Todd Sandler (eds.), *Handbook of Defense Economics*, Amsterdam, North Holland, 2007, pp. 608-620.

Thomas Scheetz, "The Macroeconomic Impact of Defense Expenditures: Some Econometric Evidence for Argentina, Chile, Paraguay and Peru", *Defense Economics* Vol. 3, No. 1, 1991, pp. 65-81.

Robert D. Schulzinger, *U.S Diplomacy Since 1900*, New York, Oxford University Press, 1998.

Travis Sharp, "Fiscal Year 2010 Pentagon Defense Spending Request: February Topline", *Centre for Arms Control and non-Proliferation*, February 2009, pp. 1-27.

SIPRI Yearbook 2009 Summary: Armaments, Disarmament and International Security, *Stockholm International Peace Research Institute*, Oxford, Oxford University Press, 2009.

SIPRI Yearbook 2011 Summary: Armaments, Disarmament and International Security, *Stockholm International Peace Research Institute*, Oxford, Oxford University Press, 2011.

Frank Slijper, "The Emerging EU Military-Industrial Complex Arms Industry Lobbying in Brussels," *TNI Briefing Series No. 2005/1*, Transnational Institute, May 2005.

The Military Balance, "The United States" London, Routledge Taylor & Francis Group, 1990.

The Military Balance, "North America", London, Routledge Taylor & Francis Group, 2010.

Thucydides, Benjamin Jowett, *The History of the Peloponnesian War*, New York, Prometheus Books, 1998.

Vegetius, M.D. Reeve, *Epitoma Rei Militaris*, Oxford, Oxford Classical Texts, 2004.

Peter Wallensteen, "American-Soviet Détente: What Went Wrong?", *Journal of Peace Research*, Vol. 22, No. 1, March 1985, pp. 1-8.

Kenneth Waltz, *Theory of International Politics*, Reading, Addison-Wesley, 1979.

Michael D. Ward and David R. Davis, "Sizing Up the Peace Dividend: Economic Growth and



Military Spending in the United States, 1948-1996", *American Political Science Review*, Vol. 86, No. 3, September 1992, pp. 748-755.

Alexander Wilner and Anthony Cordesman, "U.S. and Iranian Strategic Competition: The Gulf Military Balance", Center for Strategic and International Studies, November 2011, pp. 1-134.

Herbert Wulf, "Will the European Defence Market Strengthen or Weaken the EU's Foreign and Security Policy?" in Alyson JK Bailes, Sara Depauw and Tomas Baum (eds.), *The EU Defence Market: Balancing Effectiveness with Responsibility*, Drukkerij Artoos, Brussels, 2011, pp. 23-29.



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