

The London School of Economics and Political Science

**INTERNATIONAL TRADE IN SERVICES AND SERVICES CO-
PRODUCTION:**

**AN INVESTIGATION INTO THE NATURE OF SERVICES AND
THEIR POLITICAL ECONOMY CONSEQUENCES ON
INTERNATIONAL TRADE**

Lior Herman

A thesis submitted to the European Institute of the London School of
Economics for the degree of Doctor of Philosophy, London September 2010

UMI Number: U615331

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI U615331

Published by ProQuest LLC 2014. Copyright in the Dissertation held by the Author.
Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against
unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

THESES

F

9413



1269993

Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without the prior written consent of the author.

I warrant that this authorization does not, to the best of my belief, infringe the rights of any third party.

ABSTRACT

Goods and services are bundled together in economic analysis, which largely considers them to be similar despite contrary empirical evidence. Services have been largely absent from international political economy literature, so current explanations of international trade in services liberalisation and integration leave a lot to be desired. Using the WTO framework of the four modes of service supply, this thesis provides a comprehensive analysis of international trade in both healthcare and accountancy services. This empirical investigation sheds light on services' patterns of internationalisation and the relationships between different modes of trade. It finds that services differing from each other in many aspects are nevertheless internationalising following similar patterns and particularly through commercial presence. The empirical findings of this study are supported by an enquiry into the nature of services. They form the basis of the development of the theory of services co-production, whereby the services output is jointly created by producers and consumers and/or goods under their control. Co-production creates an inherent proximity constraint between producers and consumers, which is explained through the Services Production Trap (SPT).

Co-production and the SPT have significant consequences for international political economy. Examination of firms' response to the SPT shows that accountancy firms developed a particular organisational model based on a network of partnerships that has been highly successful for internationalisation. In addition, this model furthered accountancy firms' economic and political influence in shaping and leading the exceptional case of an international private governance regime in financial and reporting standards. Further political economy implications which are considered in this study include international trade in services liberalisation and protection, multilateralism and preferential trade, as well as European integration.

*When you set out on your journey to Ithaca,
pray that the road is long,
full of adventure, full of knowledge.
The Lestrygonians and the Cyclops,
the angry Poseidon -- do not fear them:
You will never find such as these on your path,
if your thoughts remain lofty, if a fine
emotion touches your spirit and your body.
The Lestrygonians and the Cyclops,
the fierce Poseidon you will never encounter,
if you do not carry them within your soul,
if your soul does not set them up before you.*

*Pray that the road is long.
That the summer mornings are many, when,
with such pleasure, with such joy
you will enter ports seen for the first time;
stop at Phoenician markets,
and purchase fine merchandise,
mother-of-pearl and coral, amber and ebony,*

Ithaca by Constantine P. Cavafy, 1911

*and sensual perfumes of all kinds,
as many sensual perfumes as you can;
visit many Egyptian cities,
to learn and learn from scholars.*

*Always keep Ithaca in your mind.
To arrive there is your ultimate goal.
But do not hurry the voyage at all.
It is better to let it last for many years;
and to anchor at the island when you are old,
rich with all you have gained on the way,
not expecting that Ithaca will offer you riches.*

*Ithaca has given you the beautiful voyage.
Without her you would have never set out on the road.
She has nothing more to give you.*

*And if you find her poor, Ithaca has not deceived you.
Wise as you have become, with so much experience,
you must already have understood what Ithacas mean.*

Acknowledgement

In many respects this thesis is a crossroad of several journeys. The four years I spent at the LSE had a profound impact on my development as an academic researcher and I am highly grateful for having had the opportunity to study in such a stimulating environment. The PhD has also been a professional journey where I switched from one career that I highly enjoyed to another which I enjoy even more. Along the way of giving birth to this thesis, I was also privileged to become a father to two wonderful daughters, Yarden and Ophir, who fill my life with great joy and happiness. On a different but related note, portions of this research were conducted while travelling through several cafés: The Garrick, Fleet River Café, Market Café, Nocturno and the Restobar were home to fine academic discussions and to intensive writing.

In thanking those who have supported me, I would like to begin with my parents, Vardina and Israel. They have both been a great source of inspiration and wonderful parents. I thank

them for their unconditional love, support and encouragement, and for being a model for lifelong learning and endeavour for knowledge.

I was also privileged in having two excellent supervisors. Dr. Bob Hancké has been my teacher and academic mentor. I am grateful for his support, wise advice, encouragement, and patience. Discussions with Bob were always priceless. I am also thankful to Prof. Willem Buitter whose enthusiasm, drive and encouragement of this research have significantly helped me. Willem's sharp insights and ability to see the wider context and implications of my research were highly inspiring and motivating.

The LSE was a wonderful home where I met some of the brightest minds and benefited immensely from my colleagues' work, although often working on very different scientific fronts. I am deeply grateful for the advice and comments I received particularly from Max Freier, Costanza Rodriguez-D'Acri, Alison Johnston, Zsofi Barta, Steve Coulter, Matthias Mayer, Niclas Meyer, Raya Kardasheva, Tine Van-Criekinge, and other fellow J-14ners. Brian Hindley deserves special thanks. Brian is a pioneer in researching international trade in services and his help and advice in the earlier stages of this research are greatly appreciated. I also wish to thank several colleagues and friends who read and commented on parts of my thesis: Nathan Sussman, Lauge Skovgaard Poulson, Eyal Geva, Dale Andrew, Massimo Gelosso-Rosso, Rolf Adlung, Mark Thatcher, Pierre Sauve, Amnon Aran, Steve Woolcock, Shiri Cohen, Nadav Halevi, Fredrik Erixon and Lucy Davis. I am highly grateful to Corinne Vella for superb editing of this research.

Parts of this thesis were presented at the LSE European Institute and the LSE International Political Economy and Public Policy PhD seminars, the International Studies Association (ISA) Conference in San Francisco, UACES Annual Conference in Edinburgh, Global Public Policy Network (GPPN) Research Seminar in Beijing, and The Political Economy of Liberalising International Trade in Services International Conference in Jerusalem.

I am grateful for the generous support of the British Foreign and Commonwealth Office through the British Council for awarding me a Chevening Scholarship, to the LSE for granting me the LSE Research Award, as well as to the Anglo-Jewish Association for awarding me the Karten Scholarship.

Last, but certainly not least, I wish to thank Einav, the love of my life, for sharing this journey. Her never-ending support, love and endurance have eased the way and filled it with joy and light. She is a wonderful mother, beautiful person, and my best friend. This thesis is dedicated to her.

Abbreviations

ACCA	Association of Chartered Certified Accountants
AICPA	American Institute of Certified Public Accountants
AISG	Accountants International Study Group
ARC	Accounting Regulatory Committee
CAA	Chartered Accountants Australia
CPC	Central Product Classification
EC	European Community
EEA	European Economic Area
EFRAG	European Financial Reporting Advisory Group
EU	European Union
FASB	Financial Accounting Standard Board
FATS	Foreign Affiliates Trade in Services Statistics
FDI	Foreign Direct Investment
FEE	Fédération des Experts Comptables Européens
FTA	Free Trade Area
GAAP	General Accepted Accountancy Practices
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
IAS	International Accounting Standards
IASB	International Accountancy Standards Board
IASC	International Accountancy Standards Committee
IASCF	International Accountancy Standards Committee Foundation
ICAEW	Institute of Chartered Accountants of England and Wales
ICAI	Irish Chartered Accountants Institute

ICC	International Chamber of Commerce
ICT	Information and Communications Technology
ICWA	Institute of Cost and Work Accountants
IFAC	International Federation of Accountants
IFRS	International Financial and Reporting Standards
IFTU	International Federation of Trade Unions
IMG	International Medical Graduates
IOSCO	International Organization of Securities Commissions
M&A	Mergers and Acquisitions
MNE	Multinational Enterprises
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne
NYSE	New York Stock Exchange
OECD	Organisation for Economic Cooperation and Development
OEEC	Organisation for European Economic Cooperation
PAC	Political Action Committee
PFI	Private Finance Initiatives
PPP	Public-Private Partnerships
SEC	Securities Exchange Commission
SIAA	Society of Incorporated Accountants and Auditors
SOPEMI	Systeme d'Observation Permanent des Migrations de l'OCDE
SPT	Services Production Trap
UEC	Union Europeenne des Experts Comptables, Economiques et Financiers
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organisation

Contents

Preface	1
Chapter 1: Introduction	2
International trade in services: an empirical puzzle	2
Literature Review: How can trade in services be explained?	13
The International Tradability of Services and Its Determinants	15
Research question	26
Research Design: Outline, Methodology and Selection of Case Studies	29
Research outline	29
Methodology	30
Selection of case studies	36
Healthcare services	37
Accountancy services	39
Conclusions	41
Chapter 2: International trade in services through cross-border trade and consumption abroad	42
Cross-border trade	42
Healthcare services	42
Accountancy services	52
Consumption abroad	59
Healthcare services	60
Accountancy services	69
Conclusions	70
Chapter 3: International trade in services through commercial presence and the movement of persons	73

Commercial presence	73
Healthcare services	74
Accountancy services	84
Movement of natural persons	91
Healthcare services	91
Accountancy services	100
Conclusions	104
Chapter 4: The theory of services co-production and the services production trap	110
Conceptualising services	110
Definitions based on physical characteristics	113
Definitions based on process, relationship and activities	115
Other types of definition	117
Defining services	122
The theory of services co-production and the services production trap	129
The definition of services	129
Consumers as factors of production	131
Services are heterogeneous and quality-volatile	133
Ideal-type argument	136
Intermediate and final services	137
Information asymmetries	138
Co-production differs from utility	139
Co-production differs from product customisation	141
The services production trap	141
Distance versus proximity	142
The organisation of the firm, joint production and international trade	146

Conclusions	153
Chapter 5: Can the services production trap be avoided	156
The growth of international accounting services	157
The partnership model of firm organisation	161
The political economy of international accounting standards-setting	165
The national political economy of accounting standards	166
Why would international accounting standards be desired?	167
The development of international accounting standards	170
International private governance of markets: theory and alternative explanations	176
From regulatory-takers to regulatory-makers: The partnership model and international standard setting	181
Insider strategy: influencing from within	182
Outsider strategy: developing an alternative	185
Outside-in strategy: bringing regulatory-setters inside	188
International Trade in Healthcare Services and the SPT	199
Conclusions	207
Chapter 6: Some implications for international political economy	210
The international political economy of services trade liberalisation and protection	211
Multilateralism and preferential trade	217
The European Union and the integration of services markets	221
Conclusions	228
Chapter 7: Conclusions	230
Bibliography	238

List of Tables and Boxes

Table 1.1: Trade indicators: goods and services, 2008	8
Table 1.2: Share of total affiliates in total turnover	10
Table 1.3: Main arguments in the literature on whether and why services are tradable	24
Table 1.4: The four modes of services supply	32
Box: 2.1: International trade in teleradiology	44
Table 2.1: Exports and imports of healthcare services: mode 1	47
Table 2.2: Trade in healthcare services in mode 1 and healthcare economic activity	49
Table 2.3: Healthcare cross-border trade concentration and specialisation in EU member states, 2005	52
Table 2.4: Trade in accounting, auditing and book-keeping and tax consulting services: mode 1 (US\$ millions)	55
Table 2.5: Total cross-border trade in accountancy services as a share of GDP and of output in accountancy services	57
Table 2.6: Revealed comparative advantage index, World and EU-25 in mode 1	59
Table 2.7: Medical costs: specialised treatments	61
Table 2.8: Total exports and imports of healthcare services in mode 2 (US\$ millions)	64
Table 2.9: Trade in healthcare services in mode 2 and selected indicators	66
Table 2.10: Healthcare consumption abroad trade within the EU, 2005	68
Table 3.1: Trade in healthcare service: mode 3	77
Table 3.2: Cross-border M&A deals in healthcare services with values of over \$1 billion completed in 2003-2006	81
Table 3.3: Healthcare services companies in the Fortune Global 500 list	83
Table 3.4: FDI flows, stocks and share of output in accounting services in selected OECD	86

countries 2000-2005 (US\$ millions)

Table 3.5: Share of foreign controlled enterprises, turnover and employees out of total enterprises	88
Table 3.6: Trade in accountancy services: mode 3	90
Table 3.7: Overview of healthcare workers in selected EU member states, 2004	97
Table 3.8: IMGs in the physician workforces of selected OECD states	99
Table 3.9: Geographical distribution of membership of accountancy societies in the UK, 1891-1991	102
Table 3.10: Birthplace of persons employed as accountants, corporate treasurers and auditors in Australia, May 2001 and May 2006	104
Table 3.11: Leading countries in international healthcare and accountancy services trade	109
Table 4.1: Conceptualisation of Services	112
Table 4.2: Categories of economic production	119
Table 4.3: The four types of services activity	121
Table 4.4: Three market entities: tangible goods, intangible goods and services	130
Table 5.1: The big accountancy firms: global revenues (US\$ millions)	159
Table 5.2: The big accountancy firms: number of employees	160
Table 5.3: Listing of companies from EU member states on the New York Stock Exchange (NYSE)	175
Table 5.4: Presidents of the Institute of Chartered Accountants in England and Wales	183
Table 5.5: Big-4 Political Contributions 1990-2010, United States	194
Table 5.6: Big-5 Contributions, United Kingdom General Elections 2010	195
Table 5.7: Linkage between funding and membership in the IASB and EFRAG	199
Table 5.8: Total Number of Hospitals Operated by Multinational Hospital Corporations by Country 1978-85	201

Table 5.9: Leading Healthcare Multinationals International Spread and Revenues (US\$ 202
millions)

Table 5.10: Healthcare Multinationals Expansion Mode 206

List of Graphs

Graph 1.1: Share of gross value-added, EU-25	4
Graph 1.2: Share of employees in total employment, EU-25	5
Graph 1.3: Shares of world trade 1970-2005	9
Graph 1.4: OECD average total expenditure on health, percentage of GDP	39
Graph 2.1: Cumulative growth in volume per US medicare beneficiary (%), 1999-2004	44
Graph 3.1: International trade in services in healthcare and accountancy services by modes of supply	108
Graph 5.1: Market capitalisation of NYSE companies (US\$ trillions)	175

Preface

How big is international trade in services, and why do services internationalise in a different manner from that of goods? These are the main questions guiding this thesis. In recent years, a growing body of literature has taken interest in the growth of international trade in services. Though services were previously regarded as non-tradable, international trade in services is now believed to be a global phenomenon, yet that does not mirror trade's domestic share of the national economy. This research proposes a new look into the nature of services, arguing that a joint production relationship between consumers and producers explains why international trade in services is "burdened" by a proximity constraint. This constraint does not restrict cross-border trade but creates a bias towards specific modes of trade. Furthermore, this research shows that, in order to internationalise, firms can circumvent some aspects of the proximity constraint by adapting their organisational structure, making proximity a virtue rather than a vice.

This chapter begins with a brief account of the rise of the services economy and of international trade in services, highlighting an empirical puzzle: the unexpected low volume of international trade in services. The next section reviews the literature on internationalisation and international trade in services. The enquiry, on the one hand, into the domestic and international trajectories of trade in services, and, on the other hand, into the theoretical foundations of international trade, reveals an empirical and a theoretical puzzle. These puzzles set the scene for the research questions informing this thesis, which are described in the following section. Concluding this chapter is an outline of the thesis' research design.

Chapter 1: Introduction

International Trade in Services: An Empirical Puzzle

The composition of economic production has changed considerably over the past 40 years. The importance of industry and agriculture, once the economic powerhouses of every nation, diminished, paving the way for the rise of the service economy. This transformation has not bypassed any developed economy, and has also been the case of many developing countries (Stanback 1979; Iversen and Wren 1998).¹

The rise of the service economy can be attributed to several factors, of which the following are of considerable significance. First, technological changes have enabled the international tradability of almost all services, which in the past were considered to be non-tradable (Aharoni 1997). The Information and Communication Technologies (ICT) revolution has made it feasible to trade across borders in numerous services such as laboratory examinations, consultancy, financial services, education services, and many other types of service. Secondly, demand for service functions (and, in particular, for sophisticated purposes) expanded considerably. The growing demand of firms and households for services varying in range, quantity, sophistication and quality, can be attributed to several reasons among which are: regulatory changes, greater prosperity, improvement and greater desire for quality of life, greater availability of leisure time, urbanisation and its associated services, demographic changes that led to an increase in the numbers of children and older people who tend to consume more services, socio-economic changes, rising consumer sophistication and

¹ The service economy has also been referred to as the *post-industrial society*, *the new economy*, *the intangible economy*, and the *weightless economy*.

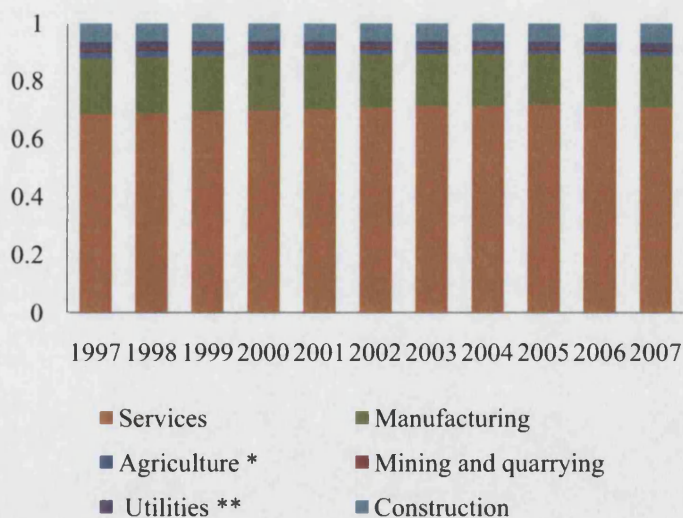
consequent demand for greater access to information and knowledge which, in turn, lead to further demand for technological innovations that improve and diversify existing services, and create new ones. In particular, firms and institutions are developing management requirements for services that are better, more sophisticated, international and complex.

Thirdly, as service activities became more and more specialised, specialisation was accompanied by a process of outsourcing functions that were previously performed in-house within households, firms and governments. Growing sophistication and specialisation of outsourced services are, at the same time, the principal drivers as well as the outcomes of this de-integration. Specialisation has led also to greater fragmentation of production, whereby services that were formerly not separated from goods are now disembodied into autonomous processes.² The result of the process is not just a mere shift of activity from in-house provision, but a net increase in services provision (Porter 1998). Lastly, privatisation of public services led to enhanced supply by the private sector. Privatisation of services took place in all OECD countries (Organisation for Economic Cooperation and Development), and led to a substantial decrease in the government's market involvement as a supplier of services. In many other cases, indirect privatisation (or governmental outsourcing) occurs whereby government entities purchase services previously performed in-house for governments' own use (e.g. catering, IT services, etc.) or remain as suppliers of services that are outsourced to the private sector (e.g. out-patient medical services within a universal public healthcare system) (Porter 1998).

² For example, the production of a suit used to include most layers of production within a single activity. These are now often divided into design, grading and marking of patterns, cutting, sewing, etc. Many of these production stages are performed by different suppliers.

On average, services account for over 70% of economic activity in EU and OECD countries. Graph 1.1 shows that, on average, services' share of gross value-added in the EU-25 member states has been 70% over a decade now. In some member states, such as the UK, services' contribution to GDP has been higher at approximately 80% of GDP (European Commission 2004).³ These figures are even higher if construction services and utilities are included. Graph 1.2 shows a similar pattern with regard to employment. Employment in services has been growing both in absolute and relative terms. While the share of employment in several economic sectors that were in total employment remained constant for at least a decade, the growing share of employment in services substituted manufacturing.

Graph 1.1: Share of Gross Value-added, EU-25



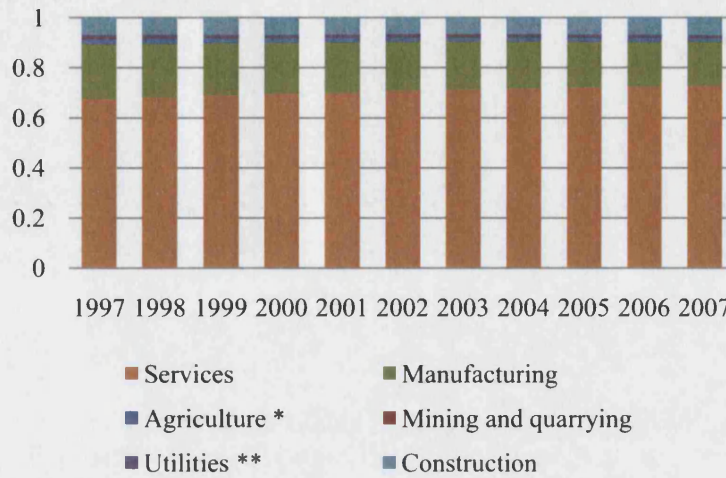
* Agriculture including hunting, forestry and fishing

** Utilities include electricity, gas and water supply

Source: EU-KLEMS (author's calculations)

³ Excluding public administration, they represent approximately 54% of GDP. Even without public sector contributions, services account for the majority of economic activity.

Graph 1.2: Share of Employees in Total Employment, EU-25



* Agriculture including hunting, forestry and fishing

** Utilities include electricity, gas and water supply

Source: EU-KLEMS (author's calculations)

Services are also important in terms of firms' distribution. The service industry accounts for over 72% of all EU enterprises. This figure rises further when measured together with construction services and utilities. The significance of services is also evident in FDI flows as, over more than a decade, FDI in services annually exceeded intra-EU FDI flows in the manufacturing sector by more than three times (European Commission 2004).

Despite its important share within domestic economic activity, the services sector fails to attain a similar role in international trade. Table 1.1 shows that international trade in services is low, particularly when compared with international trade in goods. The trade to GDP ratio is the combination of exports and imports divided by GDP. It is widely taken as an index for the degree of openness or integration of a country in the world economy. The index measures the weighted degree to which domestic producers depend on foreign markets, as well as the degree to which domestic demand relies on foreign supply. Reported trade openness shows a

negative correlation between the relative contribution of goods and services to production and international trade. Despite being the largest economic activity in OECD countries, trade of services as a ratio of GDP is very low and, on an OECD average, is less than half of that of trade in goods.⁴ In many individual countries, this relation is far bigger.⁵

The import penetration rate shows the degree to which imports satisfy domestic demand. It is measured as the ratio between imports and domestic demand.⁶ As in the case of trade openness, import penetration rates for services are exceptionally low for all countries,⁷ including those reporting high import penetration rates for goods. Similarly, export propensity rates of services are very low for almost all countries and are always superseded by export propensity rates of goods. Export propensity is another yardstick for economic openness and international trade orientation. Measured as the ratio of exports and GDP, it calculates the share of total final foreign demand and reports the degree to which domestic producers depend on demand from outside their own country. While reporting lower propensities for services than for goods, Ireland's and Greece's services export propensities are higher than those reported by other countries.

Export performance and market share indicators are provided to give a more complete picture of, respectively, the relative growth rate of trade and the degree of importance of particular

⁴ Luxembourg and Ireland are exceptions.

⁵ Among the advantages of using this index is the fact that, by comparing between economic sectors, it is possible to see that the difference between the degree of openness to trade in services and that of goods is very big even in economies highly integrated into the world economy, such as those of Belgium, the Czech Republic, Germany, the Netherlands and Switzerland.

⁶ Domestic demand (D) is measured as the sum of domestic consumption by households (C), investment demand by firms (I) and government consumption (G): $D = C + I + G$. GDP (Y) is the sum of domestic consumption and net exports (X-M): $GDP(Y) = C + I + G + (X - M) = D + (X - M)$. Therefore, domestic demand can be written as $D = Y - (X - M)$. Finally, import penetration rate equals $\frac{M}{D} = \frac{M}{Y - X + M}$

⁷ Luxembourg is a single exception, as it reports high import penetration for services (and goods) resulting from financial services' geographical concentration.

countries in total world trade. Export performance reports the growth rate of the total exports of a country subtracted from the growth rate of imports of the rest of the world.⁸ Market share, given in percentages, is calculated by dividing the exports of the country by the total global exports. The combined market of services trade reported in table 1.1 is over 70% of world trade, indicating that the above analysis covers the lion's share of world trade. Graph 1.3 shows in an aggregated way that, despite its growth, the trade in services share of world trade has remained constant and low (~20%) compared with trade in manufactured goods. Similar results are obtained from time series for individual countries (1975-2009).

⁸ If the export growth rate of a single country is higher than the growth rate of the imports of the rest of the world/region, then the export performance of this country is greater than 1.

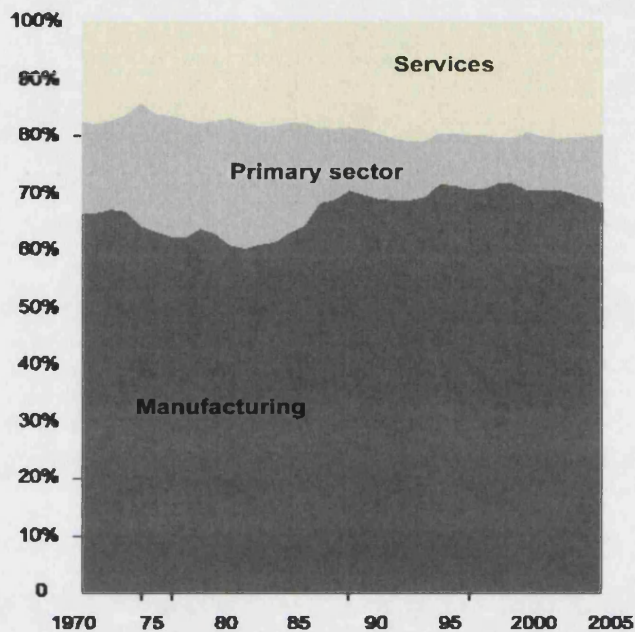
Table 1.1: Trade Indicators: Goods and Services, 2008

	Trade to GDP		Import Penetration		Export Propensity		Export Performance		Market Share	
	Goods	Services	Goods	Services	Goods	Services	Goods	Services	Goods	Services
Australia	34.3*	8.95*	17.79*	4.34*	16.21*	4.53*	1.15	0.99	1.19	1.17
Austria	86.49	26.47	45.89	11.03	43.28	16.08	0.96	0.99	1.1	1.61
Belgium	143.54*	31.08*	73.38*	15.08*	72.35*	15.77*	0.96	0.97	3.04	2.24
Canada	58.3	10.18*	28.11	5.95	30.62	16.46*	0.94	0.94	2.91	1.72
Czech Republic	131.01	18.39	67.2	8.8	66.87	10.3	1.03	1.15	0.91	0.58
Denmark	67.73	39.41	35.24	18.54	33.44	21.38	0.99	1.04	0.74	1.88
Finland	67.54	22.12	32.89	11.51	35.64	11.42	0.93	1.22	0.62	0.83
France	45.04	10.31	23.31	4.91	21.16	5.28	0.96	1	3.79	4.27
Germany	73.96	14.2	35.57	8.18	40.61	6.48	0.96	1	9.35	6.39
Greece	35.71	19.65	23.73	6.63	9.55	13.86	0.94	1.04	0.16	1.31
Hungary	137.97	25.24	69.7	12.27	68.95	13.17	0.99	1.04	0.69	0.52
Iceland	63.69	28.18	31.21	14.85	31.62	12.83	0.97	0.87	0.03	0.06
Ireland	76.55	71.49*	35.48	46.34	44.82	35.2*	0.9	1	0.81	2.63
Italy	47.14	11.04	23.45	5.74	23.57	5.27	0.93	0.97	3.44	3.2
Japan	28.52*	5.02*	13.29*	2.92*	15.46*	2.15*	0.95	1.02	4.98	3.86
Korea	90.75	16.21	45.15	8.35	45.1	7.77	0.99	1.06	2.69	1.97
Luxembourg	84.6	237.61	70.44	137.47	37.07	138.15	0.95	0.98	0.11	1.85
Mexico	54.96*	3.3 *	27.94*	1.47*	26.58*	1.72*	0.93	0.92	1.86	0.48
Netherlands	115.87	29.47	59.16	15.48	61.65	15.25	0.92	0.82	3.23	2.71
New Zealand	44.62*	14.17*	22.53*	6.95*	21.82*	7.14*	0.99	0.85	0.2	0.23
Norway	57.74	19.19	24.86	10.91	37.65	10.5	1.13	1	1.13	1.19
Poland	71.48	12.45	36.73	5.55	33.29	6.68	1.08	1.1	1.1	0.92
Portugal	60.46	14.83	33.13	5.69	24.16	8.68	0.95	1.01	0.36	0.68
Slovak Republic	149.47	18.61	73.83	9.57	73.98	8.93	1.05	1.07	0.45	0.22
Spain	43.54	15.46	24.31	6.32	17.8	8.69	0.95	0.98	1.78	3.72
Sweden	72.55	28.5	37.01	13.56	38.28	15.96	0.94	1	1.17	1.87
Switzerland	77.32	24.45*	41.96	8.94	40.05	16.48*	1.01	1.04	1.28	2.02
Turkey	45.18	6.58*	24.9	2.25	19.18	4.36*	1.07	1.08	0.84	0.91
United Kingdom	41.2	19.61	23.2	7.78	17.37	11.5	0.9	0.89	2.93	7.43
United States	23.62	6.54*	14.1	2.74	8.82	3.74*	0.96	0.97	8.29	14.14

* Figures reported for 2007

Source: OECD Stat

Graph 1.3: Shares of World Trade 1970-2005



Source: OECD, CEPII

Another indication of the mismatch between services' domestic economic significance and their low tradability is found in the activities of foreign affiliates operating in domestic markets. Table 1.2 compares Foreign Affiliates Trade in Services Statistics (FATS) for manufacturing and services companies. The data for 22 EU member states in the period 2003-2007 show that the domestic-foreign gap prevails also with regard to foreign affiliates operating in the local economy. Taking turnover as an indicator for trade (sales), foreign affiliates' domestic trade in services is lower for services than for manufacturing. Foreign turnover shares of total turnover are slightly higher than reported above for trade, yet are still

much lower than predicted, given the service sector's economic role.⁹ This evidence is important, particularly since trade in services through the local commercial presence of foreign firms is considered to be the most important mode of trade in services. This issue will be dealt with in more depth in chapter 3.¹⁰

Table 1.2: Share of Foreign Affiliates in Total Turnover

	2003		2004		2005		2006		2007	
	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services
Bulgaria	36.4%	20.3%	47.6%	24.2%	49.4%	25.3%	49.6%			
Czech Republic	47.7%	29.0%	52.5%	32.8%		36.6%	61.7%	37.7%		
Denmark							23.8%			
Germany							27.1%	15.9%		
Estonia	42.7%	19.6%	45.6%	20.8%	45.3%	21.0%	46.2%	20.1%		
Spain	27.0%	15.4%	26.4%	15.9%	26.1%	14.6%	29.7%	16.4%		
France	33.9%	18.4%	34.8%	19.3%	36.8%	20.0%	36.2%	20.5%		
Italy	20.0%	14.7%	19.6%	16.6%	18.4%	16.5%	19.0%	18.0%	18.7%	18.6%
Cyprus										
Latvia	24.7%	27.5%	24.1%	32.9%	23.9%	31.6%	26.6%	32.7%	30.6%	34.8%
Lithuania	41.1%		44.5%	24.0%	49.6%	22.2%	49.9%	23.8%		
Hungary	54.8%		60.3%	29.0%	58.9%	29.7%	61.9%	38.2%		
Netherlands	40.1%	21.2%	43.3%		41.3%	25.5%				
Austria	30.0%	19.6%								
Poland									41.8%	21.6%
Portugal	24.0%	18.8%	24.3%	16.9%	25.2%	19.6%	25.7%	20.0%		
Romania	37.3%		47.2%		35.1%	22.4%	55.4%	30.4%	54.4%	38.4%
Slovenia	23.7%	15.4%	24.6%	18.6%			26.6%	19.9%		
Slovakia	63.2%	26.5%	68.5%	31.2%	70.0%	31.4%	70.5%	31.1%	77.9%	31.6%
Finland	13.5%	19.8%	15.2%	21.6%	15.9%	22.1%				
Sweden	40.3%	27.7%	38.9%	28.2%	40.8%	30.4%	41.2%	31.8%	38.7%	30.6%
United Kingdom							43.9%	28.6%		

Source: Eurostat (author's calculations)

A possible explanation for the relatively low tradability of services could be that trade is depressed by the greater protection and prevalence of trade barriers in the service sector as

⁹ Similar results are obtained from measuring FATS statistics for several other indicators, such as employment or number of companies.

¹⁰ Although it is not within the scope of this research, the low tradability of services begs the question of whether the domestic concentration of production in the service sector will lead to a long-run structural imbalance affecting employment and wages.

compared with the manufacturing sector. Indeed, multilateral liberalisation of trade in goods was the subject of on-going negotiations in the 1947 General Agreement on Tariffs and Trade (GATT) and, subsequently, the World Trade Organisation (WTO). In contrast, multilateral liberalisation of services began only with the establishment of the WTO in 1995 within the General Agreement on Trade in Services (GATS). This difference of almost half a century suggests that, gradually and eventually, trade in services might be liberalised as has happened for manufacturing goods. Over the past 15 years, the GATS significantly contributed to locking-in WTO members' commitment to liberalising trade in services in some 160 service sectors.¹¹

However, this argument is empirically false. Liberalisation of services did not begin with the GATS and had been going on extensively for 50 years within regional and bilateral agreements, and autonomous reforms which have been undertaken in many countries. Two notable regional platforms, where wide-ranging liberalisation of trade in services took place, are the OECD and the EU. Substantial removal of barriers to trade in services took place in the context of the 1961 OECD's Codes of Liberalisation of Capital Movements and of Current Invisible Operations (OECD 2009; OECD 2009). Liberalisation of services' trade within these codes has progress continuously till today.

In the EU, beginning in 1957, the Single Market project embarked on an ambitious liberalisation of trade in services through the free movement of goods, services, labour and capital. While in the earlier days of European integration there were extensive barriers to trade in services, the situation significantly improved with the ongoing movement towards

¹¹ WTO member states schedule commitments in 160 sub-sectors covering all services according to the United Nations Central Product Classification (CPC).

completing the Single Market. Thus, in the mid-1980s and as a consequence of the EC-1992 Programme,¹² major steps were taken to remove barriers in a wide range of services sectors, most notably in financial and transport services. These measures included both negative and positive integration, abolishing existing barriers for trade in services and creating market rules and infrastructure to enable greater tradability of services, particularly through cross-border trade and the establishment of a commercial presence (Swann 1992; Pelkmans 1994; Pelkmans 2006). In subsequent years, the EU took measures to liberalise further services by removing more barriers in financial services, business-related services and the posting of workers. In 2006, the EU adopted the Services Directive, with the aim of eliminating the remaining barriers to trade in services in numerous service sectors. While the Directive did not cover some services, such as healthcare or audiovisual services, it is far reaching and is based on the fundamental freedom to provide services.

Despite the substantial removal of barriers to trade in services within the EU, trade in services remains low. Services account for only 20% of intra-EU trade, while contributing 80% of GDP. Less than 5% of production in most services sectors in the EU is exported to other member states.

The non-correlation between services liberalisation and their level of trade extends beyond the multilateral level (OECD, WTO) or the exceptional case of closely and highly integrated economies (EU). Growing understanding of the importance of trade in services has led many WTO partners to enter negotiations on deep integration agreements in the area of services. Since 1994, over 180 preferential trade agreements have included provisions on liberalisation

¹² Europe 1992 Programme was a major reform programme to complete the Single Market by 1992. The EC-1992 programme included almost 300 directives and had a profound effect on EU economic integration.

of services and investment. In many cases, these agreements extend well beyond the GATS framework in removing existing barriers to trade and developing rules for cooperation and market integration. It should be noted that the proliferation of services trade agreements includes developing and developed countries which either conclude agreements within their own group (e.g. north-north) or between the two groups (south-north). Yet, decreasing bilateral and regional levels of trade restrictions have not resulted in higher shares of trade in services in total trade (Herman 2006; Heydon and Woolcock 2009).

Finally, it is argued that the characteristics of services lead to market failures such as information asymmetries or market concentration in infrastructure sectors. These result in extensive regulation acting as significant trade barriers. However, evidence for decreasing levels of services regulation operating as trade barriers is evident in the OECD Product Market Regulation (PMR) database. These economy-wide indicators taken for the years 1996, 2003 and 2008, show that levels of restrictions on services have been extensively reduced in the areas of state control of business enterprises, legal and administrative barriers to entrepreneurship, as well as barriers to international trade and investment (OECD 2010).

Literature Review: How can trade in services be explained?

The previous section developed the empirical puzzle motivating this research. While services dominate modern economies, traditional trade patterns remain the same with a strong bias towards manufacturing trade. This empirical puzzle is further enhanced by trade theory which suggests that, *mutatis mutandis*, the trade in services is not significantly different from the trade of goods. The literature on international trade in services reviewed in this section

suggests that, while paying little explicit attention to the unique traits of services, even if services differ from goods in their characteristics, their tradability should not be different from that of goods. Hence, services economies should expect levels of trade that match their production structure.

The empirical puzzle is probably one of the most significant riddles in contemporary economic and political research. Nevertheless, the puzzle is not just an empirical one and, as such, does not end at the “last data point” of trade levels recorded. Equally important is a lacuna in the economic and political literature explaining international trade in services. Thus, a review of the literature reveals that a theoretical and analytical puzzle persists with regard to what explains international trade in services or its lack thereof, with many answers falling short of a full explanation and several questions left unaddressed.

The following literature review addresses two central questions informing research on international trade in services. First, are services tradable and in what way is their trade different from that of goods? Assuming that services are tradable, the second question is what determines services trade? The answers provided to these questions can be grouped around three main positions, which will be respectively addressed in the next sub-sections. When appropriate, the following discussion will refer to issues such as welfare, productivity and other economic consequences of trade. Although these topics are important, they are of lesser relevance to this research and will not be discussed separately¹³ in order to focus the literature

¹³ International trade theory concerns three main issues. First, it provides explanations for the trade flows between two or more countries. Second, it analyses the gains and losses from international trade. Finally, it explores the effects of various policies and state interventions on trade and the consequences of these in terms of welfare, productivity and other economic variables. Since international trade theory is “international” by definition, it does not provide a real explanation of what the internationalisation of trade actually means. It can

review on the question of internationalisation. At the end of the discussion, attention is drawn to the absence of political economy analysis in the area of services at large and in the issue of the international tradability of services in particular. Chapter 6 further extends the political economy analysis with the aim of contributing to filling this gap.

The International Tradability of Services and Its Determinants

Three broad positions can be identified with regard to whether services are tradable. The traditional or historical view of international trade theory holds that services are, by and large, non-tradable. Contrarily, contemporary trade theorists argue that trade in services is feasible and rather similar to that of goods. A third position emphasising the role of services within the trade of goods holds that services can be partially traded.

International trade theory has traditionally disregarded the tradability of services (as well as disregarding services in general) either because they were considered as “unproductive labour”—following the tradition of Adam Smith (Smith 2001: Book 2, Chapter 3) who identified services with labour—or because of the notion that their non-tradable character stems from their intangibility and inability to be stored (Francois and Hoekman 2009: 1). In places where theory treated services, it was usually done so in uniformity with goods, with little enquiry into whether services merit treatment as a separate category to goods. As an example, Fisher maintained that distance between suppliers and consumers does not permit services to be internationally traded. Moreover, he argued that, as a consequence, the growing importance of services in the economy and their non-tradability would “*diminish the relative*

be assumed from the basic models of international trade theory that trade between at least two countries is sufficient for internationalisation to occur.

importance of international trade" (Fisher 1935: 33; Fisher 1945: 231). Other notable contributions holding the view that services are non-tradable include Baumol's Cost Disease (Baumol and Bowen 1966),¹⁴ and Hill's assertion that trade in services is a logical contradiction in terms since services are changes in the condition of goods and persons and therefore cannot be stocked (Hill 1977).

While some of the arguments that trade in services is unfeasible delve into the differences between goods and services, they fall short of accurately generalising what services are. Many services do not share the same attributes which arguably suppress tradability. For example, online banking services do not require labour presence and can be provided remotely. Similarly, voice mail can be recorded and stored, just as a concert can be stored on a DVD. In most cases, the arguments that services are non-tradable describe what services are not, rather than providing a description of what they are. Their focus on the physical aspects of some services (intangibility, lack of storage or labour) also ignores the point that many goods differ in their physical qualities and disregards possible differences in the process of services production (this issue is discussed at length in Chapter 4).

Furthermore, these arguments fall short of accounting for the fact that technology enables the possibility to trade almost all services across borders. Technological changes, particularly the

¹⁴ Baumol and Bowen were among the first to apply trade theory to services. In the classical tradition of analysing services as non-productive, they observed that the economy is comprised of two sectors. The first is a progressive sector, which is more technologically oriented and mainly corresponds with industrial goods. The second sector, which corresponds with services, is non-progressive and labour intensive, with few if any, opportunities for productivity gains, since the final outcome is synonymous with the work itself. Consequently, Baumol developed what is called the 'Baumol's Cost Disease'. Unbalanced growth is the result of growth of real wages in the progressive sector, due to the interplay of technology and capital, which feeds into an increase in wages in the non-progressive services sector that makes services gradually more expensive in relative terms (Baumol and Bowen 1966). Baumol's Cost Disease has been criticised for many reasons, including the failure to identify or foresee the impact of new technologies on services, and oversimplifying of price elasticities.

introduction of network technologies such as the internet and telephony, have made it possible to trade remotely in all services.

The second strand of arguments about whether services can be traded holds that international trade in services is partially feasible. The feasibility to trade comes from the treatment of intermediate inputs in the production of goods as services. Thus, this position argues that producer services (i.e. intermediate services) trade is feasible through their embodiment within final goods that are traded internationally. The implicit assumption underlining these arguments is that services are, by and large, intangible. Melvin, for example, using a Heckscher–Ohlin analysis argued that the concept of comparative advantage is applicable for trade in producer services. He concluded that, when producer services are intensively used for a mobile good, the result will be that the country exporting services will have a trade deficit in goods (Melvin 1989).

Further research along the position that producer services are tradable, extended the perfect competition and constant returns analysis, treating producer services as an activity with increasing returns, and producing similar results (Markusen 1989; Ethier and Horn 1991). It should be noted, though, that the treatment of producer services in large parts of this literature is a sort of a catch-all concept, and is what Hoekman describes as “relabeling intermediate input varieties as ‘services’” (Hoekman 2006: 11).

The position that services are non-tradable (or that only producer services are tradable) disregards the technological transformation permitting trade in almost all services, including

consumer services (i.e. final services) and that such trade actually takes place. The arguments relating to this position are more concerned with the possibility for greater gains from trade and rising productivity (e.g. Oulton 2001; Burgess and Venables 2004), than they are with addressing the question of what makes services tradable. As such, they avoid explicitly treating the characteristics of services and the determinants of trade.

Contrary to Katouzian's conclusion stating "*that the role of comparative advantage is less important in the case of the service sector is not questionable*" (Katouzian 1970: 377), the prevailing position in contemporary literature is that international trade in services is feasible, following similar patterns to that of trade in goods. The arguments relating to this position are either general or looking at the trade-off between cross-border trade and FDI.

Many papers based in inter-industry analysis conclude that international trade in services is feasible and can be based on the framework of comparative advantage (McCulloch 1988; Sapir and Winter 1994; Hoekman 2006).¹⁵ Hindley and Smith distinguish between the positive and normative theories of comparative advantage. While the former explains why certain types of good are exported and others are imported (or why production of a particular good is cheaper, relative to other goods, in one place than in another), the latter deals with the

¹⁵ International trade theory is often divided between two complementing schools of thought: inter-industry trade and new trade theory. Inter-industry trade theory analyses comparative advantage between countries under the assumptions of perfect competition and constant returns to scale. According to this theory, relative differences in factor of production endowments or variance in tastes will lead countries to export certain goods in exchange for other goods produced in other countries. This process will also lead to growing specialisation in production and an international division of labour in production. New trade theory, on the other hand, assumes imperfect competition with increasing returns to scale. It argues that international trade will flourish even among countries with similar factors of production endowments, if goods are heterogeneous. Homogenous goods, according to new trade theory, will continue to be traded according to the specificities of comparative advantage Greenaway, D. and L. A. Winters (1994). *Surveys in International Trade*. Oxford, Blackwell.

, Krugman, P. R. and M. Obstfeld (2006). *International economics : theory and policy*. Boston, Addison Wesley.

economic efficiency and social desirability of international specialisation in production. Thus, they argue that it may be difficult or impossible to develop a description of the sources of comparative advantage (why countries trade), but that does not invalidate the prescriptions of comparative advantage stated by its normative dimension (Hindley and Smith 1984). Deardorff reached a similar conclusion that international trade in services can work according to the logic of comparative advantage on the basis of three scenarios: autarky with no trade; free trade in both goods and services; and semi autarky with goods trade but no services trade (Deardorff 1985). However, neither Deardorff nor Hindley and Smith provide an explanation for international trade in services which confirms what leads to international trade. Their arguments may logically be true, but they do not provide a clear explanation.

In contrast to the view that international trade in services is possible only when services are embodied within goods or labour, Bhagwati shows that cross-border trade of services is feasible since technology allows services to be “disembodied” or “splintered” from their medium carriers (Bhagwati 1984). The literature largely identified human capital as a particular factor motivating trade. Characteristics such as skills (Bhagwati 1984), managerial qualities and methods (Kravis 1983) and other human capital features (Sapir and Lutz 1981) explain why countries trade in services with each other and what leads to comparative advantage. Other factors identified as contributing to trade in services include physical capital (Sapir and Lutz 1981) as well as investment in research and development (Krugman 1983; Krommenacker 1984).

New trade theory and intra-industry trade arguments recognise imperfect competition as an important motivation for international trade. The literature argues that a large number of

service activities are conducted under imperfect competition conditions, such as oligopoly and economies of scale. The literature also argues that information and reputation problems can suppress international trade in services (Richardson 1987; Jones and Kierzkowski 1989; Sapir 1991; Sapir and Winter 1994; Van Welsum 2003; Hoeckman 2006).

Intra-industry arguments go further than inter-industry arguments in explaining the motivation for international trade in services, as well as the conditions in which trade will be restrained. However, these arguments, as well as the arguments concerning the factors motivating inter-industry trade, are also a recurrent feature of many goods markets. As such, they do not provide a specific explanation for trade in services or the lack thereof.

The second strand of arguments explaining trade in services focuses on the trade-off between cross-border trade and FDI. At the heart of the matter is the question of whether geographical distance (and consequently government policies) plays a role in determining service providers' choice of export mode, or if technology has diminished the distance factor. The literature does not really engage with the question of what constitutes services and mostly implicitly takes intangibility and lack of storage as a premise for analysis.

Working within the constraints of data limits on bilateral trade in services through different modes of services provision, results are somewhat mixed with regard to whether cross-border trade and FDI complement or substitute each other. Using revealed comparative advantage calculations,¹⁶ Langhammer found that in telecommunication services there is a substitution

¹⁶ Revealed comparative advantage measurement is discussed in Chapter 2.

effect between cross-border trade and FDI (Langhammer 2004). The policy implications of these findings are that restrictive or protectionist policies on trade in services in a particular mode of trade may not have a significant effect overall. Thus, restrictions on the establishment of foreign services providers can lead to substitution of exporters' choice of mode. Contrary to Langhammer's findings, and using similar methods, both Lennon and Fillat et al. find that FDI and cross-border trade complement each other (Fillat-Castejon, Francois et al. 2008; Lennon 2008; Lennon 2009).

Firm literature also addresses the issue of why services are internationally traded in different modes (Sacramento, Cunha de Almeida et al. 2002). It is noteworthy, though, that it focuses on services to a significantly lesser extent than on manufacturing firms, suggesting that the literature largely considers goods and services to be similar. Within this relatively small body of literature, the focus has been primarily on business services, whereas the internationalisation of other types of service has been little discussed (O'Farrell and Wood 1998; Roberts 1999).

Service firms have often been described as internationalising in proximity to the internationalisation of goods. Hence, services, particularly producer services, are an important element in the export of manufactured goods (Rada 1987; Daniels 2000). The internationalisation of services has also been associated with the increased development and usage of information technologies. Technology is considered to be the enabling factor, transforming services which previously were non-tradable. Within the framework of technology and goods, it has been suggested that the internationalisation of services is a combination of the degree of interaction between service providers and consumers, the

method in which the services are provided, and the extent to which services are embodied in goods or delivered in conjunction to goods (Bhagwati 1984; Vandermerwe and Chadwick 1989). The focus on firm level yields mixed results. The findings either retain the paradigm of internationalisation of services through carrier mediums (goods and labour) or remain inconclusive with regard to the effects of technology on the choice of exporting mode.

Customer-following has been emphasised by several authors as an important factor in the internationalisation of service firms. The following process is explained in various ways, such as a firm's decision to change its market mode of entry in order to maintain relations with existing clients in the face of growing competition, or expansion into new foreign markets as a result of personal relations and network effects with existing customers (Erramilli 1988; Erramilli and Rao 1990; Erramilli and Rao 1993; Björkman and Kock 1997). As in other cases, customer-following is also a feature of manufacturing trade and is not unique to services.

Finally, a small number of authors have taken the position that the internationalisation process of service firms substantially differs from that of manufacturing firms. The argument, based on four recurring traits of many services—intangibility, simultaneous production and consumption, lack of storage and quality heterogeneity—advocates that these unique features dictate different entry modes for service firms when they expand abroad (Cicic, Patterson et al. 1999). Accordingly, internationalisation of services firms does not follow the same patterns as suggested by some of the main internationalisation theories. The Uppsala Model

and variations of it,¹⁷ as one example, has been shown not to correspond with the stages of internationalisation taken by service firms (Johanson and Vahlne 1990; Erramilli and Rao 1993; Roberts 1999).

Table 1.3 summarises the main positions regarding the question of whether services can be traded internationally and why. Regardless of the position taken, the literature either fails to provide a general argument explaining what drives international trade and suppresses it, or focuses on features and characteristics that are not common to all services activities. Furthermore, the findings regarding the relationship between geographical distance and technology remain inconclusive from both analytical and empirical perspectives. An empirical gap remains with regard to a more detailed analysis of services trade through specific modes of services provision, which can shed light on the choice and actual magnitude of trade in services.

¹⁷ The Uppsala Internationalisation Model maintains that internationalisation occurs in stages, with consecutive activity stages standing for higher levels of internationalisation. Four main stages analysed by the Uppsala Model are: (1) no regular export activities; (2) export through agents / other independent representation; (3) foreign establishment; and (4) production abroad Johanson, J. and F. Wiedersheim-Paul (1975). "The Internationalisation of the Firm – Four Swedish cases." *Journal of Management Studies* 12(3): 305-322.

, Andersen, O. (1993). "On the Internationalization Process of Firms: Critical Analysis." *Journal of International Business Studies* 24: 209–231.

. Internationalisation is characterised by two distinct sets of variables. First, state-variables observe market commitment by looking at the allocation of resources for operations in foreign markets, as well as the extent and degree of knowledge concerning foreign markets. Second, change-variables address decisions regarding the commitment to allocate resources, including actual business operational performance Johanson, J. and J.-E. Vahlne (1977). "The Internationalisation Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitment." *Journal of International Business Studies* 8: 22-32.

, Andersen, O. (1993). "On the Internationalization Process of Firms: Critical Analysis." *Journal of International Business Studies* 24: 209–231.

Table 1.3: Main Arguments in the Literature on whether and why Services are Tradable

	Explanation	Criticism
Services are non-tradable	Their physical attributes (intangible, cannot be stored, labour) require geographical proximity	Many services do not share the same attributes and are in fact tradable. Given the focus on services qualities, it remains unclear why goods are tradable and services are not. Technology can bridge the geographical dimension
Services are partially tradable	Services are intangible and embodied within goods. Trade in producer services is feasible through trade in goods, which are like carrier mediums for producer services	Many services are tangible. Trade also takes place in consumer services.
Services are tradable	International trade in services follows similar patterns to trade in goods according to both inter-industry and intra-industry trade. Human capital differences as well as economies of scale are important factors propelling trade, while information and reputation problems can suppress trade.	The explanations are valid also for trade in goods and do not explain why services at large are traded far less than goods.
	Mixed results whether cross-border trade and FDI complement or substitute each other, but with evidence for significant FDI activity of services firms and influence of government policies.	Results remain inconclusive and do not resolve the question of why international trade in goods and services differs under similar conditions (e.g effects of government policies). Firm literature analysis is limited to business services and lacks generalisation into other services activities.

The literature on international trade has always upheld the importance of politics in explaining international trade. In that regard, extensive research has been devoted to explaining the interplay between politics and economics in determining international trade.¹⁸

¹⁸ Political economy analysis of international trade is extensive. A few notable important works include Kindleberger, C. P. (1975). "The Rise of Free Trade in Western Europe, 1820-1875." The Journal of Economic History 35(1): 20-55.

, Bhagwati, J. (1988). Protectionism. Cambridge MA, MIT Press.

, Irwin, D. A. (1996). Against the tide : an intellectual history of free trade. Princeton, N.J, Princeton University Press.

, Schonhardt-Bailey, C. (1996). Free Trade : The Repeal of the Corn Laws. Bristol, Thoemmes Press.

, Rogowski, R. (2000). Commerce and Coalitions: How Trade Affects Domestic Political Alignments. International political economy : perspectives on global power and wealth. J. A. Frieden and D. A. Lake. Boston, Bedford/St. Martin's: 318-326.

, Hoekman, B. M. and M. M. Kostecki (2001). The political economy of the world trading system : the WTO and beyond. Oxford, Oxford University Press.

It is rather astonishing, therefore, that no more than a handful of contributions has specifically addressed the international political economy of trade in services (Hoekman 2006; Fung and Siu 2008; Roy 2009).

Indeed, issues of relevance to political economy analysis of services trade are mentioned in many contributions. This body of research particularly analyses the effects of policy and regulation but is focused on explaining multilateral and preferential trade negotiations, and rarely establishes the link between negotiations and the actual trade of services. Chapter 6 will review this literature offering new insights and explanations based on the theory of services co-production developed in this research.

Specific international political economy of trade in services research focuses on policy and regulation, as well as on institutional constraints in determining why and how countries negotiate multilateral and preferential trade agreements. Hoekman et al. examine the Doha Trade Round and argue that trade negotiations are adversely affected by “classical” protectionist activities of domestic incumbents resisting the erosion of rents, technologies’ impact in overcoming traditional trade barriers through cross-border trade, unilateral liberalisation, preferential trade agreements, and the fear of national regulatory erosion (Hoekman, Mattoo et al. 2007). Jara and Dominguez emphasise that the domestic division of labour in regulating services, where regulatory responsibility is spread across different ministries, imposes significant constraints on the ability to effectively negotiate (Jara and Domenguez 2006). Countries’ willingness to commit to greater liberalisation in the GATS is found to be empirically influenced by political factors. Roy shows strong evidence that democracy, power, endowments and specific accession processes to the WTO have a strong

impact on the levels of GATS liberalisation undertakings (Roy 2009). These contributions are important and go a long way towards developing some of the political conditions governing international trade. Nevertheless, they do not show a direct link between negotiations, trade barriers and the actual trade in services.

A pioneering contribution is that of Drake and Nicolaïdis on the formation and institutionalisation of trade in services in the international trade agenda, particularly the Uruguay Round establishing the WTO and the GATS agreement on trade in services. They show the importance of ideas and interests, through an epistemic community, in triggering, forming and structuring multilateral negotiations (Drake and Nicolaïdis 1992). Their paper is limited to the ideational impact on forming the trade agenda and, as such, does not deal with the particular issue of services internationalisation.

Finally, Fung and Siu analyse service trade liberalisation in a developing country in the negotiations of the Doha Round. Their analysis is strictly formal and theoretical and yields few insights from a political economy perspective.

Research Question

This research is guided by both an empirical puzzle and a theoretical and analytical conundrum. On the one hand, economic theory argues that services are increasingly tradable and in a rather similar way to that of goods. Furthermore, unilateral, bilateral, regional and

multilateral barriers to trade in services were considerably reduced over the last few decades. Nevertheless, international trade in services remains disproportionate to its dominant role in the domestic economy. This empirical puzzle can be described as the 20/80 gap: while services account for some 80% of economic activity within the countries making up most of world trade, services' share of world trade remained around 20% in the last 40 years.

Indeed, it is possible that international trade in services will pick up in the future, thus eliminating or reducing the magnitude of the 20/80 gap. Still, it remains unclear from a theoretical and analytical perspective, why under similar conditions to that of trade in goods, the internationalisation of services is much slower. The theory fails to appropriately explain why services are different from goods and how that influences their tradability (or its lack thereof). In places where the theory addresses this issue, the arguments are often based on an inaccurate description of the essence of services, and they fall short of providing a generalised response. Chapter 4 will return to this issue, arguing that the various characteristics of services raised in the literature are, in fact, the outcomes of a particular production feature cutting across all services. Hence, rather than pointing towards the causes of internationalisation, the theory identifies its outcomes. Widening the theoretical gap is the evident absence of political economy literature on international trade in services, particularly on the causes of services trade.

This twin puzzle gives rise to several questions related to both empiricisms and theory. Of particular interest for this research study is the issue of services production and its impact on trade. Given current theory's analysis of services and international trade, it appears that greater investigation should be made into the issue of services production and what makes

them vastly tradable within a domestic economy but much less tradable internationally. Put differently, if services can be traded following the patterns of trade in goods, and if the levels of protectionism for and restrictions on trade significantly decreased, what is the reason for the 20/80 gap? Even if the 20/80 gap is dismissed, the questions remain as to whether demand or consumption patterns differ domestically and internationally, and what the factors are that enable or suppress trade in services.

Given the theoretical and empirical puzzles, the main research question of this thesis is as follows:

Why do services internationalise in a different manner from that of goods?

In addressing this question, the research will also address the following sub-questions.

1. *How extensive is international trade in services?* It is widely acknowledged that the measurement of trade in services is lacking, as many features of services trade are not captured by conventional statistical methods.
2. *Can disaggregated analysis into different modes of trade shed light on demand patterns?* Services are traded in four different modes. Scrutinising each one can yield important insights into the magnitude of trade in specific modes, and into the specificities of supply and demand interaction. The literature so far has mainly investigated cross-border trade and FDI, while devoting much less attention to the role of labour or consumer movement as a means of services provision.

3. *Do different services internationalise in different ways? And, if so, why?* While trade in different modes of supply may vary, can the modes of supply framework also explain international trade differences between specific services sectors?
4. *What is the role of politics in the process of services internationalisation?* Numerous issues arise in this context, including the relevance of traditional political economy explanations of services, as well as new explanations. Given the interest of this research in the production process of services, an important question is whether particular service market structures or firm formations can have political consequences in terms of power, governance and other considerations.

Research Design: Outline, Methodology and Selection of Case Studies

Research Outline

Chapters 2 and 3 empirically examine how trade is internationalising according to different modes of supply and whether some modes of services supply are more important than others. On the basis of the empirical results and an analysis of the concept and nature of services, Chapter 4 develops a new theoretical argument about why services differ from goods and how this difference results in less international trade in services. Politics come into play in Chapter 5 which explains why accountancy and auditing services, one of the two case studies presented in this thesis, have become the most internationalised service sector so far, and how firms in these sectors leveraged the proximity constraint imposed on services internationalisation as an advantage. The theory developed forms the basis of an explanation of the anomaly of the accountancy sector, leading to a political economy analysis of the unique evolution of a private governance regime in international reporting standards. Chapter 6 draws out further implications and conclusions for the political economy of international trade in services. A brief summary is provided at the end of the Thesis.

Methodology

This research is based on both quantitative and qualitative analysis. Quantitative analysis is mainly used in Chapter 2 and Chapter 3 to measure the magnitude of trade in each mode of services supply. Qualitative data support the findings and complements it where appropriate, and is applied in Chapter 5 to explain the internationalisation of accountancy services. Chapter 5 and Chapter 6 advance the analysis through a political economy perspective.

In recent years, the collection of trade in services data has considerably improved. Nevertheless, the measurement of services activity is far more difficult than that of goods, and suffers from numerous statistical flaws that mainly derive from the intangible nature of many services. A great deal of services transactions are not measured since they are traded across borders without any inspection or counting, such as in the case of e-commerce. Another reason is that transactions which bundle together goods and services are usually measured solely as goods transactions, thus many companies whose core activity is in manufacturing, perform services activities but, statistically, are regarded as part of the manufacturing sector (Porter 1998).¹⁹

This study suggests measuring services according to modes of supply, an improvement over current methods.²⁰ Services are traded internationally in different dimensions which relate to the respective geographical location of and proximity between consumers and producers, as well as factors of production, particularly workers. These dimensions constrain the ability to

¹⁹ It should be noted that, in terms of the empirical part of the puzzle, even if there is a measurement error of several hundred percent, international trade in services will still remain considerably low when measured against domestic output. For a comprehensive discussion of the statistical challenge in measuring services, see: Lipsey, R. E. (2006). *Measuring International Trade in Services*, NBER Working Paper No. 12271, Cambridge: NBER

²⁰ Although acknowledged as a more precise way of measuring international trade in services, empirical work measuring international trade according to modes of supply is still limited. Examples include Nordas and Kox 2009; Lennon 2009; Waeger 2007; Bush and Lipponer 2004;

provide a single measurement which will capture the magnitude of international trade in services, as is often the case with regard to trade in goods.²¹ Stern and Hoekman define three dimensions: separated services, demander-located services and provider-located services (Stern and Hoekman 1987). While the first category relates to the trading of services across a border in the same manner in which goods are traded, the latter two categories relate to the specific location where an exchange is conducted. Demander-located services refer to the mode of trade that requires the supplier to be close to the source of demand, while provider-located services necessitate the movement of consumers to the location of the suppliers. This definition has been widely adopted in the literature and it also provides the conceptual and legally binding framework of the General Agreement on Trade in Services (GATS) of the World Trade Organisation (WTO) through the four modes of supply categorisation. Table 1.4 provides definitions, explanations and examples of each mode of supply.

²¹ International trade in goods is usually measured in a single number which relates to the value of units of goods sold. A good is usually first produced and then sold, locally or internationally, autonomously from its production process.

Table 1.4: The Four Modes of Services Supply

Mode	Definition	Explanation	Example
1	Cross border supply	Only the service crosses the border, while the supplier and consumer remain in different territories	Sale of translation services from country A to country B via the Internet or fax.
2	Consumption abroad	The consumer crosses the border to the territory of the supplier and consumes the service there	The purchase of hotel accommodation (tourism services) by a tourist from country A when travelling in country B.
3	Commercial presence	The supplier crosses the border to the territory of consumption and establishes a commercial presence.	The establishment of a branch of a bank from country A in country B.
4	Presence of natural persons	Temporary movement of labour to the consumer's territory. This movement can be either as an intra-corporate transferee, self-employment or salaried labour.	The employment of a person from country A as an engineer in country B.

Services are almost always supplied or traded through more than one mode. Technology renders feasible the supply of almost all services through cross border supply (mode 1) with very few exceptions (World Trade Organisation 1996). The distinction between modes 3 and 4 (i.e. demander-located services) is that, while the supply of services through commercial presence is more focused on the local establishment of foreign legal entities, the supply of services through the presence of natural persons is concerned with the country of origin of the person supplying the service.

The analysis of international trade in services in Chapter 2 and Chapter 3 aims at providing a more informed measurement of trade by addressing the four possible avenues through which it is actually conducted. This approach has three main advantages. First, it offers a holistic

analysis, which does not consider only cross-border trade or FDI. Second, it reports international services transactions which, in the absence of border measures, are not captured in conventional statistics. Third, such an observation can provide greater insight into the relationship between trade and the geographies of production and consumption. It sheds light on the linkages and tradeoffs that exist between modes of supply, enabling better understanding of the determinants and motivations of trade, as well as identification of barriers and impediments to trade in services. It should be stressed that, while measuring international trade in services through modes of supply significantly improves trade data, it is by no means a panacea for the statistical shortcomings.

The central hypothesis examined in Chapters 2 and 3 is that, despite technological innovations and the reduction of transport costs, the “proximity burden” still plays a central role in explaining why services are not as internationally tradable as goods. Taking physical proximity as the independent variable and the magnitude of international trade in services as the dependent variable, the hypothesis is:

H₁: Services trade is positively related to physical proximity between producers and consumers

H₀: Physical proximity between producers and consumers is either negatively related or has no effect on international trade in services

The hypothesis will be tested for each of the four modes of services supply. The analysis will draw on existing statistics when possible, and will be complemented by proxy indicators for like-trade statistics. The advantage of proxy indicators is that they can bridge some of the gaps that prevail in existing trade in services statistics, as well as confirm (or question) conventional data. Nevertheless, the proxy indicators' main limitation is that they piece together different measurements which do not necessarily provide for comparing supply across modes. To address this specific issue, when possible, data will be relative rather than absolute (e.g. trade to GDP, percentage of foreign turnover in total turnover). Furthermore, in the absence of a unified statistical approach, this framework improves on existing measurements, which only partly capture the level of international trade in services. It allows for a comprehensive examination of the extent of the internationalisation of services, using the best available data.

The conditions for falsifying the research hypothesis are given by the rejection of the research hypothesis and acceptance of the null hypothesis (Hancké 2009: 18-23). The conditions for falsification are that the data will show that proximity between consumers and producers is either not related to the level of international trade or has a negative effect on it. If, for example, relatively high levels of trade will be found in mode 1 compared with mode 3, the hypothesis can be rejected. Falsification will take place if the following relationship between modes of supply does not exist:

$$\textit{International trade in services in Mode 3} > \textit{Mode 4} > \textit{Mode 2} > \textit{Mode 1}$$

Hence, it is expected that trade will be found to take place when greater proximity exists between producers and consumers. Therefore, greater trade is likely to take place in commercial presence when suppliers choose to supply in the territory of their consumers, as

well as through the movement of natural persons. Greater trade is expected in mode 3 than in mode 4 since commercial presence mostly concerns the movement of firms that trade more than individuals, as suggested by trade through movement of natural persons. It is also expected that trade in mode 2 will be bigger than in mode 1 because of greater proximity between consumers and producers. Mode 2 is expected to be lower than modes 3 and 4 because the relative costs borne by consumers for relocating for the sake of consumption are higher than those of suppliers (firms or individuals) who relocate for production.

The political analysis of how economic power and market structure are transformed into political power is critical in explaining why some international trade is higher in some service sectors than it is in others. This transformation and its political utilisation by accountancy firms are explained by drawing on arguments based on governance-literature incorporating the particularities of the accountancy case study. Chapter 5 shows how the organisational structure of the major accountancy firms enabled them to circumvent the services production trap (discussed in Chapter 4) that constrains international trade in services. Furthermore, it draws a link between the organisational structure and the ability to create political power resources which were later effectively used to construct an international private governance regime in reporting and financial standards. Creating a global private international governance regime, with similar reporting and financial standards across countries further increases the ability of accountancy firms to internationalise their services trade. The political analysis examines the role of the big firms within states and within national and international organisations.

Selection of Case Studies

The method used for selecting case studies draws on Mill's Method of Agreement (Mill 1973; Hancké 2009), according to which, theoretical generalisation power is possible using two case studies which are different in everything but are similar in their outcome and its explanation.²² The two case studies selected for comparison here are healthcare services and accountancy services. These sectors differ considerably from each other, particularly in two broad categories. First, their structural and production characteristics vary considerably. Second, different explanations have been invoked with regard to each sector's internationalisation or lack thereof. Accountancy services are often regarded as the most internationalised service sector. At the same time, healthcare services are taken to be among those sectors that are least internationalised, with limited scope for international trade (European Commission 1997). The empirical analysis will show that, contrary to conventional wisdom, these two sectors are internationalising along similar trade patterns, with proximity-bias serving as a common explanation of the shared outcome. The proximity-bias will serve as the basis for the development of the theory of services co-production. Nevertheless, Chapter 5 will take issue with the fact that, despite the surprising findings of the empirical chapters regarding similar international trade patterns, overall absolute trade in accountancy services has been much higher than that of goods. Thus, Chapter 5 will raise the empirical and theoretical bar and will advance a general argument regarding the organisation of production in services.

²² Put in Hancké's words: "[E]verything between the two cases is different, except for the explanation and the outcome. Since all other potentially relevant dimensions vary, but your outcomes are the same, only the similarities between cases on the explanation can cause the agreement between the cases in terms of outcomes" (Hancké, 2009: 74-75)

1. Healthcare services

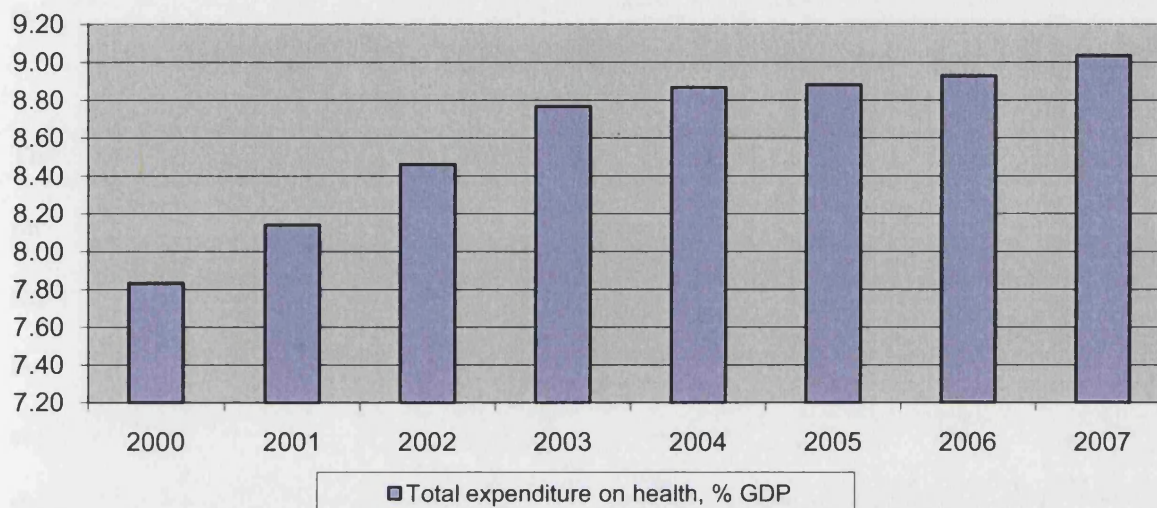
Healthcare services include both health and medical services. Health service activities, which fall under the definition of health services, broadly correspond to the categorisation of health services as defined by Division 93 of the United Nations Central Product Classification (CPC). These services include human health services (CPC 931), veterinary services (CPC 932) and social services related to health (CPC 933).

International trade in healthcare services has been regarded as relatively marginal due to the characteristics of the sector which, in many countries, include substantial government involvement and regulation. Healthcare services are often treated as public goods and services that are social in nature. Government involvement in supply and insurance of these services is explained as necessary to overcome market failure, as well as to serve a multitude of distributional, social, developmental, and other goals. These goals' relative weight varies from country to country, but nevertheless they are important objectives applied by governments in ensuring equitable access to healthcare, quality, and efficient use of resources (WTO Secretariat 2001: 371-398; Díaz Benavides 2002). Broadly speaking, there are two main approaches for government involvement in healthcare insurance. In the Beveridge model all citizens are insured by the state and are freely treated at the point of service delivery. In the Bismarckian model the state reimburses the costs of treatment either to patients or directly to healthcare providers. Funding of healthcare expenses is carried out in a variety of ways, including salary deduction, direct contribution, specific taxation, employers' participation and more. It should be noted, though, that full governmental funding of expenses does not exist in any country, particularly when it comes to pharmaceutical expenses. In many countries, patients also contribute to supplemental private insurance to

expand the range and depth of their healthcare coverage. Provision of healthcare services is usually separate from insurance mechanisms and ranges from public entities and cooperatives to not-for-profit private companies, as well as private operators (Boscheck 2005; Adlung forthcoming).

While conventional wisdom argues that international trade in healthcare services is minimal, it should be noted that there is wide scope for such trade. Rising healthcare expenditure in OECD and non-OECD countries has led to increasing pressure on governments to reduce and contain their healthcare expenditure and has resulted in many reforms leading to privatisation and outsourcing of many healthcare activities (Moran 1998; Ranade 1998). Graph 1.4 shows rising healthcare expenditure in OECD member states as a share of GDP for the years 2000-2007. The average expenditure for OECD countries is close to 10% of GDP. Non-OECD countries at low levels of income spend as much as 5% of GDP on health, while in several high-income countries, expenditure is as high as 12% of GDP (Waeger 2007). Furthermore, average annual private expenditure (as a share of total expenditure on healthcare) accounts for approximately 20% of total healthcare expenditure, and indicates substantial private demand for healthcare services.

Graph 1.4: OECD Average Total Expenditure on health, Percentage of GDP



2. Accountancy services

Accountancy services comprise a range of activities including, most notably, accounting, auditing and book-keeping. Accountancy firms have also been providing a number of related services, such as merger audits, insolvency services, tax advice, investment services and management consulting (World Trade Organisation 1998). Within the framework of this thesis, accountancy services will only include the core activities of the accountancy profession, since it is impossible to distinguish non-core accountancy-related activities from other service categories. The core accountancy activities included in this study form part of the category "Accounting, auditing and book-keeping services" (CPC 822) within Division 82 of the CPC.²³ Accounting and auditing activities (CPC 8221) include: Financial auditing services (CPC 82211), Accounting review services (82212), Compilation of financial statements services (CPC 82213), and other accounting services (82219). Book-keeping services (CPC 8222) are sub-divided only into Book-keeping services, except tax returns

²³ CPC Division 82 comprises legal, accounting, auditing and book-keeping services; advisory services related to taxation; and insolvency and receivership services.

(82220). Overall, accountancy services are covered by a single sub-category, "Accounting, Auditing and Book-keeping", of the WTO Services Sectoral Classification List (MTN.GNS/W/120), within the sector "Business Services".

The growth of international trade in accountancy services has been explained by several factors, including the internationalisation of accountancy clients, growth of capital and financial markets, as well as market imperfections. While trade in healthcare is considered to be suppressed by the prevalence of specific market failures resulting in a shortage of supply,²⁴ accountancy services do not suffer from similar market failures. Nevertheless, while thirty years ago, accountancy services were not as international as they are today, growing consolidation has led to increased internationalisation of the sector. Market imperfections are characterised by an international oligopoly of four major accountancy and auditing firms (Honeck 2002; Veron 2007).

Despite the existence of strong professional associations in both accountancy and healthcare services, the role of the latter has not been considered an important factor in promoting greater or lesser trade in healthcare services. The situation differs in the accountancy sector, where alliance between professional associations is considered to have played an important role in the sector's internationalisation.²⁵ Nevertheless, the prevalence of strong professional interest groups, with partial autonomy for self-regulation and standard setting and, at the same time, variation in policy outcomes, decreases the explanatory power of an 'interest groups' action framework (World Trade Organisation 1998; World Trade Organisation 1998; Veron 2007).

²⁴ In the absence of government involvement, healthcare services are characterised by a shortage of supply resulting from high fixed costs (expensive entry costs, economy of scale effects and other factors) and high variable costs (costly medical inputs and final treatments). Consumers' inability to pay these costs leads to an imbalance between high levels of demand for healthcare services and their potential supply.

²⁵ This issue will be extensively discussed in Chapter 5.

Conclusions

Setting the research scene, this chapter developed two puzzles concerning international trade in services. Analytically and theoretically it is not clear what drives services' internationalisation and under which conditions internationalisation happens. Furthermore, the differences in trade in services and trade in goods need a more indepth and extensive explanation. This puzzle is empirically reinforced by the 20/80 gap between services' role in the national economy and their international trade. This gap has widened over the past 40 years whereas, while services' share of production, employment and a variety of other domestic economic factors has significantly increased, their share of international trade has remained constant.

Asking why services internationalise in a different manner from that of goods, the following research first measures the degree of internationalisation of healthcare and accountancy services applying Mill's Method of Agreement. On the basis of the empirical investigation, the research goes on to develop a theoretical explanation based on co-production of services by producers and consumers. The explanation which defines the boundaries under which service suppliers trade is then revisited with regard to accountancy services. The study shows that firm organisation can have political advantages which can be used to minimise the constraints imposed on internationalisation. Finally, the results are examined and generalised in the context of the political economy of international trade in services.

Chapter 2: International Trade in Services through Cross-Border Trade and Consumption Abroad

This chapter empirically examines the extent to which trade in services has been internationalising in modes 1 and 2 (described in the previous chapter). The quantitative and qualitative data analysed in this chapter and the following one addresses two main questions. First, what is the magnitude of and extent to which healthcare and accountancy services have been internationalising? Second, is greater proximity between services consumers and services producers an important driving factor in the internationalisation process? The chapter is divided into two main sections, analysing cross-border trade and trade through consumption abroad. Each section addresses the two case studies separately.²⁶

Cross-Border Trade

Cross border trade in services, or mode 1, occurs when the service supplier and the service consumer remain in their respective countries, and only the service travels across the border as part of the transaction.

Healthcare services

Trade in healthcare services through mode 1 is, in fact, not a recent phenomenon. Traditionally, cross border trade in healthcare services included services such as clinical consultation and shipment of laboratory samples. These were provided using mail, telephony

²⁶ All quoted financial figures in chapter 2 and chapter 3 are in US dollars.

and fax machines (Chanda 2001). Nevertheless, the development of modern Information and Communication Technologies (ICT) has enabled and increased the tradability of numerous healthcare services which in the past necessitated close proximity between the service provider and the patient or the healthcare consumer.²⁷ Thus, while trade through mode 1 has long been a feature of healthcare services, it is considered to have risen significantly over the past 20 years. A 2004 US Federal report estimated the domestic telemedicine market at US\$380,000,000 with an annual growth rate of more than 15%.

Examples of cross border trade in healthcare services using ICT include telemedicine, telepathology, telesurgery, telepsychiatry, teleradiology and other analysis and diagnosis of laboratory tests, remote consultations and surveillance, as well as remote education and the purchase of healthcare insurance. Such trade allows greater healthcare availability from at least two perspectives. First, specialised treatments can be performed even in places where specialised medical professionals are not present. This has great potential for better delivery of healthcare services in developing countries, but also within developed countries, where specialists are concentrated in larger hospitals, often located in big cities. Second, telemedicine enables the provision of healthcare on a 24/7 basis all year round, and minimises treatment bottlenecks, where the growth of demand has increased faster than the number of medical professionals. Box 2.1 illustrates the concept of telemedicine with an example of international trade in teleradiology services.

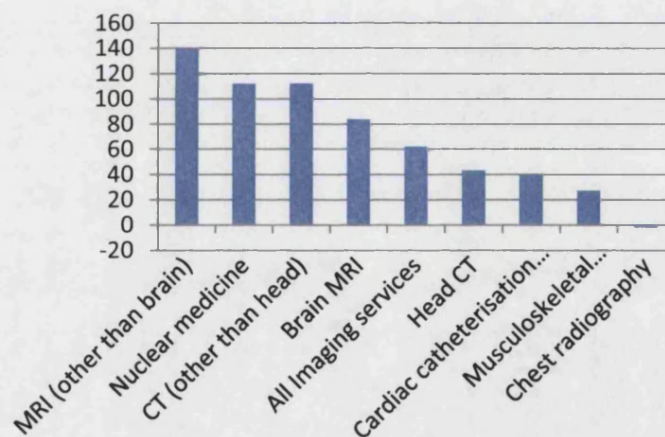
²⁷ Many healthcare service activities form part of what is referred to as e-healthcare: *"the application of information and communications technologies across a whole range of functions that affect the healthcare sector, from the doctor to the hospital manager and from data processing to social security administrators and the patient"* EuroActiv (2004). "eHealth." Retrieved 28/04, 2008, from http://www.euroactiv.com/en/health/ehealth/article-1174747?_print.

While e-Healthcare is part of the general modernisation of the healthcare sector, it is considered to be an important infrastructure for the cross border trade of services.

Box 2.1: International Trade in Teleradiology

Teleradiology is the electronic transmission from one place to another of radiological images and data. Examples of teleradiology are X-Ray scans, Magnetic Resonance Imaging (MRI) and Computed Tomographies (CT). Teleradiology can have a key role in the provision of specialised radiological treatments, where specialists are scarce, such as neurology and paediatric radiology. Medical studies have reported that technical problems are rare and that cross border teleradiology services are rapid (often provided within 30 to 60 minutes) and precise (Wachter 2006; Steinbrook 2007). Companies have also been offering virtual medical record repositories, which enable, on the one hand, patients to store their medical records, and, on the other hand, medical facilities to transmit patients' medical records and results across secure networks (Boland 2008). Studies have found that the demand for imaging services has significantly increased and that, from 1999 to 2004, imaging services growth was 62%. Graph 2.1 summarises these findings (Ebbert, Meghea et al. 2007).

Graph 2.1: Cumulative Growth in Volume per US Medicare Beneficiary (%), 1999-2004



Source: (Steinbrook 2007)

However, even in markets where teleradiology is widely used, international trade in teleradiology remains very low. A 2003 study which included 78% of all radiologists in the US found that 67% of all radiology activities within the US were carried out using teleradiology (Ebbert, Meghea et al. 2007). At the same time, cross border teleradiology trade has been minimal, despite a growing supply of such services in countries like India (Ebbert, Meghea et al. 2007; Boland 2008).

Cross-border trade in healthcare services is minimal and rather insignificant in absolute and relative terms, particularly with regard to the share of healthcare in countries' economies. The levels of trade flows are low even in countries where an appropriate infrastructure for these kinds of transaction exists. Furthermore, trade directions are often unpredictable and at times countries are net exporters and at other times net importers. Trade is low even among countries that are highly economically integrated, such as EU member states.

Table 2.1 summarises cross-border export and import patterns for 16 OECD member states. The availability of data varies considerably between countries and across years, constraining longitudinal assessment. Nevertheless, it is possible to draw out key findings concerning the internationalisation of healthcare services. First, trade is volatile and rather unpredictable, which makes it difficult to establish the directions of trade for individual countries. The Czech Republic and Slovenia are the only countries that can be regarded as net exporters of health services. At the same time, Australia is the only clear net importer of health services. Other countries are at times in trade surplus and at other times in trade deficit, with an unclear trade orientation.

Second, trade volatility is not only a case of the direction of trade. For all countries, including those who are net exporters and importers, the pattern of change in the levels of trade from one year to another is highly unpredictable. For example, the volume of both exports and imports of Australia, Czech Republic, Italy, Luxembourg and Slovenia, the countries for which data is most readily available, are constantly changing. Thus, even if a country is a net exporter of health services, the degree to which it is exporting seems to randomly surge or

decline. This finding is evident when the growth of trade is calculated.²⁸ In Italy, for example, exports rose in 2002 by 233.8% and then declined in the next years by 3%, 40.3% and 6.1% respectively. Similarly, Italian imports declined in 2002 by 2.2%, then in 2003 by 13% and then rose in 2004 by 48% and declined again in the following year by 10.1%.

Third, the level of trade for both exports and imports is significantly low in absolute terms. Exports and imports combined, as an index of trade activity, are marginal in terms of economic activity. Trade activity is highest in Italy (\$86.7 million) and Denmark (\$49.2 million), and is the lowest in Luxembourg (\$2.3 million), Lithuania (\$2.9 million) and Hungary (\$3.9 million). Even in large economies, such as the United Kingdom, Australia and Poland, trade activity reaches only \$29 million, \$25.1 million and \$20.7 million respectively.

²⁸ Growth of trade is calculated as either exports in a given year over the exports of the previous year: $\frac{EX_{n+1}}{EX_n} - 1$,
or as imports in a given year over imports of the previous year $\frac{IM_{n+1}}{IM_n} - 1$

Table 2.1: Exports and Imports of Healthcare Services: Mode 1**(Million US\$)**

Country	2000		2001		2002		2003		2004		2005	
	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im
Australia	n.a.	11.02	5.172	9.83	3.803	9.78	10.38	12.32	11.77	24.27	6.109	32.07
Cyprus	0.291	0.097	3.248	3.717	7.58	8.466
Czech Republic	15.195	12.36	23.52	11.4	28.27	18.02	..	..	30.02	22.09	25.66	15.52
Denmark	25.51	23.68
Hungary	1.465	2.905	2.2	1.317
Italy	20.58	38.5	68.7	37.65	66.59	32.73	39.73	48.43	37.31	43.53
Korea *	2.8	3.6
Lithuania	2.877	0.04	7.316	..
Luxembourg	1.185	0.352	1.331	1.084	0.848	1.642	1.337	1.456
Malta	4.732	1.874	3.094	3.512
Poland	10.39	9.843	12.36	8.964
Portugal	4.734	11.8	5.647	11.29	7.9	7.9	..	..	..	..
Romania	8.72	4.983
Slovakia	11.12	5.448
Slovenia	6.673	3.839	6.386	4.083	10.41	5.529	10.09	6.284
United Kingdom	21.82	7.273

* Data for Korea is for 2006

Source: OECD Stat, UN

The low levels of international trade in healthcare services through cross border trade are striking when trade is measured in relation to several other parameters, as indicated in table 2.2. A first indication of the relatively significant low trade in health services is the average

ratio of total trade to GDP.²⁹ On average, trade in health services is as little as 0.01% of total GDP. The highest shares of trade to GDP are found in the Czech Republic (0.33%) and in Slovakia (0.35%), while the figures are much lower for other countries, such as the United Kingdom (0.001%), Italy (0.005%) and Hungary (0.003%).

When these findings are benchmarked against national healthcare expenditure, the assumption that cross border trade in health services should mirror the activity in this sector or at least follow its main trend, is not supported. Among the 16 countries examined, the proportion of total health expenditure as a percentage of GDP is, on average, 7.38%, and in several states reaches almost 10%. Furthermore, with private expenditure on healthcare services on the rise (well above 20% of total expenditure on healthcare), the potential for greater international trade is far from being fulfilled.

The findings in table 2.2 also show that, compared with output in the healthcare services sector, trade is minimal. Commonly used as a measurement of trade internationalisation or trade openness, the trade-to-output index provides an insight into the relative degree to which trade is conducted in terms of the overall production activity in a given sector (Krugman and Obstfeld 2006).³⁰ With the exception of Slovakia, where the trade-output ratio is 4.48%, and Malta, where it is 1.71%, the index level is below 1% for all countries. In some economies,

²⁹ This is calculated as $\frac{\sum_{2000}^{2006} EX_i^n + IM_i^n}{n} / \frac{\sum_{2000}^{2006} GDP_i^n}{n}$, whereby *EX* and *IM* respectively denote total exports and total imports, *i* represents country and *n* the number of years calculated.

³⁰ The index is calculated for each individual year and country as $\frac{(EX_i^n + IM_i^n)}{GO_i^n}$ whereby *EX* and *IM* respectively represent total exports and imports, *GO* indicates gross output of health services, *i* denotes country and *n* represents year.

this ratio is as low as 0.06% (Australia, Hungary) and 0.02% (UK). The average for all countries is 0.71%.

Table 2.2: Trade in Healthcare Services in Mode 1 and Healthcare Economic Activity

	Share of Average Trade in Health Services of GDP	Share of Total Trade in Health Services (Exports and Imports) of Gross Output of Health Services	Share of Total Expenditure on Health of GDP	Share of Private Expenditure on Health of Total Expenditure on Health
Australia	0.003%	0.06%	9.18%	32.31%
Cyprus	...	0.93%	5.88%	56.45%
Czech Republic	0.03%	0.84%	7.03%	10.31%
Denmark	0.02%	0.15%	8.84%	16.55%
Hungary	0.004%	0.06%	7.78%	29.34%
Italy	0.005%	0.08%	8.43%	25.22%
Korea	0.0008%	...	5.34%	47.94%
Lithuania	...	0.52%	6.24%	28.64%
Luxembourg	0.006%	0.13%	7.12%	9.81%
Malta	...	1.71%	8.55%	24.39%
Poland	0.007%	0.15%	6.07%	29.83%
Portugal	0.009%	0.11%	9.38%	27.67%
Romania	...	...	5.15%	29.22%
Slovakia	0.04%	4.48%	6.52%	21.26%
Slovenia	...	...	8.75%	23.83%
United Kingdom	0.001%	0.02%	7.76%	15.64%

Source: Author's calculations based on data from OECD, UN, EU KLEMS, WHO NHA

The minimal level of trade in healthcare services in mode 1 is also evident with regard to closely integrated economies, such as European Union (EU) member states. Proxy variables on the usage of ICT among general practitioners and physicians show that only a fraction of patient data stored is being transferred across borders.³¹ The data show that advanced e-health

³¹ Although these proxy variables do not cover the whole span of activity within the health sector, they nevertheless represent an important part of it. General Practitioners are, in most instances, the first stop for

infrastructure is widely available throughout EU member states. Furthermore, the data also reveal that the vast majority of general practitioners in Europe (80%) use this infrastructure to record and store individual administrative patient data, and that most also use the e-health infrastructure to record and store key medical data, such as medical history, basic medical parameters, symptoms and reasons for encounters, diagnoses, medication, laboratory results, ordered examinations and results, other measurements, treatment outcomes and, to a lesser extent, also radiological images (European Commission 2008).

Specific figures on EU patients' data reveal that, on average, only 0.7% of stored data is exchanged across borders. Since these data represent trade and trade-like activity, it is striking that this number is significantly low, compared with existing high levels of e-health infrastructure and data storage. The Netherlands (4.7%), Malta (3.3%), Cyprus (2.8%), Denmark (1.9%), France (1.7%) and Sweden (1.5%) are the only countries where cross-border medical data exchanges out of stored data are higher than 1% (European Commission 2008).³²

Table 2.3 measures the geographical concentration of EU member states' trade, using the Hirschmann-Herfindahl Index.³³ The findings show a low degree of trade orientation towards

patients seeking health and serve as a “service junction” between patients and health professionals. This data should be taken as indicative and complementary to the above analysis of trade statistics.

³² The data is based on a research study commissioned by the European Commission on the usage of ICT among general practitioners in Europe. The survey covers 6,789 observations obtained from comprehensive interviews, conducted in all 27 EU member states, as well as in Norway and Iceland.

³³ The Hirschmann-Herfindahl Index (HHI) is given by
$$HHI = \sqrt{\sum_d \left(\frac{\sum_s X_{sd}}{\sum_{sw} X_{sw}} \right)^2}$$
 and measures the geographical concentration of trade (exports, imports or a combination of both) by reporting the degree to which a country's or a region's trade is dispersed across various destinations. The index takes values from 0 to 1, whereby higher values indicate greater concentration. In the index, d is the destination, s is the source country or

the EU region. On average, only less than 10% of member states' trade (exports and imports) is done within the EU. Italy and Denmark are exceptions with higher than average levels of imports from the EU at 39% and 27% respectively.

Finally, the low intensity of trade and the lack of specialisation among the member states are also reflected in the measurement of their revealed comparative advantages, as indicated by table 2.3. The index of Revealed Comparative Advantage (RCA)³⁴ shows that specialisation is particularly low. On a scale of 1 to -1, whereby 1 indicates full comparative advantage and -1 indicates a complete lack of it, Cyprus had an RCA score of 0.35, the highest among the member states. Other member states with positive RCA scores were Romania (0.33), the Czech Republic (0.29), Poland (0.28), Slovakia (0.25) and Slovenia (0.16).

region, w is the set of countries in the world and X is the bilateral flow of exports from source to destination. According to the direction of trade measured, X can be substituted by I (imports) or TT (total trade).

³⁴ Revealed Comparative Advantage is calculated as $RCA_{baj} = \frac{M_{abj} - X_{abj}}{M_{abj} + X_{abj}}$ whereby it is the difference

between imports (M) of country a from country b in sector j and the exports (X) of country a from country b in sector j , over the sum of imports (M) of country a from country b in sector j and the exports (X) of country a from country b in sector j .

Table 2.3: Healthcare Cross-border Trade Concentration and Specialisation in EU Member States, 2005

	Hirschmann-Herfindahl index			RCA
	Ex	Im	Ex+Im	
Cyprus	0.06	0.03	0.05	0.35
Czech Republic	0.12	0.07	0.09	0.29
Denmark	0.11	0.27	0.19	-0.38
Hungary	0.01	0.01	0.01	-0.35
Italy	0.29	0.39	0.34	-0.12
Lithuania	0.05	n.a.	n.a.	n.a.
Luxembourg	0.02	0.02	0.02	-0.06
Poland	0.10	0.06	0.08	0.28
Romania	0.09	0.05	0.07	0.33
Slovakia	0.09	0.06	0.08	0.25
Slovenia	0.06	0.05	0.05	0.16

Source: Author's calculations based on United Nations Service Trade Statistics Database

Accountancy services

Cross-border trade in accountancy and auditing services takes place in various forms. An example is the referral of audit work by companies or their subsidiaries to auditors in other countries. These cross-border transactions typically involve large international clients who are audited by big audit and accountancy firms. Those firms provide their services drawing on their international professional resources in various locations. A case in point is the formation of international specialised teams dedicated to a single project.

Other examples include the provision of accountancy, auditing and tax-consultancy by firms in one country to firms in other territories. Importing cross-border tax-consultancy services is a recurring feature for companies interested in investing abroad and seeking domestic expertise.

Cross-border trade in accountancy and auditing services is much higher than comparable trade in healthcare services. Table 2.4 shows that, from an absolute standpoint, the volume of trade has been increasingly rising—even doubling—several times over the period of 2000-2007 for a group of 21 EU and OECD member states. A clear pattern of growth in both exports and imports is evident and trade sharply peaks around 2003, following the end of the economic recession in the early 2000s.

Individual countries' trade directions are also evident from table 2.4. Major net exporters are the UK, the Netherlands, Hungary and Australia. Key net importers are the US, Luxembourg, Belgium, Ireland and Finland. Considering conventional wisdom, the US' consistent and growing trade deficit in cross-border accountancy trade is rather surprising as the US is widely believed to be a major export source of those services. These surprising results are possibly an indication of large foreign activities of multinational enterprises (MNEs) originating in the US. Being a world hub of origin for MNEs, these firms operating in foreign markets are audited and serviced by US accounting and auditing firms. These services are often provided on a cross-border basis to MNEs' headquarters in their home countries, such as in the US (United Nations Conference on Trade and Development 2009: 225-227). The

relative scarcity of UK-based MNEs in relation to the US possibly explains why, contrary to the US, the UK has a trade surplus in accountancy services, despite being itself a hub for major accountancy and auditing firms. This issue can also be explained differently, through an analysis of big accountancy firms' corporate structures. Accordingly, rather than being served by the same segment of the firm, international clients are served by different and independent partners of the same accountancy firm in different geographical locations. This point will be developed in Chapter 5.

Table 2.4: Trade in accounting, auditing, book-keeping and tax consulting services

Mode 1 (US\$ millions)

	2000		2001		2002		2003		2004		2005		2006		2007	
	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im
Australia	61.5	7.4	173.8	71.4	157.6	81.5	112.2	77.8	115.5	77.2	127.5	80.9	203.3	134.8	397.5	236.8
Austria	..	..	..	..	117.6	141.2	92.5	108.3	90.6	116.7	103.2	128.1	..	..	..	..
Belgium	..	..	..	..	..	..	..	..	..	..	..	..	..	..	390.1	570.7
Czech Republic	..	..	2.7	6.3	9.4	19.8	4.5	26	20.8	58.9	120.3	111.1	169.8	130.2	203.6	157.8
Denmark	..	..	..	..	..	..	..	..	..	..	87.2	42.5	146	106.1	167.7	161.1
Finland	..	..	..	..	33.9	67.8	67.7	77.9	63.8	94.6	82.2	118.6	44.2	65.7	60.1	189.8
France	..	..	..	..	..	..	555.3	483.1	..	..	..	..	..	..	..	..
Hungary	..	..	..	..	..	..	..	..	99.4	35.6	137.8	33.4	212.6	51.6	347.1	54.5
Ireland	..	..	..	..	..	44.2	..	36.1	..	45.9	..	63.4	..	47.7	..	..
Italy	152	58	173.6	234.5	142.1	309.6	147.9	459.4	188.7	244.6	226.3	237.5	356.3	288.5	354.5	307.9
Korea	..	..	..	..	..	..	..	..	..	..	..	..	80	26.1	73.7	30.1
Luxembourg	..	..	..	..	384.7	447.1	447.5	478.5	502.9	568.3	640.0	705.9	815.8	958.6	1049.4	1167.7
Netherlands	..	..	..	..	..	..	1785	515.9	1510	442.9	1707.5	476.4	2358.2	629.6	2921.1	655.9
New Zealand	..	1.4	..	13	..	11.1	22.1	23.8	30.5	23.2	33.8	26.1	36.3	27.9	67.6	50.7
Norway	68.2	5.1	43.8	3.7	40.8	8.8	51.1	5.2	62.6	3.9	100.0	8.1	153.9	9	138.7	10.9
Poland	..	..	..	..	..	..	..	..	151.5	303.5	181.4	307.9	273.3	318.4	414.3	521.4
Portugal	35.4	6.3	44.3	24.5	63.1	26.4	90.3	40.6	..	..	..	..	..	..	..	..
Slovak Republic	..	..	..	..	..	..	..	..	..	..	25.3	39.1	21.6	35.4	41.4	33
Sweden	509.7	42.5	457.9	885.3	436.6	758.3	694	1001	758.5	1098.3	324.6	347.8	355.1	400.4	484.6	525.5
United Kingdom	1000.7	22	923.8	328.1	1089.6	375.7	1195.5	489.3	1633.2	593.2	1818.2	565.5	..	..	..	..
United States	366	31	413	507	288	489	233	560	313	753	351.0	947	739	1503	842.9	1788

Source: OECD Stat.

Although cross-border trade flows in accountancy services are much higher than parallel absolute trade flows in healthcare services, their economic significance is somewhat identical and rather low. Cross-border trade is only a fraction of output produced in the accountancy sector, suggesting that trade is, in fact, marginal to output. In most countries where data are available, trade to output ratios are around one percent or less, as in the case of the UK or the US, the largest cross-border traders of accountancy services. The Netherlands is an exception with 3.6% of trade to output ratios.

From an economy-wide perspective, cross-border trade as a share of GDP is very low and is a fraction of a percentage point for all countries. These figures are particularly noticeable for the major accountancy trading countries, US (0.02%), UK (0.1%), Netherlands (0.46%), Sweden (0.22%) and Poland (0.22%).

Table 2.5: Total Cross-Border Trade in Accountancy Services as a Share of GDP and of Output in Accountancy Services* (Percentage)

	2000	2001	2002	2003	2004	2005	2006	2007
Australia	0.02 (0.18)	0.06 (0.61)	0.06 (0.55)	0.03 (0.33)	0.03 (0.30)	0.03 (0.30)	0.04	0.07
Austria			0.13 (1.87)	0.08 (1.18)	0.07 (1.04)	0.08 (1.14)		
Belgium								0.21
Czech Republic		0.01 (0.16)	0.04 (0.40)	0.03 (0.31)	0.07 (0.73)	0.19 (1.87)	0.21	0.21
Denmark						0.05 (0.12)	0.09	0.11
Finland			0.08 (1.67)	0.09 (1.96)	0.08 (1.81)	0.10 (2.15)	0.05	0.1
France				0.06 (0.67)				
Hungary					0.13 (1.83)	0.16 (2.18)	0.23	0.29
Ireland			0.04 (0.69)	0.02 (0.42)	0.02 (0.44)	0.03 (0.53)	0.02	
Italy	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
Korea							0.01	0.01
Luxembourg			3.68	3.17	3.13	3.58	4.17	4.46
Netherlands				0.43 (4.58)	0.32 (3.45)	0.34 (3.62)	0.44	0.46
New Zealand				0.06	0.05	0.05	0.06	0.09
Norway	0.04	0.03	0.03	0.03	0.03	0.04	0.05	0.04
Poland					0.18 (3.41)	0.16 (2.97)	0.17	0.22
Portugal	0.05	0.06	0.07	0.08				
Slovak Republic						0.13	0.1	0.1
Sweden	0.47	0.6	0.48	0.55	0.52	0.18	0.19	0.22
United Kingdom	0.09 (1.12)	0.09 (1.00)	0.09 (1.06)	0.09 (1.06)	0.10 (1.18)	0.10 (1.20)		
United States	0.01 (0.13)	0.01 (0.12)	0.01 (0.10)	0.01 (0.10)	0.01 (0.12)	0.01 (0.14)	0.02	0.02

* In parentheses: total cross-border trade in accountancy services as a share of output in accountancy services (available until 2005).

Source: Author's calculations based on OECD Stat. and EU KLEMS data.

Modest specialisation takes place in cross-border trade. RCA scores, reported in table 2.6, show that specialisation is low even among the largest trading partners, such as the UK and the Netherlands. The highest specialisation score was reported for Cyprus with a 0.73 RCA

score for world trade, and a 0.66 score when measured vis-a-vis the EU-25 member states. Cyprus' relatively high RCA scores may potentially indicate a "Delaware Effect" wherein Cyprus is chosen as a favourable location due to minimal establishment requirements and low taxation. Accordingly, the scores show local provision of accounting and auditing services to MNEs choosing Cyprus as a convenient location.

Finally, EU Member States' trade is largely concentrated towards the EU. Measured as a simple average of total trade, over 60% of EU Member States' cross-border trade in accounting and auditing services is conducted with other Member States. Newer Member States trade more with their European neighbours than with old Member States, such as in the case of Slovakia (94%), Romania (86%), Lithuania (83%), Hungary (82%), Poland (79%) and Estonia (78%). Sweden's and the United Kingdom's shares of trade with the rest of the EU are 11% and 40% respectively.

Table 2.6: Revealed Comparative Advantage Index, World and EU-25 in Mode 1

	2000		2001		2002		2003		2004		2005	
	World	EU	World	EU	World	EU	World	EU	World	EU	World	EU
Austria					-0.09	-0.06	-0.08	-0.11	-0.13	-0.15	-0.11	-0.10
Cyprus					0.90	0.42	0.90	0.66	0.83	0.78	0.73	0.66
Czech Republic			-0.38	-0.25	-0.34	-0.53	-0.70	-0.72	-0.65	-0.69	-0.47	-0.22
Denmark											0.19	0.14
Estonia							0.40	0.33	0.52	0.61	0.52	0.40
Hungary									0.47	0.45	0.59	0.60
Ireland												
Italy	-0.26		-0.15	-0.14	-0.37	-0.39	-0.51	-0.56	-0.13	-0.09	-0.02	-0.01
Latvia				-0.33	-0.20		-0.43	0.33	-0.25		-0.23	
Lithuania	0.06		0.35		0.09		-0.21	-0.27	0.53	0.49	0.35	0.28
Luxembourg					-0.07	-0.03	-0.03	-0.06	-0.01	-0.03	-0.07	-0.07
Malta									0.87	0.84		
Netherlands							0.55	0.43	0.55	0.50	0.56	0.51
Poland									-0.33	-0.35	-0.26	-0.29
Romania											-0.29	-0.42
Slovakia											-0.21	-0.23
Sweden	-0.11	-0.12	-0.32	-0.33	-0.27	-0.22	-0.18	-0.12	-0.18	0.01	0.01	0.18
United Kingdom					0.49	0.37	0.42		0.47		0.53	

Source: Author's calculation based on OECD Stat

Consumption Abroad

Trade in services through consumption abroad takes place when the consumer crosses the border and consumes the service in the territory of the service provider. In contrast to cross-border trade in services, the feasibility of mode 2 trade is not subject to the availability of appropriate enabling technology.

Healthcare services

Contemporary healthcare services follow in the long European tradition of travelling to spa towns to “take the waters”, in the belief that mineral water has a healing effect. Mode 2 is best exemplified by the consumption of tourism services abroad. Within this context, health tourism has been a common feature of international trade, though not necessarily well documented. Typical health tourism services today include cardiac surgery, plastic and cosmetic surgery, dental treatment and fertility treatment.

The chief motivations for healthcare tourism are the rising costs of domestic healthcare, in particular for specialised services, long waiting times for treatment, and a lack of public health insurance in certain countries (Ramesh 2005). Table 2.7 shows differences in the costs of several specialised medical treatments between the United States (an important source of health tourists) and three Asian countries. These differences, which at times are over 30% lower, are an important incentive in patients’ decisions to receive treatment abroad. Other surveys comparing prices found, for example, that treatments such as hip replacement surgery can be 70% lower for a treatment package covering the actual treatment as well as travel and hotel lodging costs (Treatment Abroad 2006). Among the countries considered to be hubs of health tourism are India, Thailand, Costa Rica, Columbia, Hungary, Poland, Lithuania, Malaysia, Jordan and Tunisia (Burne 2008; Einhorn 2008).

Table 2.7: Medical Costs: Specialised Treatments

Type of Medical Procedure	Costs (in US\$)				Costs compared to the USA		
	USA	Singapore	Thailand	India	Singapore	Thailand	India
Heart Bypass	130000	18500	11000	10000	14.23%	8.46%	7.69%
Heart Valve Replacement	160000	12500	10000	9000	7.81%	6.25%	5.63%
Angioplasty	57000	13000	13000	11000	22.81%	22.81%	19.30%
Hip Replacement	43000	12000	12000	9000	27.91%	27.91%	20.93%
Hysterectomy	20000	6000	4500	3000	30.00%	22.50%	15.00%
Knee Replacement	40000	13000	10000	8500	32.50%	25.00%	21.25%
Spinal Fusion	62000	9000	7000	5500	14.52%	11.29%	8.87%

Source: Einhorn, 2008, Author's calculations.

Another important facet of consumption abroad of health services is health education. Certain countries have been a hub for international medical students from both developed and developing countries. Driving factors include language affinity, post-colonial ties, future migration incentives, as well as shortages of training infrastructure (hospitals) and a lack of knowledge and technical and technological capacity in the foreign student's home country (Khadria 2004; Gluszynski and Peters 2005).³⁵ Data for Canada show that 17.5% of all students in Canada studying life sciences³⁶ were foreign or visa students (Gluszynski and Peters 2005). Similarly, the share of foreign students studying for health professions in the USA between 2005 and 2006 was almost 5%, representing an increase of 3.1% from the

³⁵ The actual magnitude of consumption abroad of health education services has not been well quantified in the literature and consists of anecdotes rather than systematic measurement.

³⁶ Life sciences comprising health, agriculture and biology.

previous year (Institute of International Education 2006). In the United Kingdom, the share of foreign students studying clinical medicine was 1.6% (HESA 2007).

The consumption of healthcare services abroad is captured in trade statistics such as the “Health-related expenditure” within the “Travel” category of EBOPS. Data on exports and imports of the consumption abroad of health services are summarised in Table 2.8. Trade data for this mode of supply are more readily available, though still lacking for several economies, such as the United Kingdom, where data are available only for 2005, or the United States, where data are not available at all.

Trade directions are much clearer for mode 2 than they are for mode 1. Table 2.8 shows that net exporting countries are Belgium, Croatia, the Czech Republic, Estonia, Greece, Hungary, Italy and Turkey. Bulgaria was a net importer until 2002 and since then has become a net exporter. Net importing countries are Canada, Cyprus, Iceland and Luxembourg. These findings largely correspond to the assumption suggested above that price and currency differences incentivise the consumption abroad of health services.³⁷

The average growth of trade in this mode of supply is relatively high, particularly when compared with trade in mode 1. Thus, while cross-border trade growth has been volatile and with no clear patterns, exports and imports combined in mode 2 for each country have been constantly rising. The average growth rate for the countries covered is 23.5%. On the whole,

³⁷ Although reported for only a single year, the figures for the UK seem to at least partially contradict the views that the UK is an importer of health tourism. Various figures in the media report that 50,000 United Kingdom citizens travelled overseas for medical treatment in 2007 and that 75,000 are expected to travel in 2008, reaching an expected figure of 200,000 people travelling out of the United Kingdom for health consumption by 2010 (Ramesh 2005; Burne 2008)

Bulgaria and the Czech Republic have experienced exceptionally high growth rates, with an average of 32.86% and 43.24% respectively. Italy is the only exception, where the average growth rate has been negative at -0.31%.

Table 2.8 also shows that, in absolute and relative numbers, the volume of trade in health services is far more significant through consumption abroad than that of cross-border trade. Italy's and the United Kingdom's volumes of trade for the same year were \$238 million and \$233 million respectively, compared with \$87 million and \$25 million in cross-border trade. Trade through mode 2 is higher than trade in mode 1 by 20 to 30 times in several instances, and even higher in some cases, such as Hungary's case.

Table 2.8: Total Exports and Imports of Healthcare Services: Mode 2 (US\$ million)

Country	2000		2001		2002		2003		2004		2005	
	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im	Ex	Im
Belgium					272.9	159.6	370.9	183.2	446.3	302.1	534.4	296.5
Bulgaria	1.7	1.7	2.4	3.2	2.1	2.9	3.7	1.9	3.9	3.9	7.1	5.3
Canada	63.3	213.4	63.3	237.7	63.7	231.8	73.5	249.0	81.4	263.5	90.8	283.1
Croatia									65.9	23.6	88.4	22.6
Cyprus		6.4		6.4	2.3	6.6	2.2	7.5	4.7	10.9	4.9	10.8
Czech Republic	28.7	12.6	83.4	13.7	94.5	19.0	117.5	27.1	146.2	34.1	166.2	36.2
Estonia							3.3	1.0	4.1	0.8	4.8	1.9
Germany				641.3		556.3		914.8		876.5		1035.2
Greece			15.9	56.6	42.5	17.0	58.7	27.0	73.1	19.0	61.1	20.0
Hungary									230.4	21.2	221.4	36.7
Iceland	0.5	7.4	0.4	6.3	0.2	5.1	0.8	7.1	0.2	8.6	0.1	9.1
Ireland												10.0
Italy	155.2	87.8	188.1	62.7	172.8	68.0	171.9	74.6	144.2	83.3	157.0	81.0
Latvia				1.6	0.0	1.6	1.8	1.8	0.0	3.7	0.0	1.8
Luxembourg					6.8	44.5	9.7	58.3	11.7	67.2	12.9	70.5
South Korea*											50.9	98.5
Romania		2.0		4.0		2.0		1.1		1.2		2.5
Slovenia			6.0	10.3	12.1	10.2	12.8	12.4	15.8	13.3	11.2	13.9
Switzerland	569.8		585.5		689.5		696.4		889.7		897.9	
Turkey							168.9	45.0	215.9	54.0	402.5	146.2
United Kingdom											125.7	107.5

Data availability limited to European OECD countries and South Korea.

* Korea figures are for 2006

Source: OECD Stat, UN

Nevertheless, trade in healthcare services in mode 2 is still significantly low when measured against output in the health sector. Table 2.9 shows that the annual average for the countries

examined is 1.69%, with Greece and Luxembourg having the highest trade-to-output ratio of 3.8%. Italy and the United Kingdom are at the bottom levels of trade-to-output measurement with 0.24% and 0.09% respectively.

On average, consumption abroad of healthcare services represents a small share of the total consumption of travel services, averaging 2.06%. Croatia is an exception and 7.75% of its travel services are attributed to health-related travel. The figures are exceptionally high with regard to the consumption of health services by Croatians abroad, which are 17.73% of travel imports. Iceland is also an exception in the opposite direction as 58.05% of its travel exports are attributed to consumption of healthcare services by foreigners. These figures are summarised in table 2.9.

As in mode 1, levels of trade in healthcare services in mode 2 are also very low compared with total expenditure on health as a share when compared with the relatively high degree of the share of private expenditure on health of total expenditure on health, which is, on average, almost 30% in the countries under review.

Table 2.9: Trade in Healthcare Services in Mode 2 and Selected Indicators

	Total trade in health services (exports and imports) as a share of gross output of health services	Average Share of Health Services (241) of Travel Services (236)			Total Expenditure on Health as % of GDP	Private Expenditure on Health as % of Total Expenditure on Health
		EX	IM	Trade Volume		
Belgium	1.93%	4.69%	1.81%	2.96%	9.79%	28.30%
Bulgaria		0.44%	0.91%	0.60%	7.50%	41.28%
Canada		0.63%	1.79%	1.26%	9.50%	29.90%
Croatia		6.62%	17.73%	7.75%	8.13%	18.90%
Cyprus	1.79%	0.08%	0.76%	0.22%	5.88%	56.45%
Czech Republic	2.42%	2.88%	1.26%	2.33%	7.03%	10.31%
Estonia	0.97%	6.28%	4.06%	5.58%	5.12%	22.80%
Germany		0.17%	1.28%		10.58%	21.56%
Greece	0.76%	1.70%	0.90%	0.55%	9.77%	54.59%
Hungary	3.79%	0.01%	1.00%	3.62%	7.78%	29.34%
Iceland		58.06%	1.36%	0.92%	9.71%	17.66%
Ireland		0.05%	0.16%		7.12%	24.16%
Italy	0.24%	0.03%	0.42%	0.51%	8.43%	25.22%
Latvia		5.88%	0.38%		6.39%	47.05%
Luxembourg	3.83%	0.42%	2.35%	1.23%	7.12%	9.81%
Korea		12.04%			5.34%	47.94%
Romania			1.28%		5.15%	29.22%
Slovenia	1.06%	5.88%	1.57%	1.07%	8.75%	23.83%
Switzerland			0.93%		11.19%	42.11%
Turkey			3.74%	2.04%	7.40%	30.54%
United Kingdom	0.09%			0.26%	7.76%	15.64%

Data availability limited to European OECD countries and South Korea.

Source: Author's calculations based on data from OECD, UN, EU KLEMS, WHO NHA.

Contrary to the findings in mode 1, closely economically integrated economies such as EU member states trade more with each other and develop specialisation patterns. These findings can be partially attributed to the existence of several directives facilitating the movement of patients in Europe as well as a growing body of case law against member states restricting the right of movement for European patients (Hazopoulos 2006). A strong indication towards market integration in Europe for healthcare services provided through mode 2 is given by the Hirschmann-Herfindahl index. The index shows that geographical concentration in the EU market is above 50% for total trade (exports and imports combined) in all countries. For

many EU Members, trade concentration is higher than 70%. As seen in table 2.10, Ireland had the lowest score in the index of 0.5 which indicates that half of its trade is oriented towards Europe. This score is higher than any score reported from cross-border trade. Other member states reported significantly higher scores, sometimes beyond 0.9, like in the case of both Belgium (0.94) and Luxembourg (0.93). It is plausible that with the removal of trade barriers, greater trade will take place in mode 2 where proximity between consumers and producers takes place, in contrast to mode 1 where distance has a lesser impact. Patients' surveys indicate that foreign patients tend to travel to locations in greater proximity to their home country. Thus, US patients have a preference for medical consumption in Central and South America, while Europeans consume healthcare in other European countries (Youngman 2009).

Finally, RCA scores (table 2.10) also point towards a clearer pattern of specialisation among the member states. Three countries achieved relatively high RCA scores: Hungary (0.81), Greece (0.77) and the Czech Republic (0.72). Luxembourg shows a comparative disadvantage (-0.67). The data concerning Italy are surprising because it suggests that Italy (0.32) has a mild comparative advantage in exporting healthcare services through mode 2 but a comparative disadvantage in mode 1.

Table 2.10: Healthcare Consumption Abroad Trade within the EU, 2005

	Trade (US\$ millions)			Trade Growth		Hirschmann-Herfindahl index ¹			RCA
	Ex	Im	Balance	Ex	Im	Ex	Im	Ex+Im	
Belgium	512.01	269.08	242.92	18.34%	-1.55%	0.96	0.91	0.94	0.31
Cyprus	2.59	7.58	-4.99	-9.50%	15.58%	0.53	0.70	0.65	-0.49
Czech Republic	110.00	17.97	92.03	11.10%	39.81%	0.66	0.50	0.63	0.72
Estonia	4.16	1.76	2.41	17.71%	176.18%	0.87	0.91	0.88	0.41
Germany	n.a.	802.27	-802.27	n.a.	28.80%	n.a.	0.77	0.77	n.a.
Greece	39.42	5.10	34.32	-25.49%	128.64%	0.65	0.25	0.55	0.77
Hungary	193.75	20.25	173.49	-4.45%	65.20%	0.88	0.55	0.83	0.81
Ireland	n.a.	4.98	-4.98	n.a.	n.a.		0.50	0.50	n.a.
Italy	107.13	54.81	52.32	-9.30%	33.60%	0.68	0.68	0.68	0.32
Luxembourg	12.87	65.34	-52.47	9.84%	13.29%	1.00	0.93	0.94	-0.67
Romania	n.a.	2.49	-2.49	n.a.	n.a.	n.a.	1.00	1.00	n.a.
Slovenia	9.14	3.92	5.22	-22.39%	288.47%	0.82	0.28	0.52	0.40
United Kingdom	58.30	65.59	-7.29	n.a.	n.a.	0.46	0.61	0.53	-0.06

Data availability limited to European OECD countries and South Korea.

¹ Romania's score of 1 should not be interpreted as complete EU trade orientation since it only reports trade statistics towards the EU (hence, EU=World).

Source: Author's calculations based on United Nations Service Trade Statistics Database.

The growth of healthcare trade in services through mode 2 is mirrored by a growing body of academic and professional literature on medical and healthcare tourism. The findings in this literature complement trade statistics and suggest that healthcare trade through consumption abroad is expanding. Critically drawing on official country statistics, Gupta reports evidence for wide inbound medical travel into Asia. Individual country patient figures for 2006 were 1,280,000 in Thailand, 448,000 in Singapore 300,000 in Malaysia and 200,000 in India (Koncept Analytics 2008; Koncept Analytics 2009; Youngman 2009)—a total of 2,228,000 foreign patients in four countries.³⁸ Surveying the US market, a Deloitte report had found that some 750,000 US citizens travelled abroad in 2007 for medical tourism consumption, compared with 417,000 foreign patients coming to the US.³⁹ Outbound cost estimates for US

³⁸ Due to data unreliability, the figures for India were significantly estimated downward.

³⁹ McKinsey reports a lower estimate of medical travel, but uses a very limited dataset comprised only of hospitals with a JCI (Joint Commission International) voluntary accreditation, thus omitting from its sample the vast majority of medical travellers who use hospitals, surgeries and clinics that are not part of the JCI system

citizens spending on healthcare abroad in 2008 was 2.1 Billion USD, equal to a like-spending (US lost revenue) of US\$ 15.9 billion at home. The survey also found that 39% of respondents will consider having an elective procedure in a foreign country if they could save 50% or more and if they were assured that quality was equal to that provided in the US. In a follow-up report adjusted to the economic downturn and US healthcare market reform, Deloitte estimated that, by 2012, these figures will reach over 1.6 million US citizens travelling abroad.⁴⁰ (Deloitte 2008; Deloitte 2009)

Accountancy services

Consumption abroad of accountancy and auditing services is a rare activity. The main reason is that, contrary to the case of healthcare services where consumption abroad is practiced by individual consumers, most accountancy trade is consumed by firms. Firms rarely move across the border to consume accountancy services, which they need to report back in their home country. Some companies offshoring for tax purposes yet leaving their real operations in their home country may, for that matter, consume accountancy services abroad. However, in such a case, this mode of trade will be regarded either as domestic trade (since the foreign company is registered abroad as a local company) or as cross border trade and/or commercial presence.

Data for trade through mode 2 in accountancy services do not exist. Some data for consumption abroad can be considered if accountancy education services are included with

Ehrbeck, T., C. Guevara and P. D. Mango (2008). "Mapping the Market for Medical Travel." The McKinsey Quarterly May.

⁴⁰ While this estimation is high, it represents a significant change from its post-economic recession 2007 report which projected that by 2012, 6 million US citizens will seek medical treatment abroad.

accountancy trade. While such an inclusion should not be interpreted as an indication of standard trade in accountancy, auditing or tax consulting services, it is noteworthy since many students consuming accountancy services abroad remain in the host country to work and are thus transforming into trade through the movement of natural persons (mode 4). In that regard, accountancy services and healthcare services are rather similar as the specific location of their study has a determining effect on students' future location of work. Australia is often considered to be unique due to its high proportion of international accountancy students: the number of foreign students taking accountancy is sharply increasing and is almost at par with domestic students. The share of international accountancy students rose from 32% in 2001 to over 45% by 2004. In the Australian case, this is the result of its General Skills Migration (GSM) programme that gives preference to selected professions of which accountancy is one. Hence, prospective migrants who wish to increase substantially their chances of being granted permanent residency status do so through enrolment in accountancy studies at Australian universities.⁴¹ This labour market policy compensates for the loss of domestic accountants who move abroad to supply accountancy services through mode 4 trade (Birrell and Rapson 2005; Birrell, Hawthorne et al. 2006).

This location-specificity is somewhat diminishing in the case of accountancy services due to the establishment of the International Financial Reporting Standards (IFRS), an issue which will be further developed in Chapter 5.

⁴¹ For example, foreign students in Australia who study IT have a much lower chance of later being granted permanent residency.

Conclusions

The chapter shows that, while accountancy and healthcare services are traded in different magnitudes in terms of absolute figures, they nevertheless follow similar trade patterns. Analysing cross-border trade for both services sectors reveals that trade is minimal and rather insignificant when measured relative to respective output in these sectors. Even if the volume of accountancy services trade is as high as hundreds of millions of US dollars in a particular country, it is still a fraction of the accountancy services produced in that country.

Low levels of international trade through consumption abroad are also reported for healthcare services. Indeed, international trade through consumption abroad is higher than cross-border trade but, yet again, when trade is measured relative to output and other variables, it remains marginal. Data on international trade through consumption abroad in accountancy services are not reported since such trade hardly exists, though it is feasible in principle.

The absence of consumption abroad trade in accountancy services, taken together with higher levels of trade in this mode for healthcare services when compared to cross-border trade, points towards the importance of consumers. Hence, the findings show that greater trade takes place where consumers and producers are close to each other. This is evident from the data on healthcare services trade, as well as from the nature of consumption of accountancy services. These services are largely consumed by corporate clients—rather than by individuals—which explains why they do not “travel abroad” to consume accountancy services. The next chapter will show that proximity between accountancy clients and

producers (as well as healthcare clients and producers) is achieved through other modes of supply. These results are important since they counter some of the arguments presented in the literature that distance costs or constraints in international trade have diminished with the rise of ICT, thus creating the expectation that cross-border trade would be higher than consumption abroad. Finally, the findings in the chapter on the low levels of international trade in both sectors, sharply contrast with comparable levels of trade related to output in the manufacturing and agriculture sectors (Canoy and Smith 2008: 322).⁴²

⁴² Canoy and Smith (2008) found that trade relative to output for the EU-27 in 2000 were 12.7% for agriculture, forestry, fisheries and aquaculture, and 33.3% of manufactured, mining and quarrying as well as energy products.

Chapter 3: International Trade in Services through Commercial Presence and the Movement of Persons

The previous chapter analysed the magnitude of trade in healthcare and accountancy services in two forms. It found that, although trade through the consumption abroad of services by consumers is higher than cross-border trade, both trade modes are relatively and considerably low. In these two forms of trade, either the service or the consumer crossed the border to enable international trade. This chapter analyses international trade in services from the reverse perspective, whereby the supplier—in the form of a legal entity or a worker—crosses the border to create the international services transaction. The next two sections examine, respectively, trade through commercial presence and trade through the movement of natural persons, within the prism of healthcare and accountancy services. The final section concludes both empirical chapters.

Commercial Presence

Trade through commercial presence involves the movement of the service supplier to the territory of the consumer. Most commonly, this is carried out through the establishment of some sort of legal entity, such as subsidiaries, branches, representative offices, joint ventures, partnerships and acquisitions of local companies. To a large extent, commercial presence overlaps with foreign direct investment in services.

Healthcare services

Foreign commercial presence in the healthcare service sector has not been significantly researched. Most of the literature focused on specific case studies, rather than on accounting for the actual magnitude of internationalisation taking place through this mode of supply. In these studies, the United States has been regarded as an important source country for healthcare service firms establishing themselves abroad, in particular in Latin America and in the United Kingdom (Holden 2002; Jasso-Aguilar, Waitzkin et al. 2004). One particular study of the United Kingdom found that 22% of all independent hospital beds were owned by the United States (Mohan, 1991: 857 cited in Holden 2002). According to a study using the Fortune Global 500 index for 2002 as a single year, direct healthcare services providers were the least internationalised, while producers of goods were the most internationalised (Holden 2005).

In the absence of statistics on trade through commercial presence, several proxies are used in the following analysis to assess the magnitude of trade and provide a comprehensive picture.

Using company data extracted from the ORBIS⁴³ database, it is evident that commercial presence constitutes a significant mode of international trade in healthcare services.⁴⁴

Analysis of ORBIS data provides cross country information regarding the level and nature of

⁴³ The ORBIS database covers in-depth financial information for some 60 million companies on a global scale. The data contains information for both private and public companies, across countries and industries. Companies' financial data is accompanied by figures and records of ownership and subsidiary data, stock prices for listed companies, and mergers and acquisitions information, as well as market research and news.

⁴⁴ The data extracted from ORBIS covers OECD countries. The sample used and shown in table 3.1 was selected following data cleanup to ensure accuracy and comparability. The parameters examined included company name, industry sub-sector, headcount (number of employees), annual turnover, annual balance sheet total, ultimate ownership, ultimate ownership's country, and percentage of ultimate ownership out of total ownership. Ultimate ownership is regarded as a single entity holding 25% or more of total direct or indirect ownership.

activity of foreign companies, and can thus serve as a good estimation for trade in services through commercial presence.

Taken as an indication of trade activity, the findings presented in table 3.1 show that trade through commercial presence is an important feature in healthcare services. First, foreign healthcare services providers are an important dimension of domestic healthcare provision in many countries. The lowest ratio of foreign providers (almost 5%) found in the sample (Germany) is much higher than the indices reported for cross-border and consumption abroad trade. Much higher ratios of foreign healthcare providers are reported in other countries, with the highest ratio being in the United Kingdom (73.8%). The ratio of foreign providers varies between different healthcare activities, though it remains very high if general medical practice activities are excluded.⁴⁵

Operating revenues and turnover are used as proxies for quantification of trade activities. Thus, observing the ratio of foreign turnover (or operating revenue) in total turnover indicates trade through commercial presence. The data show that commercial presence trade is highly important in many countries, such as Canada, Poland, Spain, United Kingdom, and the US. International trade is of particular significance in the categories of other human health activities, specialist medical practice activities, dental activities, as well as hospital activities.

Finally and of less importance in terms of trade, it is evident that foreign firms are also becoming important actors within the labour market. In countries such as Canada, Spain,

⁴⁵ Spain is an exception with 10.6% of providers of general medical practice activities being foreign.

United Kingdom, and the United States, foreign healthcare providers are major employers of domestic employees. This factor is most significant in specialist medical practices and other human health activities.

Table 3.1: Trade in Healthcare Services: Mode 3

NACE * Category	Country	Number of companies					Operating Revenue/Turnover (US\$ millions)					Employees				
		Total	Foreign		Domestic		Total	Foreign		Domestic		Total	Foreign		Domestic	
			Number	(%)	Number	(%)		Number	(%)	Number	(%)		Number	(%)	Number	(%)
86	Australia	6	2	33.3%	4	66.7%	3419	12	0.4%	3407	99.6%	11966	50	0.4%	11916	99.6%
86	Belgium	14	9	64.3%	5	35.7%	112	103	92.0%	9	8.0%	601	453	75.4%	148	24.6%
86	Canada	29	14	48.3%	15	51.7%	545	262	48.1%	283	51.9%	9767	4947	50.7%	4820	49.3%
86	Germany	558	27	4.8%	531	95.2%	32334	1472	4.6%	30862	95.4%	260625	12191	4.7%	248434	95.3%
86	Hungary	20	3	15.0%	17	85.0%										
86	Poland	300	30	10.0%	270	90.0%	938	129	13.8%	809	86.2%	23335	1357	5.8%	21978	94.2%
86	Spain	1499	188	12.5%	1311	87.5%	3831	652	17.0%	3179	83.0%	34870	4962	14.2%	29908	85.8%
86	UK	3208	2366	73.8%	842	26.2%	25392	9721	38.3%	15671	61.7%	277250	76675	27.7%	200575	72.3%
86	US	1878	193	10.3%	1685	89.7%	113257	9145	8.1%	104112	91.9%	1249791	119475	9.6%	1130316	90.4%
8610	Australia	2	0	0.0%	2	100.0%	3325		0.0%	3325	100.0%	10586		0.0%	10586	100.0%
8610	Belgium															
8610	Canada	6	1	16.7%	5	83.3%	85		0.0%	84	98.8%	1769	20	1.1%	1749	98.9%
8610	Germany	348	15	4.3%	333	95.7%	30046	454	1.5%	29592	98.5%	245510	5096	2.1%	240414	97.9%
8610	Hungary	1	0	0.0%	1	100.0%										
8610	Poland	79	6	7.6%	73	92.4%	564	28	5.0%	536	95.0%	17134	496	2.9%	16638	97.1%
8610	Spain	92	14	15.2%	78	84.8%	1668	353	21.2%	1315	78.8%	14520	2605	17.9%	11915	82.1%
8610	UK	354	211	59.6%	143	40.4%	9168	2294	25.0%	6874	75.0%	76095	16537	21.7%	59558	78.3%
8610	US	621	62	10.0%	559	90.0%	72961	6154	8.4%	66807	91.6%	801914	55476	6.9%	746438	93.1%
8621	Australia															
8621	Belgium	2		0.0%	2	100.0%	0			0	0.0%	5	0	0.0%	5	100.0%
8621	Canada															
8621	Germany	11	0	0.0%	11	100.0%	174	0	0.0%	174	100.0%	1368	0	0.0%	1368	100.0%
8621	Hungary	11	0	0.0%	11	100.0%										
8621	Poland															
8621	Spain	436	46	10.6%	390	89.4%	398	41	10.3%	357	89.7%	3552	260	7.3%	3292	92.7%
8621	UK															
8621	US															
8622	Australia	1	1	100.0%	0	0.0%	4	4	100.0%		0.0%	50	50	100.0%	0	0.0%

NACE * Category	Country	Number of companies				Operating Revenue/Turnover (US\$ millions)				Employees						
		Total	Foreign		Domestic		Total	Foreign		Domestic		Total	Foreign		Domestic	
		Number	Number	(%)	Number	(%)	Number	Number	(%)	Number	(%)	Number	Number	(%)	Number	(%)
8622	Belgium															
8622	Canada	10	5	50.0%	5	50.0%	186	17	9.1%	169	90.9%	2740	307	11.2%	2433	88.8%
8622	Germany	9	1	11.1%	8	88.9%	275	35	12.7%	240	87.3%	378	137	36.2%	241	63.8%
8622	Hungary	3	2	66.7%	1	33.3%										
8622	Poland	103	7	6.8%	96	93.2%	180	48	26.7%	132	73.3%	2607	373	14.3%	2234	85.7%
8622	Spain	1	1	100.0%	0	0.0%						2	2	100.0%	0	0.0%
8622	UK	732	615	84.0%	117	16.0%	2722	1618	59.4%	1104	40.6%	17673	3610	20.4%	14063	79.6%
8622	US	575	72	12.5%	503	87.5%	13707	1018	7.4%	12689	92.6%	110135	14875	13.5%	95260	86.5%
8623	Australia															
8623	Belgium															
8623	Canada	1	0	0.0%	1	100.0%	3	3	100.0%	0	0.0%	45	45	100.0%	0	0.0%
8623	Germany	7	0	0.0%	7	100.0%	2	0	0.0%	2	100.0%	25	0	0.0%	25	100.0%
8623	Hungary	3	0	0.0%	3	100.0%										
8623	Poland	19	2	10.5%	17	89.5%	13	2	15.4%	11	84.6%	71	0	0.0%	71	100.0%
8623	Spain	400	40	10.0%	360	90.0%	225	40	17.8%	185	82.2%	1978	234	11.8%	1744	88.2%
8623	UK	139	114	82.0%	25	18.0%	707	132	18.7%	575	81.3%	4425	364	8.2%	4061	91.8%
8623	US	28	2	7.1%	26	92.9%	100	20	20.0%	80	80.0%	1927	585	30.4%	1342	69.6%
8690	Australia	3	1	33.3%	2	66.7%	90	8	8.9%	82	91.1%	1330		0.0%	1330	100.0%
8690	Belgium	12	9	75.0%	3	25.0%	112	103	92.0%	9	8.0%	596	453	76.0%	143	24.0%
8690	Canada	12	7	58.3%	5	41.7%	271	241	88.9%	30	11.1%	5213	4575	87.8%	638	12.2%
8690	Germany	183	11	6.0%	172	94.0%	1837	983	53.5%	854	46.5%	13344	6958	52.1%	6386	47.9%
8690	Hungary	2	1	50.0%	1	50.0%										
8690	Poland	99	15	15.2%	84	84.8%	181	51	28.2%	130	71.8%	3523	488	13.9%	3035	86.1%
8690	Spain	570	87	15.3%	483	84.7%	1540	218	14.2%	1322	85.8%	14818	1861	12.6%	12957	87.4%
8690	UK	1983	1426	71.9%	557	28.1%	12795	5677	44.4%	7118	55.6%	179057	56164	31.4%	122893	68.6%
8690	US	654	57	8.7%	597	91.3%	26489	1953	7.4%	24536	92.6%	335815	48539	14.5%	287276	85.5%
<p>* NACE 86 - Total Healthcare; NACE 8610 - Hospital Activities; NACE 8621 - General Medical Practice Activities; NACE 8622 - Specialist Medical Practice Activities; NACE 8623 - Dental Practice Activities; NACE 8690 - Other Human Health Activities. Source: ORBIS, Author's calculations.</p>																

The ORBIS analysis allows for a detailed and disaggregated examination of trade through commercial presence. Nevertheless, it should be noted that FDI data, available only at highly aggregated level, lend weaker support to high levels of trade through commercial presence. The data for both stocks and flows of FDI in healthcare services suggest that they play a small role.⁴⁶ The share of inward FDI stocks in healthcare services of total FDI in services is constantly low at around 0.2% for developed economies. The figures are even lower for outward FDI stocks, where developed countries' position is 0.02%. Lower shares of inward and outward FDI in healthcare services out of total FDI in services exist for FDI flows. Developing countries' FDI shares do not exceed 0.1% when measured in three different time intervals over the past two decades. However, while the share of FDI in healthcare services is relatively low when compared with total FDI in services, it has been growing considerably in recent years. From 1990 to 2005, in developed economies, inward FDI stocks grew by 762% and outward stock by 380%.

Although concentrating solely on very large companies, it should be noted that healthcare companies are absent from both the Transnationality and Internationalisation indices.⁴⁷ Not a single healthcare company is listed in these indices for the years 1993, 1994 and 1999 to 2006. The absence of healthcare service companies from the indices should not be interpreted

⁴⁶ FDI data was sourced from annual World Investment Reports published by UNCTAD.

⁴⁷ The UNCTAD Transnationality Index is a scale for measuring the internationalisation of transnational companies. The Index focuses on firms' foreign assets and is calculated as the average of three ratios: foreign assets to total assets; foreign sales to total sales; and foreign employment to total employment. The Transnationality Index ranks the top 100 non-financial transnational companies. In conjunction with the Index UNCTAD also provides the Internationalisation Index, which calculates the number of foreign affiliates divided by the number of all affiliates (Ietto-Gilles, G. (1998). "Different Conceptual Frameworks for the Assessment of the Degree of Internationalization: an Empirical Analysis of Various Indices for the Top 100 Transnational Corporations." *Transnational Corporations* 7(1): 17-40.

, Dorrenbacher, C. (2000). "Measuring Corporate Internationalisation." *Discussion Paper*. Retrieved 28/04, 2008, from <http://skylla.wzb.eu/pdf/2000/i00-101.pdf>.

as a lack of commercial presence by these companies in international trade since the indices measure the extent to which internationalisation takes place, rather than its actual occurrence.

Data on cross-border mergers and acquisitions (M&As) do not clearly indicate the key countries involved in commercial presence international trade in healthcare services. M&A examine the degree to which foreign ownership of companies is spreading. The data shown in table 3.2 on global M&A were extracted from UNCTAD's World Investment Report for the years 2004-2006, and detail cross border M&A whose value exceeds \$1 billion. Five M&A are found between the years 2004 to 2006, with no M&A taking place in 2003. The share of those M&A out of the total number of M&A is low yet somewhat surprising given the lack of healthcare services companies within the Transnationality Index. The yearly average value of M&A in healthcare services for 2004-2006 is \$3.9 billion.

Two of the M&A were in nursing and personal care facilities. Other M&A took place in the surgical hospital industry, in kidney analysis centres and in drug stores and proprietary stores. The M&A in the drug store industry was included in this survey due to its proximity to healthcare services, though it should not be viewed as part of the healthcare services industry analysed here. All acquired companies were either US or British companies, with acquiring companies spread over three continents. With the exclusion of the drug stores M&A, not all M&A were concluded in the same sector, and none of the acquiring companies are healthcare services companies.

Table 3.2: Cross-border M&A Deals in Healthcare services with Values of over \$1 Billion Completed in 2003-2006

	Total number of M&A	M&A in Healthcare services		
		Number	Share	Value (US\$ billions)
2003	56	0	0.00%	0
2004	75	2	2.67%	6.9
2005	141	1	0.71%	1.2
2006	172	2	1.16%	3.6
2003-2006	444	5	1.13%	11.7

Source: UNCTAD World Investment Reports 2004, 2005, 2006, 2007

Holden (2005) studied the internationalisation of health service firms by using Fortune's Global 500 Index for the year 2002. Fortune's Global 500 annually lists the world's biggest companies, taking revenues as the indicator of firm size.⁴⁸ His inconclusive findings showed that health service firms' internationalisation is still low, though internationalisation is more prominent, to varying extents, in industries with proximity to healthcare services. Such industries included insurance companies, pharmaceutical corporations and catering firms (Holden 2005).

While Fortune's Global 500 Index provides a good estimation of firm size, it is less attractive for the examination of companies' internationalisation into foreign markets. Hence, rather than measuring international activity, the index looks at firm size in terms of whether it operates exclusively in a single market. Overcoming this problem and revisiting Holden's work, Fortune's Global 500 list for the years 2005-2007 was analysed. This involved an

⁴⁸ Firms are categorised according to industry, and the index reports various financial parameters for each company.

independent examination of each relevant company's profile to assess whether it extends to foreign markets or not.⁴⁹ The results are detailed in table 3.3. Ten healthcare services companies were on the Global 500 List in 2005 and nine companies were ranked in the following two years. The average ranking of healthcare services companies was 298, 262 and 245 respectively for each year, positioning them around the middle of the index. Nine of the companies listed in the Index have appeared in all three years, with only one company leaving the Index after 2005. The highest rank in the Index (66) was achieved by UnitedHealth Group in 2007. However, a close examination reveals that only five of these companies are operating beyond a single market (United States). Three of them operate in several different markets, while two companies are established in the United Kingdom and in Canada. This evidence suggests that the internationalisation of large health firms is still at a low level. Table 3.3 summarises the findings from the Fortune Global 500 List.

⁴⁹ Assessment of Fortune's Global 500 was motivated by the fact that it covers 500 companies annually and thus has greater coverage than that provided by the Transnationality and Internationalisation indices.

Table 3.3: Healthcare services Companies in the Fortune Global 500 List

Year	Rank (Year)	Company	Global 500 Rank	Revenues (\$Millions)	Profits (\$Millions)	International Orientation
2007	1	UnitedHealth Group	66	71542	4159	International
2007	2	WellPoint	103	56953	3094.9	US only
2007	3	Medco Health Solutions	148	42543.7	630.2	US only
2007	4	Caremark Rx	172	36750.2	1074	US only
2007	5	Aetna	263	25568.6	1701.7	International
2007	6	HCA	265	25477	1036	US, UK
2007	7	Humana	332	21416.5	487.4	US only
2007	8	Express Scripts	411	17660	474.4	US, Canada
2007	9	Cigna	446	16547	1155	International
2006	1	UnitedHealth Group	116	45365	3300	International
2006	2	WellPoint	117	45136	2464	US only
2006	3	Medco Health Solutions	148	37871	602	US only
2006	4	Caremark Rx	173	32991	932	US only
2006	5	HCA	244	24455	1424	US, UK
2006	6	Aetna	271	22885	1635	International
2006	7	Cigna	399	16684	1625	International
2006	8	Express Scripts	413	16266	400	US, Canada
2006	9	Humana	473	14418	308	US only
2005	1	UnitedHealth Group	123	37218	2587	International
2005	2	Medco Health Solutions	137	35352	482	US only
2005	3	Caremark Rx	204	25801	600	US only
2005	4	HCA	228	23502	1246	US, UK
2005	5	WellPoint	280	20815	960	US only
2005	6	Aetna	298	19904	2245	International
2005	7	Cigna	333	18176	1438	International
2005	8	Express Scripts	405	15115	278	US, Canada
2005	9	Humana	474	13104	280	US only
2005	10	Tenet Healthcare	495	12496	-2640	US only

Source: Fortune Magazine, Individual companies' profiles.

Accountancy services

Commercial presence in accountancy services is conducted in two main forms. The first method of trade consists of a broad array of establishment possibilities and foreign direct investments. This method of international trade through commercial presence is common to many other services. The second method of trade consists of partnerships established between local accountancy firms and large international accountancy firms, whereby local firms take on the brand name of those international firms and act as their local affiliates. This latter method of trade is widely applied in the accountancy sector yet is less frequent in most other service sectors. In other sectors, partnerships exist on a much lower scale. Accountancy services international trade through local partnerships will be discussed thoroughly in Chapter 5, which explains why accountancy services deviate from the theory developed in the next chapter.

FDI data reported in table 3.4 suggest that accountancy services play an important role within accountancy services trade. FDI inflows and outflows significantly grew from 1996 to 2006, reaching annual flows of trillions of US\$. This has been the case for countries like the United States, France, Germany and Austria. The growth of FDI is also clear with regard to FDI stocks, which exceed at least a trillion USD for most OECD countries reported.

The data also show that, in contrast to trade through mode 1, FDI flows are important relative to output in the accountancy sector. In some OECD countries, FDI flows in accountancy services accounted for more than half of all output produced, as in the cases of Denmark,

France and Belgium. The relative importance of FDI flows is also evident for other countries, such as Austria, Ireland and Hungary, as well as the US and the UK.

Table 3.4: FDI Flows, Stocks and Share of Output in Accounting Services in Selected OECD Countries, 2000-2005 (Millions, US\$)

			Austria	Belgium	Czech Republic	Denmark	Finland	France	Hungary	Ireland	Korea	Netherlands	Poland	UK	US
2000	Flows	In	1710	-	-	21566	-	8867	-	-	41	115	8	7163	21429
		Out	1343	-	-	17255	-	49841	-	-	23	138	8	1733	41390
	Stocks	In	6829	-	437	37618	-	85583	-	-	188	1316	654	17590	21024
		Out	5853	-	3	38502	-	114639	-	-	43	677	9	12508	357908
Flows share of output			25.7%		63.3%		56.0%			0.5%	0.7%		0.2%	7.5%	8.8%
2001	Flows	In	980	-	203	6231	-	19684	92	-	19	769	35	4485	-1750
		Out	456	-	14	5370	-	30459	37	-	3	275	-1	1132	45373
	Stocks	In	8835	-	614	39261	-	102870	1218	-	207	2060	726	19836	74810
		Out	5980	-	5	38872	-	171710	328	-	45	1024	105	8663	453233
Flows share of output			11.3%	3.9%	17.8%		44.9%	3.4%		0.2%	2.6%		0.3%	4.5%	6.3%
2002	Flows	In	-219	5269	85	2594	48	-	110	-	7	123	131	-	1721
		Out	3159	10746	7	1827	51	-	19	-	-	290	7	-	45826
	Stocks	In	10577	-	568	39860	1212	130730	1708	-	214	2583	1039	-	78598
		Out	10388	-	2	38618	1912	217824	337	-	-	1785	289	-	543317
Flows share of output			24.4%	45.5%	1.3%	6.4%	1.6%		2.7%		1.0%		1.3%		6.1%
2003	Flows	In	2133	19879	59	1143	-138	-	90	-99	24	255	485	-	4814
		Out	3403	14941	0	-173	37	-	50	337	5	881	47	-	50682
	Stocks	In	14377	-	659	41920	1458	210821	3698	275	239	8670	1700	-	87290
		Out	12206	-	1	40062	2045	297658	40	7232	57	10747	314	-	600675
Flows share of output			32.6%	80.6%	0.6%	1.6%	2.4%		2.3%	5.1%	0.2%	2.3%		4.7%	6.8%
2004	Flows	In	2269	25426	132	-7187	157	11960	367	106	-14	-585	187	-	-
		Out	3619	13290	11	-10162	147	19241	310	-	8	2156	-5	-	114161
	Stocks	In	17927	-	758	51790	1990	225091	-	706	225	-	2557	-	-
		Out	13282	-	3	91	2328	373045	-	9176	66	-	336	-	725616
Flows share of output			29.7%	74.3%	1.3%	17.9%	3.5%	17.4%	9.2%		0.1%	4.8%		1.4%	
2005	Flows	In	3225	-	1614	5158	114	26590	2164	-52	52	-933	785	-	-
		Out	6606	-	117	-2214	452	24770	-61	2084	-	2064	60	-	-131883
	Stocks	In	24900	-	2269	49721	1812	230818	-	1175	277	-	3133	-	90049
		Out	14355	-	157	120	1975	406751	-	10111	-	-	134	-	623116
Flows share of output			48.3%		14.0%	7.0%	6.0%	27.3%	28.3%	17.8%		5.0%		5.1%	

Source: OECD International Direct Investment Statistics, EU KLEMS. Author's calculations.

Foreign Affiliates Trade in Services Statistics (FATS) cover a variety of indicators regarding the activities of foreign companies established in the host country, including export, import, sales, turnover and employment.⁵⁰ FATS statistics are available for accountancy services and are reported in table 3.5. The data show similar patterns regarding the importance of trade through commercial presence. Relatively, the number of foreign controlled enterprises in EU member states is low with the notable exclusion of Cyprus where a fifth of the companies are foreign controlled. However, while the ratio of foreign controlled enterprises in total enterprises is low, their share of total turnover is high. Foreign controlled enterprises' turnover range from 10% to 30% in most countries. These figures represent high levels of international trade through commercial presence. It is also evident that the share of employees engaged by foreign controlled enterprises is far greater than their relative number in the domestic economy. These figures may imply that foreign accountancy services suppliers, providing services through commercial presence, tend to be of a larger firm size.

⁵⁰ These statistics were not available for healthcare services.

Table 3.5: Share of Foreign Controlled Enterprises, Turnover and Employment Out Of Total Enterprises, 2003-2006 (percentage) *

	Number of companies				Number of Employees				Turnover (or gross written premiums)			
	2003	2004	2005	2006	2003	2004	2005	2006	2003	2004	2005	2006
Austria	3.1%	3.0%	2.6%		4.3%				10.7%			
Bulgaria	0.7%	0.9%	1.0%	1.1%	6.2%	7.3%	8.2%		15.4%	19.0%	20.3%	
Cyprus	25.0%	19.2%	20.8%	20.8%						12.3%	10.2%	8.9%
Czech Republic	0.1%	0.1%	0.1%		8.0%	9.1%	10.9%	17.3%	20.7%	25.0%	25.8%	25.5%
Estonia	1.2%	1.2%	1.3%		22.9%	20.5%	25.1%	24.0%	31.0%	23.2%	22.2%	23.0%
Spain	0.2%	0.2%	0.2%		8.1%	7.0%	5.3%		16.5%	16.1%	15.6%	
Finland		3.7%	4.1%	3.8%	10.8%	12.1%	13.0%		16.4%	16.7%	17.5%	
France	5.3%	4.4%	4.5%	5.6%	8.7%	8.1%	8.4%		13.2%	12.1%	14.4%	
Hungary	3.6%	4.0%	2.8%		3.4%	4.0%	3.8%	7.7%	17.2%	18.2%	16.7%	24.0%
Italy	0.1%	0.1%	0.1%	0.2%	7.1%	7.3%	9.6%		9.0%	9.2%	9.4%	
Lithuania	0.7%	0.7%	1.0%		9.9%	10.2%	10.6%			17.5%	18.1%	
Latvia	0.9%				12.6%	14.4%	12.4%	14.7%	26.8%	27.5%	23.2%	22.7%
Netherlands	0.5%	0.6%	0.8%	1.0%	6.6%	7.7%	7.0%		10.9%	11.4%	10.8%	
Portugal	0.2%	0.4%	0.3%	0.4%	6.1%	5.1%	3.3%	3.5%	11.9%	10.4%	10.1%	12.6%
Romania	1.4%	1.3%			5.7%	9.0%	7.3%	9.7%	7.3%	27.9%	14.9%	18.2%
Sweden		1.0%	2.1%	2.7%	3.2%	4.3%			5.5%	11.6%		
Slovenia	0.6%	0.6%	0.7%		43.6%	47.4%			15.8%	17.6%	17.9%	19.8%
Slovakia	1.1%	1.1%	1.1%	1.1%		0.6%	7.1%	4.2%		0.7%	6.3%	5.9%

* Data reported for NACE K741-4 of which accountancy firms' activities constitute the major share.

Source: Eurostat. Author's calculations.

Data calculated from ORBIS database, and reported in table 3.6, confirm and complement FATS data. The number of foreign controlled enterprises in total enterprises is higher than that reported in FATS statistics, particularly in countries such as Belgium, the United Kingdom and the United States. Foreign owned accountancy firms have significant shares in total turnover in Europe and the United States. Significant cross-border trade in accountancy services takes place in countries such as Belgium (68.8%), Germany (39.6%), Poland (44.8%) and Spain (59.6%). Comparing healthcare and accountancy services on an aggregated basis, it is evident that levels of commercial presence trade in accountancy are higher than those in the healthcare sector.

Further ORBIS data for Italy and Poland show that commercial presence trade in management and consultancy services is also very important. These services are often provided by similar firms as those providing accountancy services and thus supplement the data on the activities of foreign-owned accountancy and auditing firms. In Poland and in Italy, 84% and 62.6% respectively of total turnover is produced by foreign-owned firms.

Finally, ORBIS data report higher levels of employment of domestic employees by foreign-owned enterprises than reported in the FATS statistics. In Belgium, the Netherlands and Poland over 50% of all employees were employed by foreign-owned accountancy firms.

Table 3.6: Trade in Accountancy Services Mode 3

Category	Country	Number of companies					Operating Revenue/Turnover (mil USD)					Employees				
		Total	Foreign Number	(%)	Domestic Number	(%)	Total	Foreign Number	(%)	Domestic Number	(%)	Total	Foreign Number	(%)	Domestic Number	(%)
Accounting, book-keeping and auditing activities; tax consultancy	Australia															
	Belgium	35	14	40.0%	21	60.0%	1051	723	68.8%	328	31.2%	2410	1232	51.1%	1178	48.9%
	Canada															
	Germany	380	8	2.1%	372	97.9%	7235	2864	39.6%	4371	60.4%	31810	5820	18.3%	25990	81.7%
	Hungary															
	Italy	74	35	47.3%	39	52.7%	2494	259	10.4%	2235	89.6%	7015	744	10.6%	6271	89.4%
	Netherlands	12	7	58.3%	5	41.7%	88	52	59.1%	36	40.9%	521	270	51.8%	251	48.2%
	Poland	336	25	7.4%	311	92.6%	270	121	44.8%	149	55.2%	2458	1394	56.7%	1064	43.3%
	Spain	2526	215	8.5%	2311	91.5%	30203	17993	59.6%	12210	40.4%	68672	13311	19.4%	55361	80.6%
	UK	586	60	10.2%	526	89.8%	2689	291	10.8%	2398	89.2%	8640	934	10.8%	7706	89.2%
US	180	27	15.0%	153	85.0%	6597	249	3.8%	6348	96.2%	26780	3678	13.7%	23102	86.3%	

Source: ORBIS, Author's calculations.

Movement of Natural Persons

The final mode of services supply takes place when labour moves between countries and produces the service in the consumer's home territory. The movement of natural persons can take place in various ways. First, there can be the movement of intra-corporate transfers, whereby employees of a certain company move between countries but are still employed within the same company.⁵¹ Another means can be the movement across the border of independent persons seeking work either as independent services providers or as employees.

Healthcare services

Healthcare professionals can move permanently, or temporarily, for purposes such as working holidays (sabbatical), study visits for the acquisition of knowledge and techniques, as well as fixed-term contracts. Various push and pull factors have been surveyed in the healthcare sector to explain this. Push factors in the home country include low wages, poor working conditions, scarcity of resources and career development limitations. Among the pull factors are higher absolute and relative wages, better working conditions, career opportunities, greater availability of resources for work, the shortage of medical staff in many OECD countries and various policies enacted by OECD countries to attract physicians and nurses (Buchan 2006; Simoens and Hurst 2006; Buchan 2007).

Generally, statistics on the movement of natural persons leave a lot to be desired. Where they exist they are often incomplete and lack comparability between countries and sectors. Nevertheless, in recent years, a growing body of literature in the medical field has been

⁵¹ Intra-corporate transference is also popularly referred to as "relocation".

examining the magnitude of and directions in the employment of healthcare professionals and International Medical Graduates (IMG) outside of their home country. In many instances, this literature either focuses on country specific case studies or it examines the extent of the brain-drain phenomenon, whereby international medical graduates' and healthcare professionals' migration from developing countries to developed economies, creates knowledge and professional shortages in developing countries.

Several conclusions can be drawn from OECD data on the composition of foreign-trained physicians in the workforce of several OECD member states (Simoens and Hurst 2006). First, great variety exists among the source countries of physicians working abroad in OECD countries. Source countries include most OECD member states, as well as other countries in Europe, Latin America, Asia and Africa. But, while source countries vary to a large extent, the magnitude of diversity varies across OECD countries. For example, while the United Kingdom and the United States attract physicians from numerous countries in different regions, some countries, like Denmark and Austria, source physicians from a limited range of countries.

Second, developing countries are an important source of physicians who are open to moving abroad. Physicians are moving to OECD economies from developing nations in Africa, Eastern Europe, the Middle East, Asia and other regions. India, Pakistan and South Africa play a significant role as source countries, particularly with regard to the Anglo-Saxon countries: Canada, the United Kingdom and the United States.

Finally, despite the noticeable exports of professionals from developing countries to developed countries, the latter are often themselves source countries for exporting physician services through mode 4. Germany, the United Kingdom and New Zealand are examples. The direction of the flow of physicians between countries is not one way. Several OECD countries are at the same time source and host countries to each other. Ireland and the United Kingdom, and Australia and the United Kingdom are examples.⁵²

Analysis of data gathered in several EU member states leads to key findings concerning the movement of healthcare professionals.⁵³ First, the numbers and shares of foreign healthcare professionals employed in many member states are growing. The United Kingdom reported in 2004 that foreign nationals made up over 9.37% of its healthcare labour force. Specifically, 18.13% of its medical doctors were foreign nationals. These numbers are considered to be even higher today following the 2004 and 2007 enlargements of the EU and the abolition of barriers to the cross-border movement of people within the EU (Blitz 2005; Research and Statistics Service 2006). In the same way, 13.93% of the Netherlands' healthcare professionals were foreign nationals (Ministry of Justice 2006).

Second, while foreign healthcare professionals have a growing role in the provision of healthcare services in Europe, most of them are from non-EU countries. This evidence supports past findings indicating the significance of developing countries as a supply source of healthcare professionals employed in the EU (Simoens and Hurst 2006). For example, the

⁵² It is also noticeable that language affinity plays an important role and physicians tend to move between countries with similar languages.

⁵³ The data were assembled in 11 case studies conducted under the European Migration Network. Member states that participated in the studies include: Austria, Belgium, Estonia, Germany, Greece, Ireland, Italy, Latvia, the Netherlands, Sweden and the United Kingdom. In almost all cases, the year of reference is 2004. For the final report, see: European Migration Network, 2006.

share of healthcare professionals employed in Germany from both the EU-25 and the EEA is only 1.42% compared with 2.35% coming from outside the EU. This difference is much higher in the Netherlands, where only 4.04% of the healthcare professionals came from the EU, compared with 9.89% who came from outside the EU. Similarly, only 2.36% of healthcare professionals in the UK came from other EU countries, in contrast to almost 7% coming from outside the EU (Derst, Heß et al. 2006; Ministry of Justice 2006; Research and Statistics Service 2006).

Third, in some of the member states that are a destination for EU healthcare professionals, these EU healthcare professionals take precedence over non-EU healthcare professionals in specialised areas. Fourth, in some specialised areas, EU healthcare professionals moving to other member states represent a relatively large share of the total number of professionals working in these fields, as well as significantly exceeding the share of non-EU professionals in these areas. For example, in Austria, EU foreign nationals constitute 8.17% of all physiotherapists, 7.54% of occupational therapists, 6.27% of speech therapists, 6.94% of paediatric nurses.⁵⁴ In Belgium, 7.18% of medical doctors and 4.75% of physiotherapists were EU foreign nationals. 8.7% of the pharmacists and 8% of psychologists in Ireland came from other member states. In Sweden, 7.03% and 5.17% of medical specialists and nurses respectively were from other member states. Finally, 10.53% of all psychologists in the United Kingdom were foreign EU-nationals (Pacolet and Merckx 2006; Quinn 2006; Schutz 2006; Swedish EMN NCP 2006). This data indicate the existence of specialisation of several countries in specific medical professions, as well as the customs like-effect of border controls on mode 4 trade. The free movement of labour within the EU enables greater tradability and facilitates division of labour.

⁵⁴ The data for Austria does not include medical doctors.

Fifth, somewhat surprisingly, new member states' share of healthcare professionals moving to other member states is very low. In many cases, such as in Belgium, Germany, the Netherlands, Sweden and the United Kingdom, their share is below one percent. Since the reported data address 2004, the year in which the EU-10 acceded to the EU, there is a possibility that newer data reflect changed patterns and that their actual share today is much higher. Furthermore, restrictions on the movement of workers from the new member states still prevails in some of the old member states following enlargements, which act as a barrier to greater trade and specialisation patterns that are likely to take effect. An indication of the enlargement effect can be seen in the United Kingdom, which has lifted all restrictions on movement immediately following the 2004 enlargement. Analysis of the Nurses and Midwifery Register for the years 2004-2008 shows steep growth in the admission of new nurses and midwives coming from the new member states to the United Kingdom, particularly from Poland, the Czech Republic, Hungary, Slovakia and Lithuania. Romania and Bulgaria became important source countries following their accession to the EU in 2007. For example, the number of Polish nurses admitted to the UK rose from 133 in 2004 to 578 in 2008, representing an increase of over 430% (Nursing and Midwifery Council 2005; Nursing and Midwifery Council 2006; Nursing and Midwifery Council 2007). Some of the above findings are summarised in table 3.7.

The data concerning the movement of healthcare professionals suggest that, while influenced by legal and institutional developments at EU level to allow greater mobility for healthcare (and other) professionals, the mobility of EU healthcare professionals to other member states is influenced by a broader international trend. The dynamics of healthcare professionals'

movement in the EU are also considered to be influenced by both shortages of healthcare professionals in many member states and the active recruitment policies of some of the latter (European Migration Network 2006).

Table 3.7: Overview of Healthcare Workers in Selected EU Member States, 2004

	Austria		Belgium		Estonia		Germany		Ireland		Italy		Latvia		Sweden		United Kingdom	
Doctors/ Physicians																		
Nationals	N/A		43679	92.2%	5189	99.6%	155564	95.1%	9074	76.9%	50584	80.2%	5389	79.7%	N/A		131000	81.9%
Other EU Nationals	N/A		3203	6.8%	11	0.2%	3703	2.3%	366	3.1%	3829	6.1%	10	0.1%	N/A		5000	3.1%
Non-EU Nations	N/A		510	1.1%	8	0.2%	4349	2.7%	2360	20.0%	8698	13.8%	1180	17.5%	N/A		23000	14.4%
Total Non Nationals	N/A		3713	7.8%	19	0.4%	8052	4.9%	6019	23.1%	12527	19.8%	1190	17.6%			28000	17.5%
Total	38422		47392		5208		163619		11,800		63111		6579				160000	
Nurses/ Midwives																		
Nationals	46094	93.4%	120004	96.7%	10578	99.9%	669755	96.2%	46033	91.7%	336916	98.4%	11088	77.9%	88311	91.1%	1249000	91.0%
Other EU Nationals	2320	4.7%	2864	2.3%	5	0.0%	9405	1.4%	1205	2.4%	1989	0.6%	13	0.1%	5096	5.3%	30000	2.2%
Non-EU Nations	940	1.9%	1197	1.0%	4	0.0%	16878	2.4%	2962	5.9%	4741	1.4%	3127	22.0%	3505	3.6%	94000	6.8%
Total Non Nationals	3260	6.6%	4061	3.3%	9	0.1%	26283	3.8%	4167	8.3%	6730	2.0%	3140	22.1%	8601	8.9%	124000	9.0%
Total	49354		124065		10587		696039		50,200		342273		14228		96912		1373000	
Dentists																		
Nationals	N/A		8557	95.2%	1337	99.0%	7274	95.5%	1644	96.7%	N/A		994	82.6%	N/A		24000	88.9%
Other EU Nationals	N/A		370	4.1%	2	0.1%	123	1.6%	56	3.3%	N/A		1	0.1%	N/A		2000	7.4%
Non-EU Nations	N/A		63	0.7%	2	0.1%	217	2.8%	0	0.0%	N/A		209	17.4%	N/A		1000	3.7%
Total Non Nationals	N/A		433	4.8%	4	0.3%	340	4.5%	56	3.3%			210	17.4%			3000	11.1%
Total			8990		1351		7620		1700				1204				27000	
Physiotherapists																		
Nationals	2288	90.7%	27257	93.7%	N/A		131586	97.3%	1692	94.0%	N/A		N/A		29973	92.4%	50000	96.2%
Other EU Nationals	206	8.2%	1329	4.6%	N/A		2560	1.9%	108	6.0%	N/A		N/A		1337	4.1%	1000	1.9%
Non-EU Nations	28	1.1%	516	1.8%	N/A		1043	0.8%	0	0.0%	N/A		N/A		1114	3.4%	1000	1.9%
Total Non Nationals	234	9.3%	1845	6.3%	N/A		3603	2.7%	108	6.0%	N/A		N/A		2451	7.6%	2000	3.8%
Total	2522		29102				135190		1800						32424		52000	

Source: European Migration Network (2006), *Managed Migration and the Labour Market –The Health Sector: Synthesis Report*.

Further data on medical graduates in the United States, the United Kingdom, Australia and Canada suggest that the magnitude of IMGs in the physician workforce is significantly high. According to the data presented in table 3.8 in the United Kingdom in 2004, 28.3% of employed physicians were IMGs. The ratio of foreign physicians has considerably increased in the past two years, particularly for the United Kingdom, with the vast majority coming from developing countries. Developing countries contributed 75.2%, 60.2%, 43.4% and 40% to the United Kingdom, United States, Canada and Australia, respectively. In contrast, IMGs from these four countries respectively accounted for 2.5%, 6.5%, 22.3% and 33.5% of the workforce (not counting the home country).⁵⁵ Table 3.8 reports the distribution and magnitude of IMGs in the physician workforce of those four OECD countries disaggregated to main source countries.

Data for the United States also show the share of IMGs within the physician workforce according to specialisation areas. 36% of internal medicine physicians are IMGs. IMGs also account for 31.4% in psychiatry, 29% in anaesthesiology, 28% in paediatrics, 20% in general surgery, 18.8% in radiology, and 17.8% in both family medicine and obstetrics/gynaecology (American Medical Association 2007).

These findings provide another indication of the growing trade in healthcare services through mode 4 as well as of the existence of specialisation patterns reported in the case of the EU.

⁵⁵ For each country, the combined share of the other three reporting countries is calculated, omitting the host country itself.

Table 3.8: IMGs in the Physician Workforces of Selected OECD States

Source Country	IMGs from SC ¹ (no of Workforce)	IMGs from SC ¹ (%Workforce)	Source Country	IMGs from SC ¹ (no of Workforce)	IMGs from SC ¹ (%Workforce)
Canada			Australia		
United Kingdom	2,735	4	United Kingdom	4,664	8.6
South Africa	1,754	2.6	India	2,143	4
India	1,449	2.1	New Zealand	1,742	3.2
Ireland	1,164	1.7	South Africa	1,253	2.3
Saudi Arabia	658	1	Sri Lanka	627	1.2
Egypt	558	0.8	Egypt	545	1
United States	519	0.8	Singapore	438	0.8
Poland	441	0.6	Ireland	424	0.8
France	432	0.6	Hong Kong	312	0.6
Pakistan	320	0.5	Poland	189	0.3
Philippines	261	0.4	Philippines	157	0.3
Australia	247	0.4	Malaysia	152	0.3
Hong Kong	224	0.3	Pakistan	133	0.2
Vietnam	223	0.3	China	112	0.2
Taiwan	189	0.3	Vietnam	108	0.2
Romania	187	0.3	Germany	101	0.2
Jamaica	179	0.3	Myanmar	93	0.2
Sri Lanka	163	0.2	Hungary	85	0.2
Lebanon	161	0.2	Serbia & Montenegro	78	0.1
Kuwait	154	0.2	Slovakia	76	0.1
Source Country	IMGs from SC ¹ (no of Workforce)	IMGs from SC ¹ (%Workforce)	Source Country	IMGs from SC ¹ (no of Workforce)	IMGs from SC ¹ (%Workforce)
United States			United Kingdom		
India	40,838	4.9	India	15,093	10.9
United States*	25,380	3	Ireland	2,845	2.1
Philippines	17,873	2.1	Pakistan	2,693	1.9
Pakistan	9,667	1.2	South Africa	1,980	1.4
Canada	8,990	1.1	Egypt	1,592	1.1
China	6,687	0.8	Nigeria	1,529	1.1
Former USSR	5,060	0.6	Germany	1,523	1.1
Egypt	4,593	0.5	Sri Lanka	1,422	1
Mexico	4,578	0.5	Iraq	1,248	0.9
South Korea	4,401	0.5	Australia	872	0.6
Iran	4,002	0.5	Spain	657	0.5
United Kingdom	3,439	0.4	Greece	596	0.4
Dominican Rep.	3,232	0.4	Myanmar	487	0.4
Syria	3,219	0.4	Jamaica	472	0.3
Germany	3,071	0.4	Italy	464	0.3
Lebanon	2,556	0.3	Bangladesh	464	0.3
Nigeria	2,392	0.3	Netherlands	419	0.3
Argentina	2,374	0.3	Sudan	395	0.3
Poland	2,365	0.3	Libya	394	0.3
Colombia	2,362	0.3	New Zealand	305	0.2

1 Source Country.

2 U.S. IMGs are US citizens who have gone abroad for medical education and returned to the United States to practice.

Source (Mullan 2005).

Accountancy services

Movement of natural persons as a mode of international trade in accountancy services includes the movement of accountants, tax consultants, auditors and other accountancy services professionals from one country to another. This movement takes two general forms. First, accountancy professionals move across borders offering their services either on an independent basis or as professionals within established firms. Foreign accountancy professionals employed in firms are not confined to services provision in specialised accountancy services firms. These professionals can also provide their services in-house within firms operating in a wide spectrum of industries and services throughout the economy. Second, and perhaps the more frequent way of services provision in mode 4, is the cross-border movement of accountancy professionals inside different segments of global accountancy firms as intra-corporate transferees or secondments. As mentioned earlier, the particular movement of accountancy professionals within big, global accountancy firms will be further elaborated in Chapter 5.

In researching the dynamics of accountancy professionals in Ireland, Hanlon found that an increasing number of accountants was migrating abroad to work internationally in the accountancy industry. These accountants were viewing their careers as international rather than as national. His findings show that, as early as 1911, 14% of the Irish Chartered Accountants Institute (ICAI) members were working abroad. These figures rose to 22% by 1990 (Hanlon 1994: 160; Hanlon 1999: 202).

Typically of mode 4 trade, statistics are limited with regard to the movement of accountancy professionals. Nevertheless, some data exist for several countries, particularly those which are considered to be home countries of the major accountancy firms, the UK and the US. Data also exist for Australia as part of its data collection within its GSM Programme rewarding prospective migrants with specialised skills with the higher points needed for their settlement visa.

The data reported below for the UK and Australia should be assessed with a pinch of salt for several reasons. First, it is limited to two countries of somewhat similar Anglo-Saxon traditions. Second, as financial centres and centres of operation for the major accountancy firms, the UK and the US are critical junctions for intra-corporate transfers of employees as part of their training and employment lifecycle. Finally, as mentioned above, Australia (and Canada) operate selective affirmative policies to attract foreign accountancy (and other) professionals.⁵⁶ Thus, while the temporary movement of accountancy professionals is a widespread phenomenon, it is likely that figures for countries other than the UK will be somewhat lower.

Data collected for the UK on the geographical distribution of membership in accountancy societies show that the share of foreign accountants becoming members of British accountancy societies has grown from 4.3% in 1891 to almost 23% in 1991. The data reported in table 3.9 also show that a significant movement of accountants had taken place already by the late nineteenth century. Evidence also exists for a considerable historical outflow of UK accountants. Thirty-three percent of chartered accountants who qualified in

⁵⁶ These programmes also apply to other services sectors, including medical professionals.

Exeter between 1880-1939 migrated to Continental Europe, and North and South America as well as to Australia (Parker 2004: 62). As early as 1850, the US in particular was a host country for a growing number of UK chartered accountants, with a sharp increase in the beginning of the 1900s (Lee 2001; Lee 2002).

Table 3.9: Geographical Distribution of Membership of Accountancy Societies in the UK, 1891-1991

	Society	Local	Abroad
1891	ICAEW	97.1	2.9
	SAA	90.7	9.3
	Total	95.7	4.3
1911	ICAEW	80.5	19.5
	SIAA	73.4	26.6
	CAA	83.5	16.5
	LAA	89.2	10.8
	Total	80	20
1931	ICAEW	88.3	11.7
	SIAA	81.1	18.9
	CAA	83.7	16.3
	LAA	76.7	23.3
	Total	84.2	15.8
1951	ICAEW	89.7	10.3
	SIAA	80.4	19.6
	ACCA	80.3	19.7
	ICWA	80.7	19.3
	Total	84.5	15.5
1971	ICAEW	86.4	13.6
	ACCA	75	25
	ICWA	70.7	29.3
	Total	81.9	18.1
1991	ICAEW	85.5	14.5
	ACCA	59.1	40.9
	CIMA	72.7	27.3
	Total	77.1	22.9

Source: (Matthews 2006: 48-49)

Table 3.10 shows that the share of Australian-born accountancy professionals employed in their profession in the domestic market dropped significantly from 2001 to 2006. Taken as an indicator of cross-border movement of professionals, the data reported show that, already in

2001, almost 29% of accountancy professionals employed in Australia were foreign-born. This share rose to almost 34% by 2006. The data remain significant even if the numbers are considerably lowered to compensate for the fact that not all foreign-born accountancy professionals' employment is, in fact, due to the international movement of natural persons.⁵⁷ It is also evident that the vast majority of foreign-born accountancy professionals moved from countries which are, relatively speaking, geographically close to Australia. These results are also confirmed by SOPEMI⁵⁸ data finding that the top five source countries were the United Kingdom (18%), India (15%), China (11%), Malaysia (4%) and the Philippines (3%) (OECD. 2008).

⁵⁷ The indicator could represent a certain bias as it also includes Australians who were born abroad and persons who were naturalised in Australia prior to their study of accountancy and their subsequent employment.

⁵⁸ Systeme d'Observation Permanent des Migrations de l'OCDE.

Table 3.10: Birthplace of persons employed as accountants, corporate treasurers and auditors in Australia, May 2001 and May 2006

Birthplace	Employed Total		% of occupation	
	May-01	May-06	May-01	May-06
Australia	100,538	105,049	71.3	66.1
New Zealand	2,399	3,192	1.7	2
Other Oceania Antarctica	1,827	1,512	1.3	1
UK & Ireland	10,113	9,226	7.2	5.8
South Eastern Europe	724	993	0.5	0.6
Eastern Europe	91	701	0.1	0.4
Other Europe	2,293	3,748	1.6	2.4
Middle East/ North Africa	3,684	2,063	2.6	1.3
India	2,904	2,495	2.1	1.6
Philippines	1,705	1,629	1.2	1
Vietnam	1,303	2,195	0.9	1.4
China (excludes SARs & Taiwan)	2,331	5,904	1.7	3.7
Hong Kong (SAR of China)	2,097	4,135	1.5	2.6
Malaysia	1,645	2,450	1.2	1.5
Singapore	1,242	1,584	0.9	1
Indonesia	0	758	0	0.5
Other Southern & Central Asia	1,500	3,258	1.1	2
Other North & South East Asia	1,286	1,666	0.9	1
USA & Canada	256	725	0.2	0.5
Other Americas	306	167	0.2	0.1
South Africa	854	3,686	0.6	2.3
Other Africa	1,290	1,549	0.9	1
Not Stated	0	352	0	0.2
Total	140,988	159,037	100	100

Source: The Changing Face of the Accountancy Profession in Australia (Birrell, Hawthorne et al. 2006: 11).

Conclusions

The empirical investigation in this chapter and in the previous one confirms the hypothesis that international trade in services is positively correlated with physical proximity between consumers and producers. Greater international trade in services takes place when foreign services providers and their factors of production produce in the territory of the services consumer. While proximity appears to be a constraint or a “burden” on international trade in services, it remains unclear why it is so. This is of particular interest given the 20/80 gap and the increased potential tradability of services using ICT infrastructure. The next chapter will

investigate this point in depth identifying the mechanisms underlying the proximity relationship.

This chapter finds that, as in cross-border and consumption abroad trade, similar trade patterns take place for healthcare and accountancy services that are traded through commercial presence and through the movement of natural persons. In both service sectors, commercial presence is significantly higher than other modes of trade as indicated by the ratios of foreign-owned services providers' total turnover. Other indicators support this analysis to various degrees. In healthcare services, aggregated FDI data show a weaker indication when all countries in the world are grouped into either developed or developing countries groups. However, disaggregated ORBIS data referring to specific countries show a much stronger indication for significant commercial presence trade. International healthcare companies are also present in the Fortune Global 500 Index, as well as involved in several major international mergers. In the accountancy sector, trade through commercial presence is particularly high, with evidence for substantial trade as a share of total output and total revenues.

The movement of natural persons is high in both accountancy and healthcare sectors. The results on movement of healthcare professionals in the EU are somewhat surprising, given the assumption that EU integration favours internal mobility over external mobility. High numbers of foreign healthcare professionals hosted in many member states come mainly from outside the EU. Nevertheless, EU healthcare professionals' mobility rates are higher than the overall levels of labour mobility within the EU (Heinz and Ward-Warmedinger 2006). Furthermore, the data show that concentration of EU healthcare professionals takes place in

some specialised healthcare professions in several member states. Data on the movement of natural persons in the accountancy sector are more limited than in healthcare, particularly as much of this movement takes the form of intra-corporate transferees and is not reported in statistics. Nevertheless, the data on the UK and Australia suggest that substantial movement of accountancy professionals is also taking place.

The empirical investigation of Chapter 2 and Chapter 3 attempted to provide a comprehensive analysis of international trade in services in healthcare and accountancy services. Given data limitations, this analysis is by no means complete. Nevertheless, the analysis improves on existing measurements of international trade as it covers all four modes of services trade, while conventional statistics typically concentrate on one or two dimensions of this trade. In that regard, this analysis is probably the most in-depth measurement of international trade in services for particular these two service sectors.

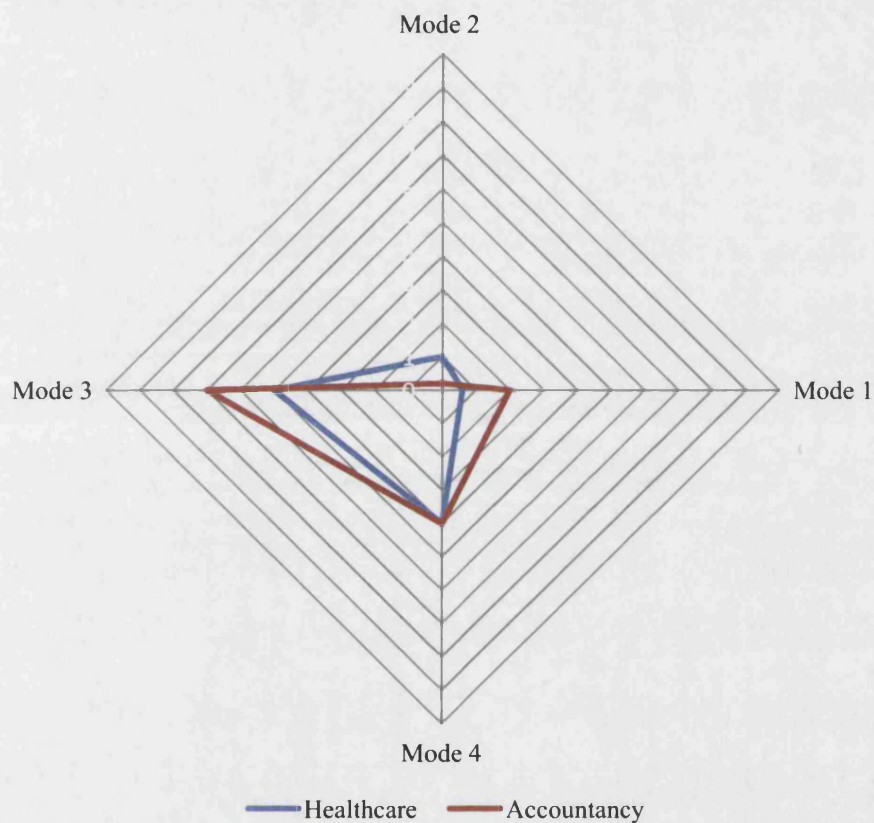
The findings in both empirical chapters advance the literature in at least three ways. First, they expand the debate in the literature regarding the relative importance and relationship between cross-border trade and commercial presence (FDI). Providing a detailed analysis of very different service sectors had yielded a similar outcome, whereby commercial presence is much more important than cross-border trade. In that regard, one of the caveats in the existing literature is that the analysis is mostly confined to absolute figures of trade, thus blurring the overall picture of how much is really traded out of how much is produced. The second finding, which is largely absent from the literature, is that trade in services ought to be scrutinised also through consumption abroad and movement of natural persons modes. The latter is evidently very important and fits in with conventional trade theory on factor

movement. Furthermore, the patterns of internationalisation in both service sectors suggest that complementarities exist between trade in mode 3 and trade in mode 4. Finally, as mentioned in the beginning of this section, it is evident that trade in services becomes significant when services suppliers are close to consumers. Following on from a comprehensive analysis of the patterns through which international trade in services takes place, the next chapter examines the causes of these patterns.

Graph 3.1 provides a graphical illustration of international trade in healthcare and accountancy services, based on the modes of supply analysis. Each of the axes has a positive scale (modes 3 and 4 do not represent negative measurement) and corresponds to a different mode of service supply. Since comparable data between different modes of supply are not available (with the exclusion of modes 1 and 2), each axis uses a different measurement for the level of international trade. Cross-border trade and consumption abroad scales represent levels of trade in relation to output. The commercial presence axis shows ratios of turnover by foreign-owned firms in total turnover. Finally, movement of natural persons represents the percentage of foreign professionals in the specific workforce. While the graph is only an illustrative representation, it offers the possibility to compare the internationalisation of two or more sectors. Since each axis represents a ratio, its scale is between zero and one and thus, with improved data, a more precise comparison is possible in the future.⁵⁹ The further the area covered is from the intersection of the axes, the higher the internationalisation of the sector. Graph 3.1 shows that, although accountancy services are traded more than healthcare services, their internationalisation patterns are identical. The graph indicates that internationalisation takes place mostly in modes 3 and 4.

⁵⁹ It is important to note that the graph does not illustrate the magnitude of trade, which is indeed non-comparable between the four sectors (perhaps only between modes 1, 2 and 3). The graph reports the degree to which a given service sector is internationalised in relation to the domestic economy.

Graph 3.1: International Trade in Services in Healthcare and Accountancy Services by Modes of Supply



Finally, table 3.11 provides countries' ranking in international trade in accountancy and healthcare services, according to different modes of services provision.⁶⁰ It is evident from the table that countries' relative trade performance varies according to modes of supply.

⁶⁰ Data limitations might explain why the United Kingdom is the only country that appears in all modes of supply in healthcare services.

Table 3.11: Leading Countries in International Healthcare and Accountancy Services Trade ¹

Ranking	Cross-border trade		Consumption abroad		Commercial presence ³		Movement of professionals ²	
	Accountancy	Healthcare	Accountancy	Healthcare	Accountancy	Healthcare	Accountancy	Healthcare
1	Netherlands	Italy		Germany	Canada	Belgium	UK	Australia
2	Luxembourg	Denmark		Switzerland	Spain	Canada	Australia	Germany
3	US	Czech Rep.		Belgium	Netherlands	UK	US	India
4	UK	Australia		Turkey	Poland	Spain		Ireland
5	Sweden	UK		Canada	Germany	Poland		Norway
6	Poland	Poland		Hungary	UK	US		Pakistan
7	Belgium	Slovakia		Italy	Italy	Germany		Philippines
8	Italy	Slovenia		UK				S. Africa
9	Australia	Cyprus		Czech Rep.				UK
10	Czech Rep.	Romania		Korea				US

¹ Based on the availability of data.

² Countries listed under the movement of professionals mode are not ranked, but constitute key countries in this mode of trade, either exporting, importing or both. The listing is in alphabetical order.

³ Importing countries.

Chapter 4: the Theory of Services Co-Production and the Services

Production Trap

The aim of this chapter is two-fold: It sets out to define services, particularly in contrast to other market entities, as well as to reveal features that are unique to services and which play a critical role in the process of trade and internationalisation. An understanding of what constitutes services is an initial and essential step in explaining why international trade in services differs significantly from that of goods, and why trade in services is subject to a proximity constraint. On the basis of an extensive review of the concept of services, this chapter addresses the thesis' core questions by proposing a theory of services co-production involving both producers and consumers. The co-production process of services leads to the proximity bias in trade, namely the Services Production Trap (SPT).

Conceptualising Services

A student of economics or an occasional reader of economic textbooks and literature will find that goods and services are analysed together, with little material or conceptual distinction between the two. While the average person would distinguish between a particular good and a particular service, economic literature bundles together goods and services when dealing with concepts such as utility, production, trade and more. The distinction between goods and services is central to explaining the differences in trade and production patterns, particularly with regard to international trade.

Conceptualising what services are is a first step in understanding why international trade in services follows the findings of previous chapters. The challenge of conceptualisation is three-fold. First, the definition should be broad enough to encompass all service activities. Second, it ought to mark clearly the borderline between services and other market entities such as goods. Finally, the definition of services should provide an account of what services are rather than distinguishing them by what they are not.

The following discussion critically assesses different conceptualisations of services as treated mainly in economic literature, as well as in sociology, political science, marketing and philosophy. The treatment of services in the literature can be analysed in respect of both ontology and epistemology. From an ontological point of view, physical traits are emphasised, with services almost always being considered as immaterial objects. Epistemologically, services are viewed more as processes and changes which are either material or immaterial. These dimensions are observed in terms of time and space, relating to the ability of services to endure over time, as well as to the geographical distance between service suppliers and consumers.

Table 4.1 illustrates the conceptual treatment of services along the dimensions of epistemology and ontology observed through time and space. The discussion will show that the literature fails to provide a conceptualisation which fits both dimensions, as well as account for the above challenges of defining services. The following sub-sections review definitions of services based on their physical characteristics, processes and relationships and

other definitions. It shows that these definitions are limited and only partially fit the different rubrics of possibilities in the table.⁶¹

Table 4.1: Conceptualisation of Services

		Epistemology							
		Outcome			Change and Process				
			Space			Space			
Proximity	No Proximity		Proximity	No Proximity					
Ontology	Material	Time	Simultaneous			Time	Simultaneous		
			Production-Consumption				Production-Consumption		
			"Stockability"				"Stockability"		
	Immaterial	Time	Simultaneous			Time	Simultaneous		
Production-Consumption					Production-Consumption				
"Stockability"					"Stockability"				

⁶¹ Other definitions which mainly deal with different categories of services are not addressed here. The typology used here is analytically useful, yet it should be noted that many of the definitions and attributes discussed here often fit more than one category, and occasionally are rather vague and opaque. Definitions which cluster services into different types of technical classifications are not discussed here for lack of theoretical relevance.

Definitions Based on Physical Characteristics

Definitions of services based on physical characteristics emphasise four main aspects. Services are treated as intangible, simultaneously produced and consumed, non-durable, cannot be stocked and thus unproductive and not contributing to national income (Delaunay and Gadrey 1992). These definitions view services as final outcomes or outputs and, to a large extent, they are a legacy of classical economics' focus on supply-side production. Moreover, these definitions can be regarded as negative in the sense that they attempt to draw a marking line between services and goods, rather than positively specifying their unique qualities or essence. The foundations of the perception that services are perishable and non-durable had been laid out by Adam Smith,⁶² and were further accepted and elaborated on by other economists such as Malthus, Ricardo, Say, Simonde de-Sismondi, Mill or Saint-Simon, who argued that services are perishable, non-durable, cannot be stocked and cannot be regarded as part of the national capital (Say 1821: 134-139; Mill 1909: Book I, Ch. 3; Sismondi and Hyse 1991: 123; Delaunay and Gadrey 1992: 28-29; Malthus 2001: 102; Smith 2001: Book II, 438).⁶³ The focus on intangibility led later authors to argue that services are inaccessible to the senses, since *"they cannot be seen, felt, tasted, or touched in the same manner in which goods can be sensed"* (Zeithaml, Parasuraman et al. 1985: 33). Others have

⁶² According to Smith, contrary to the labour of the manufacturer, the *"labour of the menial servant...does not fix or realize itself in any particular subject or vendible commodity. His services generally perish in the very instant of their performance, and seldom leave any trace of value behind them, for which an equal quantity of service could afterwards be procured"* Smith, A. (2001). "An Inquiry into the nature and causes of the wealth of nations." from http://www.theacademiclibrary.com/login_cat.asp?filename=1843270404&libcode=EBP.

⁶³ Two notable examples are Simonde de Sismondi and Say. Simonde de Sismondi highlighted services' immaterial nature and their dissipation *"at the very moment of its creation"* Sismondi, J. C. L. S. d. and R. Hyse (1991). New principles of political economy : of wealth in its relation to population. New Brunswick, New Jersey, U.S.A, Transaction Publishers.

Say defined services as perishing in the moment of their production and *"impossible ever to accumulate them, so as to render them a part of national capital"* Say, J. B. (1821). A treatise on political economy. London,.

argued that intangibility is the source of uncertainty in the trade of services, since consumers cannot see the service output prior to its purchase (Grönroos 1984; Hindley, Kierzkowski et al. 1987: 50; Grönroos 1988).

However, these definitions suffer from many flaws. First and foremost, as definitions they only attempt to distinguish services from goods without positively specifying the unique qualities or essence of services. Ironically, they do not provide a definition of goods, either. Hence, we are left with neither an understanding of what are goods, nor of how services differ from them. Second, many market entities considered to be services are not intangible at all. Written reports of consultants, certain maintenance services, digital media and software are all cases in point. As Fuchs said, "*A dentist who makes a false tooth and places it in the patient's mouth is certainly delivering a tangible product, but dentistry is invariably classified as a service*" (Fuchs 1968: 15). Third, the notion that services are non-durable and cannot be stocked can be refuted by a variety of empirical examples such as haircuts,⁶⁴ messages recorded on answering machines, or voicemails and other forms of digital media, like music recordings and software. Finally, the argument that intangibility and inaccessibility to the senses are at the root of the uncertainty of services trade is rather weak. The argument is based on two non-verified assumptions. The first is that sensual experience is a precondition (though not necessarily a sufficient condition) for greater certainty in transactions. As a matter of fact, many goods, although accessible to our senses, are often traded across borders without the client's direct or indirect sensual experience. An example is the wide online international trade in books. The second assumption regarding intangibility and uncertainty in trade is that there is some notion of uniformity with regard to sensual

⁶⁴ It can be argued that haircuts are durable for only a short period, until a new haircut service needs to be performed. Nevertheless, the same is true for many goods, such as food products. The main point here is that services do not necessarily perish at the very moment of their production.

experiences. It is not clear at all that different sensual experiences lead to similar feelings or convictions. People do not have similar feelings or tastes with regard to different goods, while at the same time an opera (service) can be seen or invoke feelings of excitement in the same manner as a bouquet of flowers (a good). Thus, services can invoke sensual experiences and, at the same time, there is no clear hierarchy or uniformity with regard to differentiated sensual access. Furthermore, uncertainty is a common trait also in the trade of various products, such as agricultural goods or electronic commerce.

Definitions Based on Process, Relationship and Activities

Process-based definitions of services characterise services in terms of the manner in which they are produced and consumed. Although they are occasionally associated with a lack of durability, these definitions shift the emphasis from services as outcomes to services as defined by process and interactions between producers and consumers.

The lack of storability of services, led both Smith and Say to attach two further attributes to the process by which services are produced. First, they argued that production and consumption occur simultaneously or immediately follow one another, as exemplified by the performance and consumption of a concert or a dinner. Second, the production of services requires physical proximity between the service supplier and the consumer. (Say 1821: 134-139; Smith 2001: Book II, p. 438). Simultaneous production and consumption and physical proximity remain a defining characteristic of services by many contemporary authors (Regan 1963; Judd 1964; Zeithaml, Parasuraman et al. 1985; Bowen and Ford 2002).

Although these are important observations which characterise many services, both simultaneity of production and consumption and the necessary requirement for physical proximity between suppliers and consumers of services are no more than loose generalisations. Many economic activities regarded as services, such as insurance and savings (financial services) are not produced and consumed at the same time. Furthermore, technological advancement makes remote trade in services feasible, overcoming the need for service producers and consumers to locate themselves close to each other. Telemedicine services, such as teleradiology, is a good example of cases where a medical test can be carried out on a patient in one locality (x-ray or CT), while analysis and diagnosis can be done in a different place and time.⁶⁵

Marx was probably the first to observe that, rather than being object-like, services are a type of activity: *“it does not render service in the form of a thing, but in the form of an activity”* (Marx and Burns 1969: 405). His observation of services as activities and not as outcomes is not further developed, probably because his focus of interest was on material production. Nevertheless, Marx’s insight is important because it represents a conceptual change. Reference to services as activities marks a breakaway from the traditional focus on services as outcomes. Since trade theory is focused on outcomes (i.e. generally final or intermediate products) rather than on processes, the notion of services as activities has significant implications for trade theory. This issue will be further developed later in this chapter.

The notion of services as activities, in contrast to the classical dichotomy between material and non-material products, emerges clearly with both Bastiat and Marshal who viewed

⁶⁵ Other examples include online consultations with physicians, as well as remote education.

services as activities of exchange between two or more persons who do not create new material things, but simply add utility to them (Marshall 1920: Book II, Ch. III).⁶⁶ Recently, Baida, Akkermans et al. defined services as activities but in a way which does not really distinguish them from goods, as “*an activity which is about an exchange of objects of economic value (benefits) between customers and supplier*” (Baida, Akkermans et al. 2005: 464). This definition excludes immaterial exchanges such as education services or some entertainment services.

Giard definition of services is process-oriented. Accordingly, he observe the means of service provision (either operators or machines), the process of inputs modification (such as persons and equipment), and the type of information provided (simple or complex) in the process. On the basis of this definition, Balin and Giard later proposed to define and categorise services by different service production processes which are divided into two main categories: services consumed by persons and services consumed by enterprises. Within these categories they analyse whether a service provides products or information, and what kinds of resource are utilised by the service provider, such as equipment or personnel (Balin and Giard 2006). The definition proposed by Giard and Giard and Balin, is rather limited in its applicability to trade theory. On the one hand, it broadly distinguishes services into different categories that makes it questionable whether they can be meaningfully treated within the same conceptual framework. On the other hand, similar services can be, at the same time, consumed by persons and enterprises, thus blurring the initial distinction altogether.

Other Types of Definition

⁶⁶ According to Marshal “*Man cannot create material things...all that he can do in the physical world is either to readjust matter so as to make it more useful...*” Marshall, A. (1920). Principles of economics : an introductory volume. London, Macmillan.

Other definitions of services are usually more simplistic to the extent that they are mainly concerned with specific categorisation of service activities or do not provide a positive account that constitutes the essence of services. Some definitions take a consumption or a functionalist framework, while others define services according to their modes of provision.

Fisher divided the economy into three main sectors, which he linked to economic progress and transition of employment. The Primary Sector consists of agriculture, forestry, fishery and mining activities. The Secondary Sector is synonymous with manufacturing and industry. Services fall within the category of the Tertiary Sector, which consists of “*facilities for travel, amusements of various kinds, governmental and other personal and intangible services, flowers, music, art, literature, education, science, philosophy and the like*” (Fisher 1935: 25-9; Fisher 1945: 5-6). Clark had taken a similar approach and added construction and utilities, which are regarded today as services, to the secondary sector. The tertiary sector is primarily composed of transport, communication, commerce and services, as well as “smaller scale production of goods, such as baking, dress-making and show repairing” (Clark 1957: 375). The approach taken by both Clark and Fisher suffers from various flaws of which the most important is that, while they divide economic production into sectors, they do not provide any criteria or rationale as to what actually makes a service. This classification does not reflect that many services are, in fact, incidental or related to production in the primary and secondary sectors and thus will not be treated as services within this framework. Another problematic aspect inherent in this categorisation is that it only reflects the principal product of each industry and fails to account for other outputs. Despite the limitation and subjectivity of this taxonomy, it was used at times by many authors and practitioners, who either accepted it as it is (Kuznets 1957), tried to advance it by offering sub-divisions of the tertiary sector (Katouzian 1970; Singer 1971 cited in Singelmann, 1978), or proposed categorisation

according to productivity growth (Fourastié 1960). Table 4.2 provides a general scheme of the primary-secondary-tertiary categorisation.

Table 4.2: Categories of Economic Production

The Primary Sector		The Secondary Sector	
Fisher	agriculture, forestry, fishery and mining	Fisher	manufacturing, industry
Clark	agriculture, forestry, fishery	Clark	manufacturing, construction and utilities (gas, electricity, water)
Fourastié	activities with average productivity growth	Fourastié	activities with fast productivity growth
The Tertiary Sector			
Fisher	travel, entertainment and recreation, government, personal, and intangible services, flowers, education, research and development		
Clark	services, commerce, transport and communications		
Fourastié	activities with slow or no productivity growth		
Katouzian	<u>Complementary services</u>	financial, distribution, and transport services	
	<u>New services</u>	education, recreational and entertainment, and new medical services	
	<u>Old services</u>	activities which were of importance prior to industrialisation, such as household services	
Singer	<u>Production services</u>	communications, commerce, transport and storage services	
	<u>Collective consumption services</u>	education, government, health and social services	
	<u>Individual consumption services</u>	repair services, certain business services, and household services	

Compiled from: (Fisher 1935; Fisher 1945; Clark 1957; Fourastié 1960; Katouzian 1970; Singer 1971).

Many classifications and categorisations distinguish between different services (yet not so much between services and non-services) according to their functionality, output orientation or process mode. One such example is Shelp who defined the service sector according to investment-related services, trade-related services, as well as trade and investment related services (Shelp 1981). This classification, like others of that sort, is a static one in the sense

of its possibility to incorporate new services in the future. Specifically, it admits that it is not really possible to draw a clear line between investment and trade service activities.

A more sophisticated approach to classification, proposed by Andersen and Corley, is based on the notion that services are material and immaterial objects that are transformed within specific spheres. This heterogeneous taxonomy divides services into artefacts (material goods), actors (persons, organisations), nature elements (energy, air) and symbolic material (information, property rights). To some extent, this classification is based on Riddle's definition of services and therefore observes four possibilities of transformation: physical, biological, social and abstract (education), that are located within a particular sphere (over time, across space, or instant production and consumption) (Andersen and Corley 2003: 7-8).⁶⁷ Nevertheless, this type of categorisation suffers from various caveats as discussed earlier, among which are the treatment of objects or social facts (like property rights) as services, thus blurring the border with goods or other entities.

Lovelock offered a consumer-oriented taxonomy which is divided into five different categorisation schemes, each consisting of several groups of service industries: the nature of the service act; the type of relationship that the service organisation has with its customers; the amount of room existing for customisation and judgement; the nature of supply and demand for the service; and service delivery (Lovelock 1983). However, while this categorisation may be useful for marketing purposes, it is too broad to enable its integration

⁶⁷ Riddle defines services as "*economic activities that provide time, place and form utility while bringing about a change in or for the recipient of the service. Services are produced by (1) the producer acting for the recipient; (2) the recipient providing part of the labour; and/ or (3) the recipient and producer creating the service in interaction*" Riddle, D. I. (1985). Service-led growth : the role of the service sector in world development. New York, Praeger.

within a research framework, and is muddled since the same services overlap between categories.

Sampson and Snape, as well as Stern and Hoekman, suggested a template which distinguishes service activities by reference to the movement of the service, the producer and the consumer. Their template, which was later adopted with modifications by the World Trade Organisation to analyse service trade and its restrictions, observes four modes of service supply (although they refer to them as types of service), as reflected in table 4.3 (Sampson and Snape 1985; Stern and Hoekman 1987: 40-1). This categorisation does not shed light on the essence of services, yet it provides a useful analytic tool for their provision modes. It should be noted that services are almost always (possibly) traded in all four modes of supply.⁶⁸

Table 4.3: The Four Types of Services Activities

Type of service activity	Rationale
No movement of providers of demanders (<i>separated services</i>).	Services trade does not necessitate the foreign movement of either the supplier, or the consumer.
Movement of providers only (<i>demand-located services</i>).	Physical proximity is a necessary condition for the provision of the service and the supplier (labour / capital) must move internationally.
Movement of demanders only (<i>provider-located services</i>).	Physical proximity is a necessary condition for the provision of the service and the consumer must move internationally.
Movement of providers and demanders (<i>footloose, non-separated services</i>).	Factors of production and consumers move to another country where the service activity is performed.

Adapted from (Stern and Hoekman 1987).

⁶⁸ The four modes of services provision are discussed at the end of this chapter.

Defining Services

Hill's 1977 paper on goods and services is a seminal contribution to the analysis of services, their essence and their relation to the basics of economic theory. In this paper, Hill departs from previous notions of service, which revolved either around physical traits or processes, or around relationships and activities. Instead, he suggests a definition of services which is technical and social at the same time. He defines a service "*as a change in the condition of a person, or of a good belonging to some economic unit, which is brought about as the result of the activity of some other economic unit, with the prior agreement of the former person or economic unit*" (Hill 1977: 318). Hill's definition is encompassing in the sense that it is mutually applicable to processes, situations, and relationships. Analysis of services as a change of persons or goods enables an analytical framework that transcends the simplistic tangibility-intangibility debate. Furthermore, it explains why services can be durable and at the same time intangible, since a change in a person's mental state (education) can last many years more than the shelf-life of a good (a book or a notebook). Surgery exemplifies a physical change in a person that will remain until the end of her or his life. Hill's definition also reinstates the issue of property rights that was largely lost by focusing on intangibility. The reference to interaction of economic units that are engaged with each other on the basis of prior agreement makes it clear that the change is brought about under economic relations, like a contract (not necessarily a monetary one) between producers and consumers. Thus, this definition treats services both as intermediate outputs and as final outcomes.

Hill's definition also has important implications with regard to the quantification of trade in services. On the one hand, contrary to activities which are continuous in nature, changes are outcomes that can be measured at given points in time, at least in theory. On the other hand,

the definition shows the inherent, and possibly insurmountable, difficulty in effectively quantifying services and trade in services. If services are, in fact, changes, then the quantification of changes is both objectively and subjectively problematic. Thus, objectively, it is not possible to observe all changes, in particular as some changes relate to non-physical dimensions or are subject to longer term effects. On the other hand, subjectively, changes of the same type may be regarded differently as to their intensity, effects, etc. While the quantification and measurement is not solved by this definition, it improves over those definitions treating services as activities.

Critics of Hill's definition have argued that, by focusing on change, his definition misses the fact that some services are produced to prevent change, like security services and medical services (United Nations Conference on Trade and Development and World Bank 1994: 2; Parrinello 2004: 385). However, change prevention is, to a large extent, a change in itself and this argument does not necessarily weaken Hill's definition. Another criticism concerns the issue of government or public services. Accordingly, important non-market services like the provision of law and order (judicial and police services) and national security (army services) do not fall within the definition, since they do not meet voluntariness criterion. Hence, the definition lacks the notion of a social contract (Bhagwati 1984: 136, 143) Lastly, Gadrey argued that the definition blurs the distinction between goods and services since employees are treated as services, whether they are employed in manufacturing or in services, because they are recruited to transform the goods belonging to the owners of the firm's capital (Gadrey 2000: 375).

The treatment of services as changes has also been criticised on the grounds that it leads to discrepancy in the observance of real changes in the overall economic structure. Accordingly, an 'in-house, out-house puzzle' occurs since intra-unit transactions change to inter-unit transactions while no real change take place (Bhagwati 1984: 136; Bhagwati 1987: 6). However, as Hill's argument addresses activities between different economic agents, this paradox can be solved according to the particular level of unity of the economic agents under observation. Furthermore, even when taking the argument as it is, a service could have been produced regardless of whether the production took place in-house or not. To argue differently would be to say that household production does not yield goods like food or accommodation that can also be produced and purchased within the market.

Hill's 1977 definition received considerable interest in the literature, mainly due to the renewed interest in trade in services during the 1980s, and had also impacted new classifications of services and methods of statistical reporting. Nevertheless, his newer 1999 definition of services, further advances understanding of the essence of services. This new definition breaks away from the traditional taxonomy of goods and services, to a division of market entities according to tangible goods, intangible goods and services. Doing so, it overcomes some of the problems related to the definition of services, which are explained above.

A tangible good is defined as *"an entity that exists independently of its owner and preserves its identity through time. If ownership rights can be established it follows that they can also be transferred from one economic unit to another, which implies that goods must be exchangeable"* and *"the owner of a good derives some economic benefit from owning it, in*

contrast to a 'bad' which has a negative exchange value". It follows that three main features distinguish the production of goods from the production of services. First, the producer of goods owns the entire output derived from the production process. Second, this output is at the disposal of the producer. Third, there is a separation between the production process of the good and its usage or disposal by its producer (Hill 1999: 437-8).

Intangible goods "*consist of intangible entities originally produced as outputs by persons, or enterprises, engaged in creative or innovative activities of a literary, scientific, engineering, artistic or entertainment nature. Broadly speaking, the original intangibles consist of additions to knowledge and new information of all kinds and also new creations of an artistic or literary nature*" (Hill 1999: 438). These originals are wide ranging and include various entities traditionally regarded as services, such as computer programmes and musical compositions, as well as traditionally associated goods such as books or films. Originals need to be recorded and stored on tangible medium carriers, which explains why they exist independently of their creator and can be stored and do not immediately perish, as argued by definitions centred on physical characteristics. Once originals are stored they can be treated like durable goods. However, the original itself, which is the information, the ideas and the actual content, is intangible. Thus, the process of producing the original differs from the process of producing copies of it. While the latter is similar to the production of tangible goods, the former is not. Like tangible goods, intangible goods are entities over which property rights can be assigned. Ownership can be transferred from the producer of the original to other economic units, and is often treated with legal instruments in various forms of intellectual property rights. Similar to tangible goods, ownership of an original implies the possibility of usage-excludability by its owner. It also reflects that, in some sense, originals have certain traits of public goods, since their consumption is non-competitive, to the extent

that their usage does not reduce the scope for further usage, other than reduction of demand. However, since property rights can be assigned to intangible goods, they are not public goods and are not subject to the demand for universal provision.

Services are defined in the same manner as in Hill's 1977 definition with an additional distinction between tangibles and intangibles that makes the definition analytically sharper. In contrast to the other two categories, it is evident that the provision of a service by one economic unit to another is an inherent imperative, and that a service consists of a relationship between the producer and the consumer. Furthermore, this taxonomy and its definitions overcome the customary treatment of services as immaterial goods, since in contrast to tangibles and intangibles, services do not exist independently of their producers and consumers. In fact, the output of many service producers consists of material change in either persons or goods, such as machine repairs or medical operations. It also follows that services, according to this definition, cannot be stocked for the very reason that a stock of changes is a contradiction in terms. This does not imply that services' output cannot be measured, but it does mean that since they are not entities and therefore cannot be stocked, it is also impossible to constitute ownership rights over services or to trade in services independently of their production and consumption. Therefore, argues Hill, *"it is not possible, for example, to produce services in one country and subsequently export them to another country in the way that automobiles or computers can be produced in one part of the world and transported to other parts. Services can be, and are, exported, but only by resident producers providing the services directly to non-resident consumers. This imposes a major constraint on international trade in services"* (Hill 1999: 442).

Two related issues arise from this last argument. First, services necessitate at least some degree of proximity between producers and consumers. Second, international trade in services cannot occur when the service producer and the service consumer are in different locations. It is therefore necessary that either the producer will draw closer to the consumer in order to supply the service, or vice versa. Put differently, cross border trade in services is unfeasible. This conviction is nevertheless at odds with technological progress. While, for example, online gambling, remote operations, and the selling of insurance over the phone, are neither intangible goods nor tangible goods, it also appears that they do not satisfy the definition of services, since they can be traded across borders. It is on this point that Hill's argument that it is not possible to produce services and export them in the same way as automobiles and computers, needs to be re-examined. If services are not exported in a similar manner to tangibles and intangibles, the possibility still exists that they can be exported across the border in a different manner. Thus, technology provides infrastructure which enables the production of and trade in services in a manner which will satisfy Hill's definition. Hill's argument does not necessarily follow on from his definition.

Gadrey questions Hill's definition of services from the vantage point of the specificity of the requirement for a relationship between the service producer and the consumer. He shows that, in fact, some services, such as distribution services (wholesale and retail) or tourism, have two different demand rationales. The first rationale can be described as an aid or intervention rationale, whereby assistance is supplied upon request for intervention. This rationale is consistent with Hill's definition of services as a change. The second rationale revolves around the provision of maintained technical capacities and human capacities that consumers can benefit from in return for payment. The latter rationale fits in less easily with the notions of change of conditions or state when consumers make use of electronic media, telephony,

hotels, the shelves at any retail store, and many services that are directed at an audience, such as cultural and entertainment services (Gadrey 2000: 380-2). This issue further explains the above-mentioned problem concerning the feasibility of cross border trade in services.

Responding to the challenges of either re-categorising conventionally-held services to non-service activities, in line with Hill's definition, or accommodating the obstacles of technical and human capacities, Gadrey offers an improved definition. He defines services as "*any purchase of services by an economic agent B (whether an individual or organization) would, therefore, be the purchase from organization A of the right to use, generally for a specified period, a technical and human capacity owned or controlled by A in order to produce useful effects on agent B or on goods C owned by agent B or for which he or she is responsible*" (Gadrey 2000: 382-3). This definition addresses services in three interrelated dimensions: live-performance services, technical capacities, and assistance or intervention. Gadrey's definition improves Hill's definition in two aspects. First, it enables the allocation of property rights to services, which are fundamental to economic analysis, as well as to trade. Second, it eliminates the possibility that a salaried workforce will be regarded as 'services', as the emphasis is on a purchase from an organisation. The organisation in the service transaction could be a firm, a government, an association or a self-employed individual. Moreover, the focus on organisations also overcomes the need to introduce a notion of a "social contract" when analysing government services or the need to account for services supplied on a not-for-profit basis.

Gadrey's definition is not complete and at least two problems arise from it. The first arises in industrial subcontracting, outsourcing or co-production between manufacturing enterprises.

Since the definition deals with purchases from organisations, it can also apply to a situation such as the industrial outsourcing of some goods' manufacturing processes from one organisation to another. The second problem derives from the same issue. While the reference to organisations makes the definition more inclusive, it nevertheless excludes certain personal services, such as household cleaning and maintenance, that are normally regarded as services. The second setback is less problematic if the definition is expanded to include cases where households employ salaried workers to look after their goods or persons, as also suggested by Gadrey himself.

The Theory of Services Co-Production and the Services Production Trap

The definition of services

Services are defined in this research according to Gadrey's definition while retaining, at the same time, Hill's division of the market into three entities, namely, tangible goods, intangible goods and services. This conceptual blend provides both coherence and functionality. It is constructive since Hill's taxonomy enables better differentiation between services and other market entities, while when it is used with Gadrey's definition of services, it enables analytical research with clear borders. Hence, it provides the possibility of analysing services within a single framework, regardless of the diversity of activities conducted in those service sectors. Furthermore, it distinguishes between two different groups of market entities, which are traditionally confused to be one and the same: services and intangible goods. Gadrey's definition of services enables the assignment of property rights to services and eliminates the risk of treating all salaried workforces as services, considerations which were missing from Hill's definition. Finally, services can be sub-divided into three interrelated dimensions: live-performance services, technical capacity, and assistance or intervention (such as repair

services). Overall, this definition of services broadly covers specific services activities as classified in the W/120 or the CPC. W/120 is the classification used by WTO Member States in their General Agreement on Trade in Services (GATS) undertakings. These commitments are often complemented by the more disaggregated classification of the UN, the Central Product Classification (CPC). Gadrey’s definition accounts also for government services as well as services supplied on a not-for-profit basis. It is, therefore, far more advanced than other definitions of services, which only capture a few dimensions of their subject, such as intangibility, lack of storage or proximity to clients. Table 4.4 outlines the definitions and taxonomy of the three market entities applied in this research.

Table 4.4: Three Market Entities: Tangible Goods, Intangible Goods and Services

Market Entity	Definition
Services	<i>“any purchase of services by an economic agent B (whether an individual or organization) would, therefore, be the purchase from organization A of the right to use, generally for a specified period, a technical and human capacity owned or controlled by A in order to produce useful effects on agent B or on goods C owned by agent B or for which he or she is responsible” (Gadrey 2000: 382-3).</i>
Intangible Goods	<i>“consist of intangible entities originally produced as outputs by persons, or enterprises, engaged in creative or innovative activities of a literary, scientific, engineering, artistic or entertainment nature. Broadly speaking, the original intangibles⁶⁹ consist of additions to knowledge and new information of all kinds and also new creations of an artistic or literary nature” (Hill 1999: 438).⁷⁰</i>
Tangible Goods	<i>“an entity that exists independently of its owner and preserves its identity through time. If ownership rights can be established it follows that they can also be transferred from one economic unit to another, which implies that goods must be exchangeable” and “the owner of a good derives some economic benefit from owning it, in contrast to a ‘bad’ which has a negative exchange value” (Hill 1999: 437-8).</i>

⁶⁹ Originals include computer programmes, musical compositions, as well as traditionally associated goods such as books or films. They need to be recorded and stored on tangible mediums, which explain why they exist independently of their creator, can be stored and do not perish immediately after their creation. Once originals are stored they can be treated like durable goods; however, the original itself, which is the information, ideas and the actual content, is intangible.

⁷⁰ It follows that the production of goods is distinct from the production of services by three main features. First, the producer of goods owns the entire output derived from the production process. Second, this output is at the disposal of the producer. Third, there is a separation between the production process of the good and its usage or disposal by its producer.

Consumers as factors of production

The separation of market entities into tangible goods, intangible goods and services, enables the exposure of some unique and constitutive aspects of services, which explains why services are internationalising while maintaining a proximity bias between suppliers and consumers.

The production of a service is a process through which technical and human capacities owned or controlled by the supplier are used to produce useful effects on the consumer or the goods she or he owns. It follows that there is an ontological necessity for the consumer or goods owned by the consumer to be part of the production process which eventually generates the service as a final or intermediate product. Hence, in contrast to goods which have an independent ontological existence and can be first produced and then consumed, the service product does not exist without the involvement of the consumer or his or her goods in the process of producing the service.

This important dimension was missed by many observers when they attributed intangibility, the lack of storage and simultaneous production and consumption characteristics to services. It is the participation of the consumer or goods owned or controlled by the consumer in the actual production process of the service, which occasionally occurs at the same time as the consumption process of the service. Similarly, intangibility accompanies the service outcome in many cases, particularly when the effects produced are on the consumer, and not on goods owned or controlled by the consumer. In both cases, intangibility is not a necessary trait of the service outcome. Partially observing the phenomenon of services' joint production by

consumers and producers, Grönroos, Berry and Parasuraman noted that part of the service production occurs in interaction with consumers (Grönroos 1984; Grönroos 1988; Berry and Parasuraman 1993; Grönroos 2004).

The consumer (or goods owned or controlled by the consumer) as endogenous to the process of production means that consumers (and their goods) play a unique role that is somewhat comparable to that of factors of production, and not just as consumers who benefit from the utility of a finalised product. Indeed, service consumers are also consumers who derive utility from consumption and the former motivates the latter. Nevertheless, they have a dual role in production, acting as factors of production at the same time as being consumers. Contrary to the case of goods, where output is finalised prior to consumption and is not conditioned by it, the critical part of service production occurs in interaction with the consumers. The service as an outcome does not exist before the interaction stage takes place.

Services co-production is not necessarily a recognised process in which producers and consumers knowingly distinguish between the ontological necessity of co-production for service existence, and the actual trade and consumption of the service. It is more likely that consumers are more unconscious than aware of their productive role in the creation of services. While co-production takes place, consumers are engaged in what they understand to be consumption activities.

Services are heterogeneous and quality-volatile

The joint production dependency explains why services are heterogeneous, quality-volatile and non-standardised in the sense that different output can be produced by the same service producer, even if it is produced at the same time and place. If a service is provided by the same supplier to different consumers, the result is likely to be production of different service products. As each consumer (or goods owned or controlled by it) contributes to the process of production, homogeneity of the service outcome decreases, depending on a multitude of factors related to individual consumers. Although it is not a condition for homogeneity, services' heterogeneity may decrease in the case of services performed on goods owned or controlled by the consumer, such as financial services or repair services. This is the result of the possibility for greater homogeneity among goods, in contrast to individual or corporate consumers.

Heterogeneity also implies that the introduction of standards in services production has a similar effect to that of the production of goods. Production standards adopted for goods facilitate greater convergence towards homogenous products since they list essential requirements related to production. These standards are imposed and enforced solely on the supplier, with the aim of ensuring a given standard, quality level, safety requirements and so on. They facilitate convergence between different aspects of products, even though product differentiation prevails. Standards act to ensure that certain homogeneity exists when the product is consumed. A consumer may face difficulty in choosing among many different cars (which vary in their technologies, performances, colours, etc.) but she or he knows that all cars offered comply with the same health and safety standards. Contrary to goods, in services, where the consumer is part of production, the producer has no complete control over the

production process and outcome. Therefore, standards imposed on producers of services are insufficient in creating similar homogeneity effects.⁷¹

For each service produced, the outcome varies and depends on the specificities of production relations with consumers. For that reason, volatility and difference in quality are important features of services. The conditioning of the service outcome by the consumer flavours the production relationship in a unique way, explaining why service relationships between producers and consumers tend to be less flexible. Joint production informs the quality of services and leads to the formation of features such as trust, loyalty and information problems. These aspects have often been invoked as reasons for the suppression of international trade in services (Canoy and Smith 2008: 325). Their root cause is the effects of co-production, leading to these features affecting trade. The uniqueness of services production raises switching costs from one service provider to another in terms of quality uncertainty.

A more intuitive consideration of the particularity of this production process can be illustrated by three examples based on the three different types of service proposed by Gadrey: live-performance services, technical capacities services, and assistance or intervention services. Consider live performance services such as education or healthcare services. In both cases the consumer is critical to the process of production. A lecture given in

⁷¹ The lack of standardisation capacity also implies lower capacity for productivity gains through standardisation. An important issue for future research emanating from the co-production of services by consumers and producers is that the measurement of productivity in services is missing and incomplete. Since productivity is the measurement of output per unit of input, current measurements of productivity are not observing consumer's contribution to output. The relative importance of the consumer input in productivity may very well vary in different services, and its measurement suggests a great difficulty. Nevertheless, an intuitive implication is that some services' productivity as in the case of producer services, can be enhanced by investment and upgrading of consumers' skills.

class in front of 25 students produces 25 different outcomes. The variation in the service outcome will depend on various factors related to the students, such as their prior knowledge or level of awareness. These factors are exogenous to the traditional notion of production, but are endogenised when the consumer becomes part of the co-production process. In a similar manner, patients with similar symptoms react differently to the same treatments. Neither service would exist without the participation of the consumer in the process of production, nor can the outcome and quality be the same for each student or patient.

Consumers' participation in production is also a feature of technical capacity services or services intended for assistance or intervention. Telecommunication services or postal services (technical capacity), depend either on the consumer or on the goods under his or her control. For example, mobile telephony depends on the technological feasibility available in the client's handset and not only on the infrastructure and range of possibilities offered by the supplier. Postal services deliver and produce useful effects on goods (letters, parcels, etc.) owned by service consumers, and have no real existence without the initiation of the service production process by the consumer. Finally, transportation providers (assistance services) perform useful effects on consumers or on their goods based on the actual mode of participation of consumers, resulting in different service outcomes. For example, the congestion of passengers on London's underground system has a strong effect on the speed and frequency which are part of the delivery of an underground train ride. Similarly, the size, shape, weight and content of cargo affect the final outcome of a maritime or an air shipment. In the absence of the participation of the consumer or the consumers' goods in the process of production and provision, the service would not have existed.

When a train leaves the station to its next destination with no passengers on board, the service as an outcome is incomplete. Rail transport services are being produced, but the process of production is incomplete without passengers taking the train. Reaching its destination without passengers, the train ride certainly means that resources and factors of production (labour, capital, etc.) have been deployed in the production process. Nevertheless, in the absence of passengers who are transported, the actual transport service is not created.

Ideal-type argument

The above examples illustrate an important element of the co-production relationship. The production process analysed here is an ideal type production argument. The participation of the consumer or goods owned or controlled by the consumer is an inherent feature in the production of all services. Nevertheless, the degree or intensity of this participation varies across different services. In many live performance services, this participatory role is very evident and clear. In other services, such as transportation or telecommunication, consumer participation can have a lesser impact on the final outcome.

Thus, co-production of services by producers and consumers should be viewed along a continuum. Services such as professional services, educational services, healthcare and social services, tourism, recreational and sport services will usually require greater involvement or a more evident degree of consumer participation in production. Other services, often those performed on goods owned or controlled by consumers, such as transport services, distribution services and communication services require a lesser degree of participation by the consumer and her or his controlled goods.

Co-production is a continuum across time and space. Since services are the “production of useful effects on the agent or goods for which she or he is responsible”, some of these may not come into effect at the time and place of the service transaction. Time and space affect the degree of consumer participation. Financial, healthcare and education services are examples of services greatly affected by these dimensions. Consider, for example, insurance services, such as the purchase of a health insurance policy that may or may not come into effect in the future. The purchase of the policy at t_1 produces insurance services with very little degree of consumer participation.⁷² Consumer participation in production of the policy may increase if the policy comes into effect before its expiry at t_2 . In both cases, consumer participation is an integral part of production, but its degree can vary, particularly if service production is “stretched” over time.

Intermediate and final services

The discussion over co-production of services by consumers and producers has so far concentrated on services as final goods. However, services are increasingly becoming important as intermediate or producer goods, used as inputs in the production of both goods and services. These intermediate services either become embodied within final products (goods or services) or changed in the production process in a manner that makes them unrecognisable (Francois and Woerz 2008; Lejour and Smith 2008: 170-171).

⁷² It should be noted that most insurance policies are tailored to consumers based on a multitude of individual parameters. The insurance company can reject a client on the basis of her or his condition and can also introduce specific conditions. The insurance service transaction always requires some degree of “knowing the consumer” as part of pricing the risk. The notion of risk in itself largely encapsulates the idea of consumer participation.

The more evident role of the consumer in joint production apparently seems to diminish in the case of intermediate services. Yet, services are technical and human capacities to produce useful effects on an agent or on goods owned or controlled by the agent. The difference in consumption, whether final or intermediate, is therefore not a difference in co-production. Intermediate services are co-produced by consumers and producers so long as services produce useful effects. In the case of intermediate services, these effects are often on goods owned or controlled by the consumer, who can be a producer of another good or service. The difference is in the nature of consumption, whether consumption is final or not, rather than in co-production that takes place regardless of whether the service is final or intermediate. The observable effects of co-production on consumer services have been noted in empirical findings, including the need for proximity between consumers and producers, standardisation challenges, quality uncertainty and limits to international tradability (Bradford Jensen 2008; Francois and Woerz 2008). When certain production processes are outsourced, like the design and final assembly of a product, they produce useful effects on materials owned by a consumer (e.g. production firm) of these services. These services often become embodied in those materials. Professional services, education and training, financial services and transportation services exemplify typical intermediate services in the production of goods and services. They are co-produced by producers and consumers with the latter themselves (or their goods) being producers of final or further intermediate services and goods.

Information asymmetries

Asymmetric and imperfect information problems are abundant in services. Consumers are faced with numerous problems in assessing the quality and features of services. Information problems confront consumers trying to assess the safety of services, the competences and

reliability of professional service providers, or the soundness of certain services and their providers.

While information problems are not exclusive to services and prevail also in the consumption of goods, they are more frequent in services. Many have identified intangibility as a major source of these information problems. Accordingly, the intangible nature of many services prevents consumers from prior testing or assessing the quality of the service they require. (Hoekman, Mattoo et al. 2007; Francois and Hoekman 2009: 10-11; Lennon 2009: 383). As argued previously, intangibility is not a unified trait of services (car repair services are a counter example) but it reflects the nature of co-production. Co-production leads to the uniqueness and particularity of the service outcome. Information problems are pervasive in the matching process between producers and consumers as part of the service production. Thus, while co-production is not a single reason for information problems in services, it exacerbates imperfect and asymmetric information problems.

Co-production differs from utility

Co-production and utility are different from each other. The outcome variation in production of services should not be confused with differentiated utility. Utility is the subjective satisfaction and other sensations which are derived from consumption (Gravelle and Rees 1992: 74). The concept of utility revolves around preferences and the assumption that more is better and desirable. Three axioms of rational choice underlie preferences. First, *completeness* means that if A and B are any two situations, the individual will always specify exactly whether A is preferred over B, or the other way round, or if they are equally attractive.

Second, *transitivity* implies that if A is preferred over B and B is preferred over C, then A is preferred over C. Finally, *continuity* implies that if A is preferred over B, then situations that are close to A are also preferred over B (Nicholson and Stapleton 1992: 69-70).

It is important to note that utility and the characteristics of the utility function are the result of consumption or desirable consumption. They differ from the co-production process between producers and consumers. The overall utility of an individual might clearly be affected by a variety of factors that go beyond satisfaction from consumption, such as social pressure and conventions or personal experiences. Nevertheless, in the context of production the utility is derived from consumption of the service, whose existence is partially attributed to the participation of the consumer in its production. This participation eventually leads to utility generation but it is not utility in itself. Furthermore, expected utility, which is the utility expected by people under conditions of uncertainty, might motivate the initial entry of the consumer into the service production relationship, but it is different from the joint production process which first generates the service and is followed by the utility derived from its consumption. A student's prior knowledge or lack of sleeping hours will affect the way in which education services are produced.⁷³ Nevertheless, the utility derived from education services will derive from the final service produced and conditioned by these parameters. This utility, be it satisfaction, displeasure or self-fulfilment, can be experienced immediately after consumption or over a longer run.

⁷³ Giarini and Stahel argued that, in many instances, service consumers are a precondition for the proper functioning of what is produced (rather than being an actual part of production). However, their emphasis on the value of utility derived from services consumption ignores the co-production phenomenon Giarini, O. and W. R. Stahel (1993). *The limits to certainty*. Dordrecht ; Boston, Kluwer Academic Publishers.

Co-production differs from product customisation

Another distinction ought to be made between the joint production of services by producers and consumers and the notions of customisation or personalisation. Customisation refers to the ability of customers to alter or make specific changes to products they purchase (usually within boundaries). Personalisation is often synonymous with customisation but occasionally emphasises that the product is tailored to the personal specificities of a customer. Customisation might seem at a first glance to be identical to the process of production of services with consumers' participation. As such, it can be argued either that joint production is a process of customisation or that the joint production phenomenon is not unique to services and prevails also in the realm of goods.

However, both arguments have shortcomings. First, customisation refers to a situation where the consumer can influence the final outcome of a good or service. However, this influence is an act of projecting consumer's preferences into the final product or service, rather than rendering the consumer into a factor of production, as argued above. Furthermore, as customisation is the shaping of an existing product or service, it differs from the process whereby the participation in production of the consumer or the goods the consumer controls, enables the ontological existence of the service.

The Services Production Trap

The Services Production Trap (SPT) explains why services fail to internationalise in a similar manner to the way in which goods are internationally traded. Drawing on the participation of consumers in the production of services, the SPT argues that services co-production leads to

proximity bias between producers and consumers, which considerably reduces the levels of cross-border trade, without limiting its feasibility.

Distance versus proximity

According to the co-production relationship, technology is not a sufficient condition for bridging geographical distance in international trade in services. In that regard, there is an important distinction between the notions of distance and proximity. Distance often refers to the gap or space between two or more objects. Distance has been considered as a standard explanation in trade,⁷⁴ often confirmed by the gravity model which calculates bilateral trade based on distance and several other variables. The closer the geographical distance is between two countries, the more likely it is that they will trade more. International trade theory takes distance as an important element, particularly with regard to the effects of transportation and information costs on trade. According to this explanation, transportation costs increase with distance and depress the magnitude of trade.

The technological and digital revolutions have been argued to lead to greater international trade. Technological advancements, and particularly the Internet, diminish the impact of spatial separation and significantly reduce and eliminate transportation and information costs. According to these arguments, the ability to trade through the internet reduces transportation costs as well as information costs, such as market access knowledge or the search for trade partners (Rauch 1999; Berthelon and Freund 2008). In a theoretical and empirical test, Freund and Weinhold found that fixed costs related to distance will decrease as a result of the

⁷⁴ This issue was also discussed in the literature review in Chapter 1.

Internet, thus leading to greater international trade (Freund and Weinhold 2002; Freund and Weinhold 2004).

Regarding international trade in goods, many findings contradict the proposition that falling transportation costs and the introduction of new technologies render distance a lesser explanatory variable for trade. Empirical findings show that neighbouring countries and regional groupings are more likely to enjoy trade creation when trade barriers are lowered than in comparable cases of distant trading partners (Krugman 1991; Anderson and van Wincoop 2004; Disdier and Head 2008). Furthermore, when the distance argument over time and over different sectors of manufactured products was tested, results found that transportation costs remain an important explanation as to why distance matters (Anderson and van Wincoop 2004; Berthelon and Freund 2008). Disdier and Head find that *“on average bilateral trade is nearly inversely proportionate to distance”* (Disdier and Head 2008: 48).

Contrary to the mainstream view in the literature on international trade in goods, it has been argued that technological advancement matters more for trade in services for at least two reasons. First, technological change enables the tradability of previously non-tradable services. The invention of technologies such as telegraph and telephony systems initially triggered this process, which was significantly intensified with the introduction of the Internet and related information and communication technologies. If international trade in services was not feasible before due to the distance problem, technology bridges the distance leading to a net increase in trade. Second, cross-border trade over the internet eliminates almost all transportation and mobility costs since producers and consumers remain in their territory while the service travels across the border with significant diminishing of both time and

spatial constraints. This effect is much more significant than in the case of traded goods that still need to physically travel across borders. This argument explains why services are often viewed as minimising transaction costs, enabling other transactions which would have been more expensive in other circumstances. Furthermore, several applications of the gravity model in the analysis of international trade in services found that distance does not play an important role as a determinant of services trade (Lejour and de Paiva Veerheijden 2004; Lennon 2008). This finding has also been confirmed by Walsh who examined the EU as a regional grouping of adjacent countries (Walsh 2006).

Nevertheless, the idea that technology can bridge physical distance is at odds with the empirical findings of previous chapters. The least and marginal part of international trade takes place on a cross-border basis conducted via ICT platforms. This has been the case even when extensive ICT infrastructure prevails. Thus, it seems that technology has a potential to bridge distance but is an insufficient condition for trade.

The co-production of services leads to an important distinction, mostly overlooked in trade literature. While distance has been a standard argument in trade, it should be distinguished from the notion of proximity. Distance is a matter of geographical or physical space and a measurement between objects. Proximity, on the other hand, encapsulates more than geographical distance. Proximity comes into play in at least three dimensions: space, time and relationships (Oxford Dictionary of Current English, 1965; Webster's Third New International Dictionary, 1966). First, proximity covers geographical distance and closeness between two or more units. It is somewhat different from distance in the sense that distance is more quantifiable while proximity has more of a qualitative nature. In the context of

international trade in services and the process of co-production between consumers and producers, geographic proximity is more about localisation. Second, proximity is also an issue of time. It is about the sequence and order of events. Many services share proximity in time in the sense that they are produced and consumed simultaneously. Some services' production and consumption continue over time (thus, translated to lesser proximity). Finally, proximity also refers to closeness within relationships. When services are co-produced by producers and consumers under information and quality constraints, the relationship generates trust, long term commitments and other features of a relationship.

Given the co-production relationship between producers and consumers, in the case of services it is essential to incorporate the consumer element as an additional factor of production. This may lead to some reconsideration of the relationship between supply and demand in a way that will highlight the fact that the production of services entails what can be termed consumer specific costs. These costs include information, search, adaptation and other costs and their minimisation in the production function is assisted by greater proximity, in time, space and relationship, between consumers and producers.

The observation of the service firm production function as one of joint or team production is useful in explaining why the process of services production limits the scope of international trade in the service output. The production of services with traditional factors of production such as technology, capital and labour jointly with the service consumer, implies that a degree of proximity is needed between consumers and producers to enable the firm to efficiently operate and produce. The detailed empirical findings concerning specific modes of trade confirm this result.

The organisation of the firm, joint production and international trade

The notion of co-production between consumers and producers breaks away from the traditional treatment of demand and supply as autonomous and separate spheres and therefore can be challenging for economic theory. In economic theory, it is the price mechanism that links between supply and demand in reaching market equilibrium. Individual firms produce in order to maximise profits choosing inputs and determining output in order to achieve maximum economic profit. Thus, the profit-maximising firm is faced with the problem of matching appropriate levels of inputs or factors of production (e.g. capital, labour) (Nicholson and Stapleton 1992: 363-392). Assuming that the individual firm is a price taker, demand does not directly affect production.

The theory of the firm explains the existence of firms through the prevalence of market transaction costs. Rather than producing separately, individuals are incentivised to organise within firms in order to minimise transaction costs, such as the costs of production, bargaining, information, search and more. Thus, the non-costless operation of markets leads to the development of firms that produce goods and services internally to avoid transaction costs.

However, the advantage of firms-formation over individual contracts between independent self-employed individuals is not unlimited. Firm formation and size is limited by decreasing returns to the function fulfilled in the firm by the entrepreneur. As noted by Coase, among the reasons limiting the indefinite growth of firms are, exceedingly, rising organisation costs that

are negatively or unevenly correlated with the increase of organised transactions and, to larger firms, rising costs of factors of production (Coase 1937).

Two further conditions influence the formation of the firm, beyond the issue of transaction costs. First, it *“is possible to increase productivity through team-oriented production, a production technique for which it is costly to directly measure the marginal outputs of the cooperating inputs”* and, second, *“it is economical to estimate marginal productivity by observing or specifying input behaviour”* (Alchian and Demsetz 1972: 783). The notion of the firm as a joint production function or team production is thus fundamental for the emergence of the firm as a contractual organisation of factors of production, and as a solution to the fundamental problem of information processing (Aharoni 1993). Portrayed as such, the firm is characterised as a joint production function with several factors of production owners (capital and labour), and one party who is common to all contracts of the joint production factors and who has a right to renegotiate any production factor’s contract independently of other production factors’ contracts, and who holds the ‘residual claim’ with a right to sell this status (for example, the manager or the owner) (Alchian and Demsetz 1972).

In its simplest form, the co-production function that incorporates consumers (or goods owned and controlled by them) as factors of production can be written as:

$$Q = F(A, L^P, L^C)$$

Where Q denotes quantity produced and F is a function of technology (A), “traditional” production factors (L^P)⁷⁵ and consumer production factor (L^C)⁷⁶. The co-production relationship, which is conditioned by the contribution of the consumer to the actual production of the service, is given by:

$$\forall L^P, L^C = 0 \Rightarrow Q = 0$$

Hence in the absence of the consumer production factor and other production factors, no service is produced and hence the quantity (Q) of services produced is zero.

Consider an autarky that consists solely of services. In this autarky, the gross domestic product relationship would be described as:

$$Y^S = C + G + I$$

Total services output is given by Y^S . C and G respectively represent private consumption and government expenditure (and hence total consumption), and I denotes gross investment.

⁷⁵ For simplicity, all production factors, other than the specific consumer factor of production, are represented together within L^P . L^P includes human capital, capital and land. Human capital expands beyond the workforce to include also the “stock of competences, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value.” Sullivan, A. and S. M. Sheffrin (2003). Economics: Principles in Action. Upper Saddle River, New Jersey, Pearson Prentice Hall.

. Capital includes fixed capital and financial capital.

⁷⁶ Note that L^C can take the form of an individual (human) or a corporate consumer, as well as goods owned or controlled by it.

Since, in most cases, services are either embodied in goods or cannot be stocked, assume that $I=0$ (or close to zero). With C^s representing total consumption, total output equals total consumption:

$$Y^s = C_p + C_G = C^s$$



$$Y^s = C^s$$

Introducing international trade, the output equation can be rewritten, for X^s and I^s respectively denoting total exports and imports of services, as:

$$Y^s = C^s + (X^s - I^s)$$



$$C^s = Y^s - (X^s - I^s)$$

Since services can be traded through four modes of supply, the relationship of joint production in an open economy can be given in the following manner:

$$C_{i,j} = F_{i,j}(A, L_{i,j}^P, L_{i,j}^C)$$

Where $C_{i,j}$ represents the consumption of consumers from country i in country j ; $F_{i,j}$ is the production function with technology from country i in country j , using two factors of production: $L_{i,j}^P$ is labour production factor from country i used in country j and $L_{i,j}^C$ is consumer production factor from country i used in country j .

The four modes of services supply are given by

$$\left. \begin{array}{l} \text{Mode 1: } C_{i,j} = F_{j,j}(A, L_{j,j}^P, L_{i,i}^C) \\ \text{Mode 2: } C_{i,j} = F_{j,j}(A, L_{j,j}^P, L_{i,j}^C) \\ \text{Mode 3: } C_{i,j} = F_{j,i}(A, L_{i,i}^P, L_{i,i}^C) \end{array} \right\} \forall (i \neq j)$$

$$\text{Mode 4: } C_{i,i} = F_{i,i}(A, L_{j,i}^P, L_{i,i}^C)$$

The proximity-bias leads to the services production trap. Despite the feasibility and technology which enable trade in services in all modes of supply, production of services is more efficient when producers are in proximity to consumers. The SPT explains the empirical

results of previous chapters, where greater trade took place through commercial presence and movement of labour.⁷⁷ The relationship between modes of supply can be written as:

$$F_{j,i}(A, L_{i,i}^P, L_{i,i}^C) \succ F_{i,i}(A, L_{j,i}^P, L_{i,i}^C) \succ F_{j,j}(A, L_{j,j}^P, L_{i,j}^C) \succ F_{j,j}(A, L_{j,j}^P, L_{i,i}^C)$$

Concluding, the SPT explains international trade in each mode of supply. Since trade is biased towards proximity between consumers and producers who jointly produce services, cross-border trade is the lowest component within international trade in services. Technology can eliminate the geographical distance between producers and consumers, as well facilitate proximity in time, but has a lesser effect on proximity in terms of relationships. The nature of co-production which materialises into quality uncertainties, search and information costs, suppresses cross-border trade. The result is less trade than technology permits and significantly lower shares of trade out of total output, even in cases where trade is much higher in other modes of supply.

An important qualification is in place here. International trade in services is most often conducted through several modes of supply at the same time. It is possible that the proximity-bias can be further reduced by cross-production of services with the same clients in two or more modes of supply. Online retail banking services exemplify this point. Consumers tend to use more online banking services (mode 1) when they also have physical branches that they can go to (mode 3). Trade in online retail banking services independently of commercial

⁷⁷ These findings were partially confirmed (as for the relation between modes 2 and 1) for other services sectors: Canoy, M. and P. Smith (2008). "Services and the Single Market." *Journal of Industry, Competition and Trade* 8(3): 319-347.

presence is far more seldom. This point illustrates the complementarities that exist between modes of supply and the fact that trade in mode 3 can facilitate greater proximity in mode 1. Recent cross-country and cross services sectors' empirical work supports the evidence that complementarities exist between mode 1 and mode 3 (Buch and Lipponer 2004; Fillat-Castejon, Francois et al. 2008; Nordas and Kox 2009; Buch, Kesternich et al. 2010).

Despite proximity between consumers who move abroad to consume services, international trade through consumption abroad is also obstructed by the SPT. Co-production between consumers and producers necessitates proximity. However, unlike modes 3 and 4 where the costs of minimising the proximity-bias are borne by producers (e.g. through relocating to the territory of the consumer), consumption abroad trade shifts the costs to consumers. For the individual consumer interested in consumption and not benefiting from production in the economic sense in which factors of production are being rewarded, the marginal cost of relocation is usually higher than that of the producers and its factors of production. It should also be noted that the monetary and transaction costs for the consumer trying to minimise the proximity-bias are higher, since producers who trade through commercial presence or movement of natural persons usually have an economy of scale advantage not enjoyed by the individual consumer. Thus, service producers moving to the consumers' territory can enjoy decreasing transaction costs as they spread them over a large market.

International trade through commercial presence allows for a significant reduction of the proximity-bias, thus minimising the SPT. Localising production enables the close proximity needed for co-production and enhances international trade. The choice of commercial presence as a means to advance international trade in services is supported by empirical

findings and also shows that technology is insufficient for generating a substitution effect from trade in mode 3 to trade in mode 1 (Nordas and Kox 2009). As mentioned above, commercial presence allows for decreasing costs of co-production. The choice of commercial presence can affect proximity. Some modes of commercial presence, which includes full presence of the foreign supplier including the hiring of local production factors, can have a greater proximity effect than weaker forms of commercial presence.⁷⁸ This issue will be discussed at length in the next chapter, explaining how international accountancy firms minimised the proximity-bias of the SPT.

As with commercial presence, the movement of natural persons allows for the greater proximity needed for co-production of services. In cases involving the movement of workers within corporate environments, the SPT's proximity costs are borne by producers. In other cases, when individual service providers are relocating to another territory for the provision of their services, these costs are internalised by individuals, raising their marginal costs. Further research is needed to assess whether indeed greater movement of labour employed in services takes place when workers are moving as intra-corporate transferees or are hired by local firms. Nevertheless, it seems plausible that this is indeed the case.

Conclusions

This chapter began with a critical assessment of the notion of services, showing that the literature fails appropriately to account for the essence of services and their difference from other market entities, as well as to provide a generalised definition. One of the important

⁷⁸ Weaker forms of commercial presence can, for example, be legal registration with a physical mailbox address but no real presence.

elements in this discussion was to show that many traits regarded as particular characteristics of services are, in fact, outcomes of the services' nature of co-production between producers and consumers. Applying Hill's market division into three market entities (tangible goods, intangible goods and services) and using Gadrey's definition of services, allows for an analysis of services within a single framework.

Having defined services, the main argument advanced here is that the constitutive characteristic of services, which explains their international trade patterns, is the nature of joint production between producers and consumers. The service as an outcome, whether intermediate or final, does not exist ontologically prior to a joint process of production, where, to a varying degree, the consumer is an input. The participation in production of the consumer (or goods belonging to the consumer) affects the heterogeneity of services and leads to quality variations even when standards are used. Co-production with consumers contributes to greater information problems in services.

This unique characteristic of services is at the heart of the answer to the research question guiding this study. Co-production creates a proximity bias between producers and consumers, thus explaining why services are internationalising more through commercial presence trade and through the movement of natural persons than they are in other modes of trade. The concept and importance of proximity extends beyond its treatment in the literature as mere physical distance. Stemming from the notion of co-production, proximity is extended to include time, space and relationship.

The SPT explains why co-production of services leads to particular patterns of international trade in services. Trade through commercial presence is the preferred mode of international trade because it localises production in close proximity to the consumer. Proximity is enhanced in all of its three dimensions. Movement of natural persons also furthers proximity yet the marginal costs for such reductions are higher when borne by individuals and not firms. Consumption abroad trade also leads to greater proximity but shifts costs onto the consumer, thus not benefiting from decreasing costs as in the case of commercial presence where service suppliers benefit from economy of scale effects. Finally although cross-border trade reduces some transaction costs, it retains less proximity particularly with regard to the relationship between the producer and the consumer.

Chapter 5: Can the Services Production Trap be Avoided?

Following an empirical investigation into the trajectories of international trade through different modes of supply, as well as into the very nature of services, it has been proposed that proximity between consumers and producers is an important constraint on the growth of international trade in services. The theory of services co-production and the SPT provides an answer to the question of why international trade in services has remained so low (and relatively constant) for the last 40 years, as suggested earlier by graph 1.3.

Nevertheless, while international trade in services remains significantly low, it appears that some service sectors have been able to internationalise far more than others. The consolidation of the accountancy and auditing services sector into a handful of global firms has often been taken as an indication that these services are among the most internationally traded services. The empirical results of Chapters 2 and 3 confirm this proposition, particularly with regard to trade in mode 3. However, it is still unclear why mode 3 trade became so high in the case of the accountancy sector, but has not been so for other sectors. Put differently, if the SPT predicts that trade will be higher in mode 3 due to the proximity constraint, why have other services sectors, which have followed similar trade patterns, not enjoyed the same magnitude of commercial presence in international trade?

This chapter aims at raising the empirical and theoretical bar by questioning the SPT through contrasting it with evidence that, perhaps, and unlike other sectors, accountancy services are highly traded internationally and have somehow managed to overcome the proximity-bias of services co-production. Fending off this challenge, the chapter suggests that accountancy

firms adopted a specific model of firm organisation, which had allowed them to minimise the consequences of the SPT by taking advantage of the proximity constraint. Thus, accountancy firms globally localised (inter-localised) themselves in order to cater to their clients in the closest possible proximity. Doing so, they have gained unique economic and political powers which also enabled them to further their internationalisation through international harmonisation of accountancy standards.

The chapter proceeds as follows: the next section discusses the growth and internationalisation of accountancy firms, particularly the big four firms. This discussion leads to the puzzle challenging the ability of the SPT to explain the internationalisation of the accountancy sector. The subsequent sections solve the puzzle, showing consistency between the theoretical underpinnings of the SPT and the internationalisation of accountancy services. The subsequent section then explores the features of the partnership model of firm organisation, and is followed by a section discussing the importance of accountancy standards. The chapter concludes with a thorough investigation into the political economy of international accountancy standards-setting. This inquiry extends beyond the main question guiding this research into the construction of international private governance. Nevertheless, it is important since it highlights an international political economy application stemming from the very nature of service firm organisations initially generated to address the SPT.

The Growth of International Accounting Services

The theoretical predictions and the empirical findings show that international trade in services takes place mainly through the localisation of the service transaction. In most cases, it is the service provider or factors of production (labour) that provide services in proximity to

consumers. It is nevertheless surprising that accountancy services became so globalised in contrast to other service sectors (World Trade Organisation 2000:1). The section briefly describes the state of play in the accountancy sector where a worldwide four-firm oligopoly-like structure exists. The next sections expand the analysis into how this formation came about.

As was indicated in Chapters 2 and 3, the accountancy sector has been growing rapidly, particularly over the last 30 years. This expansion has gone hand in hand with a consolidation process that took place in the sector on a global scale. From the second half of the twentieth century onwards, consolidation led to global domination of the profession by some eight large accountancy and auditing firms, often termed the Big Eight. These firms originated from networks of partnerships coming from the UK and the US which, in the early 1900s, were small firms with several partners and several hundred employees. Excluding Arthur Andersen, which originated in the US, all were originally UK firms that expanded abroad. During the end of the 1970s and the 1980s, the accountancy sector embarked on a process of further consolidation and concentration, with the Big Eight merging with smaller firms and expanding partnerships (Zukin and DiMaggio 1990: 229-230). In 1988, the Big Eight were transformed into the Big Six, when Deloitte, Haskins & Sells merged with Touche Ross and became Deloitte & Touche (which is now called Deloitte, Touche Tohmatsu).⁷⁹ Ernst & Whinney merged with Arthur Young and formed Ernst & Young in the same year. Further consolidation in the market took place ten years later when, in 1998, Price Waterhouse merged with Coopers & Lybrand, creating PricewaterhouseCoopers. In 2002, following the

⁷⁹ The UK partnership of Deloitte, Haskins & Sells separately merged with Coopers & Lybrand, while the Australian partnership of Touche Ross merged with KPMG.

Enron scandal,⁸⁰ the accountancy market became dominated by the Big Four, as Arthur Andersen, Enron's auditor company, collapsed after it was found to be involved in misconduct and in the obstruction of justice. Subsequently, Arthur Andersen was sold to the remaining Big Four companies, which effectively control the sector today, KPMG,⁸¹ Deloitte Touche Tohmatsu, Ernst & Young and PricewaterhouseCoopers (Deloitte Touche Tohmatsu 2008; Ernst & Young 2008; KPMG International 2008; PricewaterhouseCoopers. 2008). Tables 5.1 and 5.2 show the growth of revenues and employees of the big international accountancy firms. Over a period of 28 years, these firms' revenues grew by more than 3100%. It is also striking that the combined revenues and numbers of employees of the Big Eight firms together are far lower than those of each of the Big Five in the next period. More than half a million employees were engaged annually by the Big 4 and Big 5 companies over the last 12 years, compared with fewer than 90,000 by the Big 8 during the 1980s.

Table 5.1: The Big Accountancy Firms: Global Revenues (US\$ billions)

Firm	1980 Big 8	Firm	1999 Big 5	Firm	2008 Big 4
Arthur Anderson	0.645	Pricewaterhouse Coopers	17.3	Pricewaterhouse Coopers	28.185
Coopers & Lybrand	0.595	Arthur Anderson	16.21	Ernst & Young	24.5
Peat Marwick & Mitchel	0.586	Ernst & Young	12.58	KPMG	22.69
Ernst & Whinney	0.5	KPMG	10.86	Deloitte Touche	27.4
Deloitte Haskins & Sells	0.45	Deloitte Touche	10.6		
Arthur Young	0.4				
Touche Ross					
Price Waterhouse					
Total:	3.176		67.55		102.775

Source: Companies annual reviews; *Fortune* (1980) and *Public Accounting Report* (1981, 2000) cited in Cooper and Robson, 2009.

⁸⁰ Enron corporation was an energy company that went bankrupt in 2001 following a fraud of its accountancy procedures jointly conducted with Arthur Andersen. At the time, the collapse of Enron was the largest ever bankruptcy in history.

⁸¹ KPMG stands for Klynveld, Peat, Marwick and Goerdeler, who founded the companies that form KPMG today.

Table 5.2: The Big Accountancy Firms: Number of Employees

Firm	1980 Big 8	Firm	1999 Big 5	Firm	2007 Big 4
Arthur Anderson	15,500	Pricewaterhouse Coopers	155,000	Pricewaterhouse Coopers	146,767
Coopers & Lybrand	12,000	Arthur Anderson	135,000	Ernst & Young	124,335
Peat Marwick & Mitchel	14,000	Ernst & Young	97,800	KPMG	123,322
Ernst & Whinney	14,000	KPMG	102,000	Deloitte Touche	150,000
Deloitte Haskins & Sells	10,000	Deloitte Touche	90,000		
Arthur Young	15,000				
Touche Ross					
Price Waterhouse					
Total:	80,500		579,800		544,424

Source: Companies annual reviews; Fortune (1980) and Public Accounting Report (1981, 2000) cited in Cooper and Robson, 2009.

Furthermore, already by 1996 the Big Six companies dominated the audit market. The Big Six's combined market shares were 98.5% in the USA, 97.4% in the United Kingdom, 84.4% in Japan and 79.6% in Germany. Their market share in France was smaller (50%) but still represented control of half of the market (Klaassen and Buisman 2008: 444). In terms of the number of companies and their sales or assets, the vast majority of Fortune 500 companies are audited by the Big 4 accountancy firms (Hanlon 1999: 205).

The next sections explore this anomaly from two perspectives. First, taking an organisational perspective, the following section looks into the nature of the accountancy partnership firm and its structure. The subsequent section explains, through the prism of political economy, how accountancy firms used their firm's organisational model to gain sufficient powers to construct a global governance regime for accountancy standards. Global accountancy standards enable accountancy firms to further expand internationally using similar rules and standards.

The Partnership Model of Firm Organisation

The international dominance of the accountancy sector by several global accountancy firms stems from their unique model of firm organisation, the partnership model. This organisational model enables accountancy firms to take advantage of the proximity-bias constrained by the co-production of services by producers and consumers. Furthermore, by serving their clients in close proximity, accountancy firms were able to consolidate substantial market power and further expand on a global scale. Finally, these firms were able to leverage their economic powers to exert political influence using a multi-level strategy to internationally harmonise accountancy standards.

Most international accounting firms are private partnerships, with some of them as old as the nineteenth century. Over the years, many have become global through mergers and expansion of their partnership basis. These partnerships form networks of firms that are owned and managed independently, whether wholly or partly (Boys 2005; Jenkins, Deis et al. 2008). They differ considerably from the “classical” notion of the multinational enterprise, which is a corporation owning subsidiaries in more than one country. The partnership model, as it will be referred to in this paper, exists in several other markets, such as law consultancy and advertising, though hardly to the degree prevailing in the accountancy sector.

The uniqueness of the partnership model of corporate association is that each international accountancy firm does not constitute a single entity but a range of many independent firms, sometimes more than a thousand different firms in different geographical locations.⁸² Hence, accountancy firms may share a common name, such as KPMG or Grant Thornton but, at the

⁸² In some cases, and often in proximity to capital and financial centres, many firms are concentrated in the same location.

same time, they are almost completely independent of each other. The partnership or network structure enables the development of the firm's global reputation and branding.

Since regulation in accountancy differs considerably from one country to another, at least until recently, having local partners in each country minimises adaptation and learning costs that are often borne by international corporations that need to comply with differentiated regulation as part of the firm's operation.

The partnership structure provides accountancy companies with particular advantages vis-à-vis their clients. First, they exhibit internationalisation through localisation. Rather than spreading internationally through the establishment of subsidiaries or forming new companies in each territory, accountancy firms draw on existing local firms and their resources. This practice most often provides them with an immediate and existing market base of clients. Second, the local dimension of the company is an important aspect in the provision of the service. Trading through local producers and firms facilitates greater proximity to consumers beyond the elimination of geographical dimensions. Localisation enables greater proximity in terms of relationship and time and generates proximity spillovers such as certainty, trust and minimisation of information problems. Internationalisation through local partners also adds international reputation to the service. Finally, as many clients of accountancy firms become international, they have a growing need for uniformity and coherence in measurements of their financial activities and consecutive reporting. The global spread of the network provides accountancy firms with the opportunity to service their clients virtually anywhere in the world, with relatively few costs or investment in creating new operations abroad, while at the same time maintaining quality standards across the partnership, and enabling proximity in the process of production.

For these reasons, accountancy firms' governance is a hybrid of diffuse and centralised control. Centralisation is the key to sharing back office facilities, accumulation of knowledge, reputation, and quality assurance across the network, as well as enabling the referral of clients between partners, and facilitating intra-corporate transfers. Thus, by concentrating on the production of services in mode 3, they are also able to expand trade through mode 4 and mode 1. The big companies operate an internal labour market where their professionals move across borders between partners (Hanlon 1991; Hanlon 1999: 206). Centralisation is carried out through the establishment of an entity that coordinates the activities of the partnership network. However, the central entity itself does not practice accountancy. Diffusion is central in enabling more effective and proximate delivery of services to clients. It is also a key element in the financial stability of the partnership firm. If one partner experiences financial difficulties or collapses, the independence of partners ensures that this will not affect the rest of the firm.⁸³ This structure is often termed as Verein or Voluntary Association, a business structure consisting of independent nodes with limited liability vis-à-vis each other. Accountancy firms gain advantage over national regulators, since this structure frees them from reporting the activities of other partners who are not in the same national territory. This is of particular importance to them, as in the US case, since they are not obliged to report their operations to the SEC, other than those carried out by the local partners. For that reason competition and antitrust policies are harder to enforce on the global accounting firms. Furthermore, the international partnership model creates a strong incentive for harmonisation of standards. By operating and referring to the authority of internationally accepted standards, firms linked in an international network but operating on a national level use harmonisation as an insurance mechanism in minimising national liability suits.

⁸³ While this structure minimises financial negative effects across the firm, it does not preclude the reputation damage that can occur, particularly when major partners are involved.

Accountancy companies are an important place where accounting and auditing practices are often developed and become standard practice. They are also an important human resource for any industry, as their alumni take up positions and play a key role in corporate accounting and finance across all industries. With accountancy becoming a highly specialised profession, partly due to the growing sophistication of financial and capital markets, accountancy firms and their alumni are, in most cases, far more experienced than the government employees who regulate and supervise their activities (Haller 2002; Cooper and Robson 2009).

Various motivations and reasons can explain the growth of accountancy firms and the consolidation that took place in this sector in the last 30 years. Indeed, favourable economic conditions furthered the need for their services and following their clients. At the same time, the very basic organisation of the firm also creates an incentive for expansion. The growth of independent partners reduces traditional limitations to firm size. The independence of partners does not decrease returns in the same way that employees do as profits are not shared between all partners. Thus the networked firms have an incentive to increase the number of partners. As a result, there is an absolute growth of salaried accountants (hired by different and independent partners), which exceeds the expected normal rate in a traditional firm (Pastra, 2004 cited in Cooper and Robson 2009).

Accountancy firms are conscious and sophisticated political actors. The growth of their economic power strengthened their ability to influence the political economy environment in which they act. Historically, particularly in Anglo-Saxon countries, senior partners from accountancy firms founded professional associations and were substantially involved in running them. This critical involvement is well exemplified in the establishment and

management until today of key organisations such as the Financial Accounting Standards Board (FASB), the American Institute of Certified Public Accountants (AICPA) and the Institute of Chartered Accountants in England and Wales (ICAEW). Partners have also played a central role in the foundation and development of the Securities and Exchange Commission (SEC) and the International Accounting Standards Committee (IASC) (Mattli and Buthe 2005; Cooper and Robson 2009). Thus, accountancy firms are not only networks in terms of their structure, but they are also active participants in a complex political economy web involving the private sector, professional standard-setting institutions and regulators. The next section argues that accountancy firms were able to mobilise their network organisation, as well as economic and knowledge resources, to construct and govern international accounting standards setting.

The Political Economy of International Accounting Standards-Setting

The partnership model's ability to minimise the constraints stemming from the joint production of services by producers and consumers, has particular implications for the political economy of services trade liberalisation. While these implications are not deterministic, they illustrate how the concentration of economic power in the hands of a few firms led, in the case of accountancy services, to the concentration of political power. The combination of these power resources facilitated the capacity of the Big 4 firms to construct a favourable international governance regime of accounting standards which further supported their internationalisation. Hence, large international accountancy firms were able to mobilise their economic, human and technical powers across the globe to influence governments and international organisations to harmonise their accountancy rules in accordance with standards that they have collectively developed over more than thirty years. Accountancy firms were able to do so due to their unique partnership organisational structure, that enabled them to

concentrate vast resources among a few market actors. These power resources were used for the creation of International Financial Reporting Standards (IFRS) that form a private global governance regime of accounting standards accepted in over 120 countries in America, Europe, Asia, Oceania and Africa. This section continues with a brief introduction to the notion of accounting standards, and their importance and the role they play in the national and international political economy. It then provides the empirical contextualisation of the development of international accountancy standards and analyses the effects of the Partnership Model on the emergence of international accounting standard setting.

The national political economy of accounting standards

Accounting standards are rules and guidelines that specify how firms should report assets and events in their financial statements. The standards define the type and degree of information to be presented and include elements such as assets, profits, costs, revenues and liabilities. A fundamental rationale which underlines accounting standards is the creation of a level playing field across firms in reporting their financial status and value to shareholders and the public. While accounting standards may appear to be quite technical, they significantly influence the incentives structure behind firms' behaviour.⁸⁴ For this reason, they serve as a tool for governments in assessing corporate malfunction and anticipating financial instability. Accounting standards have followed the development of the nation state and were drafted, regulated and enforced in each constituency following its unique political, legal, cultural and economic trajectory.

⁸⁴ For example, accountancy standards can affect a firm's decision to invest or to raise capital in order to minimise tax payment or to improve the visibility of executive performance for shareholders. At the same time, these standards have a strong moral hazard prevention dimension in that they influence companies against the kind of misconduct exemplified by the Enron case and several other cases in the recent Credit Crunch.

Traditionally, two main and well entrenched accountancy philosophies prevail. The Anglo-Saxon convention emphasises the provision of investors with adequate information, with rule-setting mainly by professional bodies, and influenced by court rulings. In some Anglo-Saxon countries, such as the US, taxation is delinked from financial accounting. The continental European accountancy practice (as well as Japan), is less focused on information provision, and is oriented towards safeguarding creditors' interests. In these countries, standard-setting is predominantly an integral part of the legal system, and alteration of accountancy standards is done through legislation rather than through case law. In continental Europe, tax accounting is often linked with financial accounting (Botzem and Quack 2006; Nobes and Parker 2008).

Since accountancy standards are not a matter of pure technicality, various competing interests prevail in the field. Accounting firms and professionals have vested interests in regulation, since regulation influences their income, earnings, status and risk exposure. Governments are interested in social welfare, socio-economic consequences and financial stability. Companies and institutional investors have an interest in minimising costs related to compliance and disclosure. Investors are interested in the true value of companies and financial information, while other society actors, such as trade unions, pursue accountability and social justice aims. Thus, regulation, membership and services are all subject to competing interests of various stakeholders, and accountancy standards setting reflects this private vs. public tension (Gallhofer and Haslam 2007).

Why would international accounting standards be desired?

The case for international harmonisation of standards is not straightforward given the prevalence and entrenchment of divergent interests in the domestic economy, as well as the

different national trajectories in accounting standards setting. Nevertheless, with the intensification of globalisation, incentives became stronger for many market actors, and particularly large auditing firms, to harmonise accounting standards on a global scale.

Multinational Enterprises (MNE) operating across borders view regulation as an entry barrier. Hence, different financial and accountancy reporting standards increase the costs of accessing multiple capital markets. Harmonisation of standards reduces the cost of tailoring listing and issuing requirements to specific capital markets, and facilitates the flow of financial information with the MNE. International harmonisation is also beneficial for foreign investors requiring an understanding of the financial statements of companies whose shares they wish to purchase.

Globalisation also affects the interests and motivation of national regulators who, on the one hand, wish to ensure that they have sufficient domestic control over standards setting in order to ensure quality and adequate enforcement and, on the other hand, wish to facilitate expansion of the domestic capital markets and investment. A common international accountancy basis simplifies economic activity since divergent standards result in market inefficiencies constraining capital flows and investment (Sawani 2009: 6). If regulators are convinced that international standards can still maintain high quality and enforceability, then international standards can also reduce regulatory costs. These costs include the need to constantly develop and adjust local accountancy rules to domestic and international developments,⁸⁵ as well as monitoring costs. The latter costs stem from the problem of monitoring and controlling local and foreign firms operating across the border, where

⁸⁵ Greater cost savings can be particularly high in developing countries where capital markets and regulatory systems are underdeveloped.

different standards increase the difficulty of supervision. Comparability of financial information reduces misunderstanding concerning foreign financial statements.

Large accountancy and audit firms can benefit highly from international harmonisation of accountancy standards. International standards remove a major constraint on their ability to operate across borders and service international clients, as well as facilitate the internal movement of labour across borders. In this context, national regulators have an incentive to work closely with the accountancy sector in developing and enforcing standards since accountancy and auditing firms serve an important role in ensuring that the rules and standards are applied and enforced in an appropriate manner. As will be discussed later, the benefits of creating international accountancy standards were even higher in the case of the big accountancy firms who also sought to play a significant role in developing and governing these standards.

The development of international accounting standards is important since it shows that the partnership model enabled major firms from the accountancy sector to minimise the constraints of the SPT. Organising themselves through this model, these firms were not only able to internationalise through local partnerships, they were also able to gain the powers needed to effectively lobby governments and international organisations to create international accountancy standards in a manner serving these firms and one that allows them to expand further. Such internationalisation has not been experienced in any other service sector. The next section reviews attempts to develop international accounting standards. It is followed by a short review of relevant governance literature, facilitating the subsequent discussion of how the large accountancy firms managed to create and keep substantial control of an international private governance regime of accountancy standards.

The development of international accounting standards

Initiatives to harmonise accounting standards at regional and global levels can be traced to at least a hundred years ago, with three main reasons for substantial attempts taking place in the aftermath of the Second World War era. First, the prevailing inadequacy of accounting standards was perceived to be one of the sources of the Great Depression, which was considered, at least partially, to be one of the elements that led to the outbreak of World War II. Second, initiatives for economic cooperation necessitated greater harmonisation of accountancy standards. Finally, Keynesianism, the prevailing doctrine at the time, emphasised the importance of public accounting for policy-making (Suzuki 2003).

The 1947 Marshall Plan marked the first significant attempt to harmonise accounting standards on a transatlantic level. The distribution of funds and economic recovery necessitated closer cooperation and comparability of measurements and performance of national accounts. The Organisation of European Economic Cooperation (OEEC) played an important role, and provided a forum for intensive discussions on the harmonisation of national accounting standards. By 1953, the OEEC developed a system of national accounts, and began publishing data on this basis. Nevertheless, this cooperation was limited in its scope and dealt with improving national accounts, while accounting standards remained unaffected (Botzem and Quack 2006). Within the same historical context, similar attempts to create a system of national accounts were made at the United Nations (UN), and in 1956 the OEEC and the UN decided to merge both systems.

The success of harmonising national accounts within international organisations⁸⁶ did not mirror accounting standards in any of the attempts made from the mid-1950s until today. On several occasions, the UN had unsuccessfully tried to play a part in setting accounting standards. A proposal to establish an International Institute of Accountancy within UNESCO failed, as a result of European opposition. Similarly, the establishment of the Commission on Transnational Corporations' Expert Group on International Standards of Accounting and Reporting did not succeed in meeting its goals of developing common UN international reporting standards for MNEs due to disagreements between developing countries and developed economies, where most MNEs originate. The UN abandoned its initiative to internationally harmonise accounting standards in 1982. As a counter initiative to UN efforts, the Organisation for Economic Cooperation and Development (OECD) representing most developed economies at the time, sought to produce limited harmonisation of accounting standards among its members. OECD's recommendations on accounting standards within the framework of the Guidelines for MNE (1976) remain minimal and are not binding (Zund 1983; Katsikas 2006; Kerwer 2008). Finally, an attempt to harmonise accounting standards was made by World Trade Organisation (WTO) member states, where accountancy rules were exceptionally selected as a test case for harmonisation of professional services disciplines. Despite much deliberation and negotiation, WTO member states were reluctant to lose even partial control over the regulation of the accountancy sector (Honeck 2002).

Regional attention to the US and Europe is important for the sake of understanding the development of international accounting standards. While the US had a long tradition of standards setting, the European integration project brought together countries' accountancy systems' diversified trajectories. Attempts to discuss cooperation to set accounting standards

⁸⁶ Throughout this paper, intergovernmental organisations are referred to as international organisations. Non-governmental international organisations are referred to explicitly.

in Europe began in 1951 with the establishment of the Union Européenne des Experts Comptables, Économiques et Financiers (UEC); however, it had no impact and, once again, the goal of common accounting standards was not realised. Harmonisation of accountancy standards became an issue with the establishment of the European Community (EC) in 1957. Common accountancy standards were viewed as a necessary component in meeting the goal of freedom of establishment of firms across the EC, as well as facilitating cross-border trade, and the establishment of a European capital market (Haller 2002; Leuz, Pfaff et al. 2004; Katsikas 2006).⁸⁷ In the mid-1960s, the Commission launched an initiative to implement this goal and formed an experts committee, which produced the Elmendorff Report in 1971, serving as the basis for the draft of the first directive aimed at harmonising accountancy rules, the Fourth Company Law Directive. The draft Directive gave ground to a major conflict between member states, as well as between business interests, and was further complicated by the 1973 enlargement of the EC to include the United Kingdom, Ireland and Denmark. The draft Directive was heavily influenced by Germany, and was met with much criticism by the UK, Denmark and the Netherlands, all of them countries with an Anglo-Saxon tradition. At the end of long negotiations, the Fourth Directive was adopted in 1978. The second directive, named the Seventh Directive, aimed at further harmonisation, experienced a similar fate and was adopted in 1983 after long and complicated negotiations (Botzem and Quack 2006).

The Fourth and the Seventh Directives had limited success in driving harmonisation forward in Europe. While, on the one hand, they led to mandatory codification of certain accountancy rules which impacted over 2000 firms across Europe and enabled some comparability of

⁸⁷ *“The Council and the Commission shall carry out the duties devolving upon them under the preceding provisions, in particular...by co-ordinating to the necessary extent the safeguards which, for the protection of the interests of members and others, are required by Member States of companies or firms within the meaning of the second paragraph of Art. 58 with a view to making such safeguards equivalent throughout the Community”* (Treaty of Rome, Art. 54 (3)(g)).

financial statements across the member states, they were on the other hand, the result of hard compromise that was vague and left open to widely varying implementation and interpretation (Haller 2002; Botzem and Quack 2006).⁸⁸ During the 1980s and the beginning of the 1990s, the Commission and the US SEC discussed the possibility of transatlantic convergence in accountancy standards. By 1995, the Commission realised that the ocean of differences between the US and Europe is too wide to be bridged and began cooperating with the IASC to support its work to develop international accounting standards (European Commission 1995).

The situation in the US was completely different from that in Europe. US General Accepted Accountancy Practices (US GAAP) were well established and gained global importance with the economic flourishing in world financial and capital markets. From the beginning of the 1980s, financial and capital markets underwent rapid and growing globalisation. Foreign direct investment, as well as mergers and acquisitions were the key to this process. One of the features of this global growth was the expansion of capital markets, with companies seeking to raise capital to increase their economic activities. US stock exchanges were central pillars in this process, and became the chief source for capital raising, attracting international firms and companies seeking to become international. For European companies, US markets were particularly attractive and became significant capital sources. Table 5.3 and Graph 5.1, respectively show the growing importance of US capital markets, particularly for European firms. Table 5.3 shows the growth of European firms listed on the New York Stock Exchange (NYSE). This growth peaked in the last decade. Graph 5.1 shows the rapid rise in the market

⁸⁸ The Fourth Directive established requirements regarding information disclosure, classification and presentation of information and methods of valuation for the annual accounts of certain types of companies. The Seventh Directive defines accounting rules and requirements on usage of prescribed formats for consolidated balance sheets and consolidated profit and loss accounts (European Economic Community, 1978; European Economic Community, 1983).

capitalisation of US and non-US foreign firms on the NYSE. Market capitalisation is the sum of the various stocks issued multiplied by the respective prices of those stocks.

The globalisation of capital and financial markets put further pressure on governments and non-governmental actors to work towards internationally harmonising accounting standards that would minimise excessive costs of measurement and reporting for firms, and allow for better regulation and supervision for governments. Acknowledging the need for international accounting standards, the SEC and the Financial Accounting Standard Board (FASB), as well as other US accounting organisations, were of the view that US economic and financial centrality enables them to pursue a strategy of global convergence towards US GAAP rather than IFRS. Although they were increasingly willing to engage with the IASC, this perception and strategy remained, even in the face of the 1997 Asian financial crisis or the 2002 Enron and WorldCom scandals. Indeed, in both events, the need for improved standards was evident, but the US approach was to make domestic changes rather than go for international collective action (Haller 2002; Botzem and Quack 2006; Katsikas 2006; Gallhofer and Haslam 2007).⁸⁹

⁸⁹ The Sarbanes-Oxley Act, 2002, is a case in point, and was designed to correct accountancy, auditing and corporate governance deficiencies exposed in the Enron scandal.

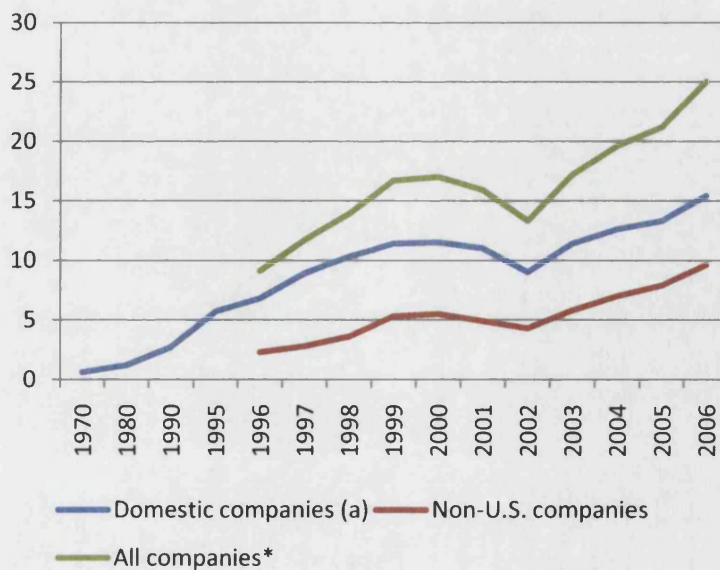
Table 5.3: Listing of Companies from EU Member States on the New York Stock Exchange (NYSE)

	<u>Until 1990</u>	<u>Until 2001</u>	<u>Until 2008</u>
Austria	0	1	0
Belgium	0	1	242
Denmark	1	2	1
Finland	0	4	1
France	0	18	815
Germany	0	14	17
Greece	0	3	16
Ireland	0	5	6
Italy	2	11	10
Luxembourg	0	1	24
Netherlands	4	18	185
Portugal	0	3	54
Spain	5	10	16
Sweden	0	2	4
UK	14	53	71

Source: NYSE 2008

(http://www.nyse.com/about/listed/lc_all_overview.html); Haller, 2002.

Graph 5.1: Market Capitalisation of NYSE Companies (US\$ trillions)



Source: NYSE, Facts and Figures

While international accounting standards setting was a matter of deep disagreement among governments, several private actors began developing international accounting standards that could be voluntarily adopted by countries and firms around the world. This led to the initiative to develop the IASC, later transformed into the IASB. From 1973, the IASC had sought to develop International Accounting Standards (IAS), which have gradually been adopted or accepted by a growing number of countries around the world, and are now practiced in some 120 countries. The most notable acceptances of the IAS (now called IFRS) have been those by the EU and the US. In 2002, the EU decided that, from 2005 onwards, all EU companies listed in a regulated market will prepare and publish their statements in accordance with the IAS, thus subordinating over 7,000 companies across the EU to international accounting standards. In August 2008 the SEC announced that it will allow certain companies to provide reporting according to IFRS from 2010, and will require all companies' IFRS reporting from 2014 (Dewing and Russell 2004; Epstein 2008). The next section reviews the literature on international private governance, as well as alternative explanations of why and how international private governance in accountancy standards came about.

International Private Governance of Markets: Theory and Alternative Explanations

The international governance of markets has been the subject of a growing body of literature mainly in the fields of international relations, political science and economic sociology. Responding to the emergence of international professional associations, standards setting institutions, and international organisations, these studies address issues of regulation, authority, governance, market formation and accountability in a globalised age marked by growing interdependence between states, as well as between non-state actors.

Explaining these phenomena, the literature emphasises self-regulation, soft law and private authority to describe and explain new forms of international governance that often represent a breakaway from traditional international governance structures directed by states (Hall and Biersteker 2002; Slaughter 2004). In this context, the importance of knowledge and expertise have often been used to explain how policy networks of professionals and epistemic communities create standards and international regimes to which firms and states voluntarily adhere (Adler 1992; Haas 1992; Keck and Sikkink 2001; Quack 2007). Morgan, as well as Fligstein and Dauer, provide three distinct approaches for the construction and governance of markets: markets as politics, markets as network structures, and markets as mechanisms of calculation (Fligstein and Dauer 2007; Morgan 2008). The approach of markets as politics view market governance as a political arena where different actors compete and engage in constructing and influencing market governance rules (Fligstein 2001; Fligstein and Stone Sweet 2002). The markets as networks approach focuses on interactions within the markets, whereby firms respond less to demand, and position themselves in relation to other firms using price and product quality signalling (White 2002). A central tenet of this approach is the idea of structural holes, which are gaps between individuals that can be connected through another individual, who can then benefit from significant advantages (Burt 1992). Finally, the 'markets as mechanisms of calculation' approach underlines the notion of framing: market entities need to be limited in order to be commercialised, with several characteristics that can be transferred to the market. Several calculative practices are set by the market, generating price legitimacy and predictability with monitoring and controlling mechanisms in place to ensure that the market frame is maintained (Morgan 2008).

As in other governance modes, private international standard setting governance is embedded within the greater problem of cooperation and enforcement. The problem of international cooperation has been discussed at length in the literature, dealing with formal and informal modes of cooperation, as well as addressing the particular conflict between actors from various backgrounds, competing interests, strategies, world views and understanding, goals and agreements concerning boundaries, symbols and the distribution of power and resources (Djelic and Quack 2003; Loft and Jeppesen 2003). In the case of developing international standards, governance is also likely to lead to enforcement problems, particularly when standards are voluntarily adopted. Furthermore, international standards suffer from an inherent problem of implementation despite the good will of states, since once standards are set internationally, they still need to be tailored locally and contextualised within each constituency to ensure that implementation is not just a formality (Loft and Jeppesen 2003; Botzem and Quack 2006; Harpaz and Herman 2007). Nevertheless, numerous international standards and international standards-setting organisations exist, such as in the fields of telecommunications, engineering, meteorology, laboratories accreditation and more.

Several paths can lead to the emergence of international private governance. Private governance can be the result of the delegation of authority from states to a range of private actors. This delegation invokes the agency problem, where principals' and agents' interests do not match, and once authority has been delegated, the agent can act contrary to the principal's interests (Coase 1960; Mattli and Buthe 2005). Much of the literature dealing with the delegation of authority to private actors engages in the question of whether this delegation has eroded the capacity of the state to regulate or reinforce it through re-regulation and other means (Vogel 1996; Djelic and Sahlin-Andersson 2006). Nevertheless, the delegation of authority from the state to private actors does not correspond to the development of the

private governance of accounting standards where delegation did not take place. Another reason for the emergence of international private governance has been attributed to a bottom-up process, where private actors frame, define and respond to new issues, with epistemic communities and transnational advocacy networks being major explanations. Yet, governance in accounting standards has not been a new issue and states were engaged in finding a common solution to it for a considerably long period. A third possibility of private international governance emergence is a mixture of the other two courses. Governments and private actors jointly engage in constructing new modes of governance or improving existing ones, with an important notion that governance is not necessarily a zero-sum game (Djelic and Sahlin-Andersson 2006). This explanation seems plausible at first glance since cooperation between governments and private actors indeed took place. However, as will be shown later, this cooperation succeeded only after private actors cooperated in isolation from governments and, to a large extent, imposed their solution on states either implicitly or explicitly.

The case of international rule-making in accountancy received much attention, mainly because it is a unique case where international rule-making has been widely driven by the private sector, and is becoming globally accepted. This particular case is of interest due to long entrenched divergent trajectories in the regulation of the accountancy profession throughout the world, with competing regulatory philosophies and strong corporate interests. The literature on international governance of accountancy can be divided into two main strands. The first strand is analytical and explains the nature of governance and the issues that arise from it, such as accountability or enforcement (Mattli and Buthe 2005; Walter 2008). The second strand of the literature is mainly descriptive in telling the story of international

standards setting in accounting, emphasising the role of states, private actors and changing conditions, such as globalisation and exogenous economic shocks.

It is rather striking that very little attention has been devoted to explaining the reasons that enabled the creation of private international governance in accountancy standards setting. Two reasons that have been put forward are the role of knowledge and epistemic communities as well as hegemonic power. The epistemic community explanation argues that the IASC was an epistemic community built around the formation and possession of unique technical knowledge. When pressures for greater financial and capital globalisation intensified in the 1990s and countries were unable to find a common solution to the need to harmonise their standards, the IASC was able to claim legitimacy (Martinez-Diaz 2005). While elements in this explanation are convincing, the IASC does not satisfy the conditions of an epistemic community, particularly as the experts comprising the community did not share similar beliefs about accounting standards and their cause-effect relationship. Indeed, the IASC brought together common interests from the private sector (most notably, accountancy firms), but actors differed in their worldviews and solutions to the problem of harmonisation. The broadness and flexibility inserted in the first 26 IAS is a case in point. The second explanation focuses on the role of the financial hegemon in setting accounting standards. Accordingly, the US had been able to export its standards to the rest of the world since it was a dominant financial centre. The role of the IASC is underplayed and is viewed as legitimising standards that are American in character (Simmons 2001). Indeed, the US has resisted the adoption of international standards other than its US GAAP for many years, and had sought other countries to converge into its standards. Nevertheless, the argument lost its ground with developments that took place after 2001, the year Simmons' paper was written, most notably the prospective adoption of IFRS in the US.

The case study of private governance in accountancy standards setting is significant to the study of political economy and private governance. While the partnership model of firm organisation, discussed below, exists in several other markets to a lesser extent, understanding the conditions that enabled the inter-localisation of international accountancy firms and the creation of private governance in accountancy standards can yield better understanding into the dynamics of these other sectors, as well as the complexity of multi-level collective action problems. Moreover, the depth and model of private governance achieved in accounting standards setting is of relevance to the study of other cases of emerging private governance, even when the firm partnership model is not concerned.

From Regulatory-Takers to Regulatory-Makers: The Partnership Model and International Standard Setting

The creation of an international private standards setting regime can be attributed mainly to the influence of big accountancy firms. Translating their financial, knowledge, and client basis resources and using their network structure, accountancy firms were able to simultaneously pursue insider and outsider strategies. On the one hand, market proximity allowed accountancy firms to grow and spread domestically, so that these international firms were treated as domestic companies. On the other hand, these firms, particularly the Big 4, used their partnerships network to gain global influence. They have lobbied and influenced countries and international organisations towards greater convergence and harmonisation of accountancy standards, and at the same time they have developed an alternative by constructing a new organisation which will develop international accounting standards. While decision-makers around the world were unable to reach collective action in the face of growing pressures from the financial and business environment, accountancy firms used an

outside-in strategy of incorporating decision-makers into the alternative process they were producing over more than three decades.

Insider strategy: influencing from within

Accountancy firms and their partners have always played a significant, if not a decisive, role in the development and running of professional associations and regulatory bodies. This position enables them to influence from within through various channels. First, as members of the organisations they can influence through voice and funding. Since in many countries, particularly in the Anglo-Saxon world, accountancy standards setting is conducted wholly or partly by the private sector, accountancy firms are not only reactive in their actions, they are active in proposing new standards and modifications. Second, the influence of big accountancy firms that are international in their nature in almost all cases, extends also to the actual decision-making mechanisms. Acting and former partners of the big accountancy firms (as well as smaller firms) are significantly represented in professional associations, such as in the case of the American Institute of Certified Public Accountants (AICPA) or the ICAEW. In the latter, which is one of the oldest associations in the world, over 70% of all presidents came from the Big Four companies, and over 80% from the Big Eight firms. As illustrated by table 5.4, if their number of years in office is taken into account, their influence is even greater.

Table 5.4: Presidents of the Institute of Chartered Accountants in England and Wales

Firm	Presidents		Term	
	Number	Percentage	Yrs	Percentage
PricewaterhouseCoopers	34	33.7%	42	33.6%
Deloitte Touche	18	17.8%	21.5	17.2%
Ernst & Young	10	9.9%	20	16.0%
KPMG	9	8.9%	10.5	8.4%
BDO Stoy Hayward	4	4.0%	3.5	2.8%
PKF	3	3.0%	3	2.4%
Grant Thornton	2	2.0%	2	1.6%
Kingston Smith	2	2.0%	2	1.6%
Other	12	11.9%	13.5	10.8%
Non-practising	7	6.9%	7	5.6%
Total	101	100.0%	125	100.0%
Total (Big 4)	71	70.3%	94	75.2%
Total (Big 8)	82	81.2%	104.5	83.6%

Source: Boys, 2005 (Presidents)

When attempts to harmonise accounting standards began in Europe, accounting firms heavily invested in lobbying efforts. They have played a significant role in the Groupe d'Etudes, as well as in the UEC and later in the FEE. Through these European professional organisations they have tried to shape and influence the negotiations between European member states from the end of the 1950s until the EU finally adopted the IFRS in 2005 (Hopwood 2004). This insider strategy used lobbying at European institutions, such as the Commission and the Council, through drafting position papers, suggestions and active participation in the deliberations. At the same time, accountancy firms used the national level to directly and indirectly lobby governments, using the partnerships network of their firms to do so in as many member states as possible, while simultaneously being classified as a local company in each country.

It should be noted that opposition to IFRS adoption in the EU came from several Member States, including France. This is exemplified in a letter sent to Romano Prodi, the President of

the Commission, by Jacques Chirac, the French President, who expressed his grave concern that adopting IFRS would be against Europe's best interests (Armstrong, Barth et al. 2008: 9). Nevertheless, accounting and auditing firms, particularly the big firms, had a substantial impact on European politics and decision-making processes concerning the EU's eventual 2005 decision to adopt IFRS. European companies (mainly those audited by the Big 4 firms) as well as the Big 4 auditors themselves, spent many resources in lobbying the Accounting Regulatory Committee (ARC),⁹⁰ the European Parliament and the European Commission (Armstrong, Barth et al. 2008; Königsgruber 2009: 30).

Evidence of considerable lobbying involvement on behalf of accountancy firms has also been documented in the efforts of other international organisations to harmonise standards, such as in the UN, the OECD and the WTO. In the WTO, accountancy firms have been particularly active, taking advantage of their expertise in a field that was negotiated mainly by trade people, rather than by professional accountants. Accountancy firms invested many resources in direct lobbying and in indirect influence through the International Federation of Accountants (IFAC), which has been one of the major motivating forces behind the goal of creating accounting disciplines (Honeck 2002). Nevertheless, the exclusive possession of knowledge and expertise by the accountancy lobby was not a sufficient condition for success at WTO level.

An important qualification must be put into place. The insider strategy taken by accountancy firms is not necessarily a lobbying cartel, nor does it imply any inter-firm coordination between the big accountancy firms (other than collective actions through professional associations). Since accountancy firms have been in growing competition with each other, the

⁹⁰ The ARC is composed of Member States' government representatives.

contrary is probably more accurate (Zeff 2003). Furthermore, rifts in accounting ideology strongly persisted, at least until the 1980s, between the big accountancy firms and smaller firms in continental Europe. Nevertheless, while fierce competition prevailed, large accountancy firms (and others, in many cases) had an incentive to promote closer international convergence of accounting standards, regardless of their substance, as argued earlier.

Outsider strategy: developing an alternative

Not abandoning their attempts to influence governments and international organisations' initiatives to harmonise accountancy rules from within, accountancy firms began to develop an alternative forum, of a more professional scope. In 1966, Henry Benson, a prominent English figure in the accountancy profession and the grandson of one of the four founding brothers of Coopers (later to become part of PricewaterhouseCoopers) began cooperating with other firms and accountancy institutions in the US and Canada to devise international accountancy standards. The initiative led to the creation of the Accountants International Study Group (AISG), and was, to a large extent, a counterweight response to the European Commission's sponsored Group d'Etudes. The AISG was composed of representatives from accounting associations in the UK, the US and Canada who were high profile practitioners from international accounting firms, that felt their attempts to promote their agenda in the Group d'Etudes were not fruitful. The main aim of the AISG was to provide a private standard setting alternative to international convergence, and it was mainly led by the big Anglo-Saxon firms who wanted greater penetration into European markets (Botzem and Quack 2006; Veron 2007). The AISG produced comparative studies of accounting standards and was dissolved in 1977.

In 1972, the AISG invited six further professional associations to join its initiative to create the IASC, with the manifest goal of developing internationally accepted standards. Existing associations were joined by others from Australia, France, West Germany, Japan, Mexico and the Netherlands. British accountancy firms were behind the main motivation to establish the IASC, as they felt that they were not successful in their lobbying efforts to secure their interests in the negotiations over the Fourth Directive. Thus, while they maintained an insider strategy of lobbying the British government and acting through European professional associations, they began to diversify their possibilities by creating a new international platform that extends beyond Europe (Hopwood 2004).

The formation of the IASC highlights several issues. First, while governments had some success in developing international accounting standards for the macro-economy (national accounts), they were not successful in agreeing on common standards to serve the micro-economy (firms), at least as perceived by the accountancy sector itself. Second, while governments made efforts to develop international standards in international organisations, it was evident at the time that they believed the prospects for success are greater at the regional level (Europe). For accountancy firms that wanted to enlarge their networks this was not enough and it did not solve the great transatlantic accountancy divide. Third, private actors, most notably firms, were willing to engage in the front line of negotiations concerning international accounting standards setting. Finally, the creation of the IASC was both instrumental and symbolic. It was instrumental since it provided the accountancy sector with a platform for joint cooperation away from any government intervention. It was symbolic for two reasons. First, it signalled to accountancy firms' clients that auditing firms were seeking to find a solution which potentially removed a high hurdle for clients' internationalisation. Second, the creation of the IASC signalled to governments that they were distancing

themselves from their constituencies, thus creating an incentive for governments to reengage with the accountancy sector.

Evidence of the success of the IASC and accountancy firms can be seen in the gradual process of de-facto adoption of the IAS by many European companies. While negotiations did not succeed at the European level, the success of the IASC to develop 26 IAS from 1973 to 1988 did not go unnoticed. Faced with an alternative to long and cumbersome negotiations in Europe, private sector and accountancy firms' lobbying became successful in several European capitals, which, starting in the 1990s, began amending their laws to permit reporting in accordance with IAS. Facilitating this process was the de-facto adoption of the IAS by many European companies that wanted to become international and to exploit the new opportunities brought about by the globalisation of trade, finance and capital. Indeed, some European companies chose to adopt dual reporting along with the US GAAP and according to national required standards, but the vast majority of European firms embarking on this process, chose the IAS.⁹¹ Member states such as Austria, Belgium, France, Germany, Ireland, Italy, the Netherlands, and the UK either brought their regulation into line with the IAS or permitted it as a second and complementary reporting system (Haller 2002; Katsikas 2006). This phenomenon of de-facto or spontaneous adoption of the IAS has also been confirmed in statistical analyses (Canibano and Mora 2000). The growing alternative produced by the IASC, de-facto harmonisation to the IAS and persistent political disagreement in Europe, are at the basis of the Commission's move in 2002 to suggest that

⁹¹ For example, German companies, such as Bayer, Heidelberger Zement, Schering and Deutsche Bank, were among the pioneers that published their reports in conformity with the IAS Katsikas, D. (2006). Explaining Non-State Regulatory Authority: The Case of the International Accounting Standards Board. Garnet Conference. Amsterdam.

European accountancy standards' harmonisation will be made to the IAS/ IFRS (European Commission 1995).⁹²

Outside-in strategy: bringing regulatory-setters inside

The success of the IASC in the 1990s and the 2000s in setting standards voluntarily adopted by a growing number of countries across the world is also attributed to the outside-in strategy taken by it and by the accountancy firms that are behind it. The outside-in strategy, adopted from the mid-1970s was to engage major standards-setters in cooption and cooperation with the IASC. From 1976 onwards, the IASC began cooperating on various initiatives with the Bank of International Settlements (1976), the OECD (1979), the UN (1980), national standard-setting organisations, the SEC (1984), FASB (1985) and International Organization of Securities Commissions (IOSCO) (Haller 2002; Botzem and Quack 2006). Membership and observers status was offered to organisations with close affinity to standards setting: the Association of Financial Analysts (1986), the Federation of Swiss Holding Companies (1995), and the Association of Financial Executives (1996). The International Chamber of Commerce (ICC), International Federation of Trade Unions (IFTU), International Banking Association, World Bank, OECD and UN organs became affiliated, as did the FASB (1988), the EU Commission (1990), IOSCO (1996) and the Republic of China (1997) as observers (Botzem and Quack 2006; Katsikas 2006; Kerwer 2008).

The outside-in strategy was directed at attracting and including the main stakeholders in accounting standards setting, in an environment initially shaped by the accountancy sector,

⁹² It should be noted that the creation of the IAS does not indicate that conflicts and disagreement did not exist in the IASC. Indeed, evidence for such conflicts is scarce, but as argued by Botzem and Quack, the broad and flexible choice of principles that the IAS permitted, indicates the existence of disagreement Botzem, S. and S. Quack (2006). *Contested Rules and Shifting Boundaries: International Standard-setting in Accounting. Transnational governance : institutional dynamics of regulation*. M.-L. Djelic and K. Sahlin-Andersson. Cambridge ; New York, Cambridge University Press: 266-286.

with the aim that these stakeholders would voluntarily adopt the IAS/ IFRS. The inclusion of these key organisations enabled the private sector and accountancy firms to negotiate rule-making on an equal footing with them and, directly and indirectly, with governments.

It is important to note that the big accountancy firms have invested in lobbying and influencing the FASB almost since its inception. In 1976, the Metcalf inquiry into the accounting profession, led by Senator Lee Metcalf, produced an extensive report on the behaviour of the Big 8 accountancy firms. The report found that the Big 8 dominated the decision-making process of accounting standards setting in the US, to the extent that the firms had gone as far as bidding for their corporate clients through their influence over the FASB, and had disproportionate representation as well as controlled funding and staffing (Zeff 2003; Bratton 2007: 20). Despite changes made following the report in the accounting standards setting process, the big accountancy firms continued to exert much influence over the FASB. Their continued lobbying on drafts and proposals was substantially higher than that of non-Big 8 accountancy firms and other actors, and they also informally increased their power within the FASB through representation of former ex-Big 8 members on the Board. These members often voted as a group and were able to form a winning coalition on subject matters of importance to the big accountancy firms (Sutton 1984: 90-91; Meier, Alam et al. 1996).

For the IASC and accountancy firms, cooperation with three entities—the SEC, FASB and IOSCO—was most important since these organisations were responsible for the world's most important capital markets. Recommending the use of IAS by IOSCO to its members was critical since it had the greatest influence in standards setting for stock exchanges around the

world (Haller 2002; Kerwer 2008). Accountancy firms were willing to go a long way in order to win IOSCO's recommendation to its members to adopt the IAS/ IFRS. This situation was clear to the SEC who used IOSCO to exert influence over the IASC to introduce many changes that would lead to greater convergence between the IAS and US GAAP (Hopwood 2004; Katsikas 2006).⁹³

Part of the influence of the SEC is reflected in the 2001 strategic change in which the IASC transformed into the IASB. Following much influence by the SEC and FASB, the IASC decided to become a not-for-profit independent foundation and board, where members are selected according to their experience and expertise. This change was warmly facilitated by accountancy firms, since it enabled the representatives of large firms to increase their influence and power (Dewing and Russell 2004; Botzem and Quack 2006). The growing power of accountancy firms in the IASB and its organisational restructure have helped facilitate the relationship between the IASB on the one hand, and the SEC and FASB, the key American actors in accounting standards setting, on the other hand. As in the then newly established IASB, the FASB depends on continuing support from business groups, mainly large firms and accountancy firms, despite its independent status (Mattli and Buthe 2005). The growth of transfer of authority and governance to both the IASB and the FASB had helped the global network of large accountancy firms to mobilise their interests towards transatlantic accountancy standards convergence, which, in 2007, resulted in a decision to require US companies to fully comply with IFRS reporting by 2015.

⁹³ As put by Cairns: "*Many of the changes made by the IAS...reflected the wishes of IOSCO representatives*" in Katsikas, D. (2006). *Explaining Non-State Regulatory Authority: The Case of the International Accounting Standards Board*. Garnet Conference. Amsterdam.

While the US decision to accept IFRS was taken against the backdrop of an unfavourable economic environment for the US,⁹⁴ pro-IFRS lobbying played a significant role in influencing this decision. All of the Big 4 firms submitted letters to the SEC in which they encouraged it to move towards IFRS adoption and in the fastest way possible and had sent their top professionals and partners to the US to influence their colleagues and clients to support the move (Zeff 2008: 5-6; McKenna 2010).⁹⁵ As put by the chief executives of the Big 4 themselves:

“When I think about convergence, I actually think we have an opportunity to have one set of globally accepted auditing standards, maybe faster, sooner, than the whole area of accounting. And I’d like to see that happen... Do I think there’s a need for convergence? The answer, yes... convergence is a must, and the question is how fast can you really move in that direction. And I am one who supports moving faster than slower.” (Dennis M. Nally, Chairman and Senior Partner of PricewaterhouseCoopers (Solomon 2008)).

“I believe global convergence is necessary, and the new global standard is likely to be International Financial Reporting Standards – IFRS...Moving to a global standard will not happen overnight, but it will occur sooner rather than later.”
(Timothy Flynn, Chairman and CEO, KPMG (Solomon 2008)).

⁹⁴ Market capitalisation in 2006 was shrinking, possibly as a result of the hi-tech bubble explosion, and several business scandals that rocked US stock-exchanges, as well as trade imbalances. IFRS adoption was seen as a pro-market act in order to allow US capital market growth.

⁹⁵ Large corporations, particularly those that are international and clients of the Big 4, also supported IFRS transition. There is little evidence, though, that investor groups, dispersed with little organisation, had a real influence over the SEC decision Albrecht, D. (2008). Dave Albrecht–IFRS Critic. The Summa. D. Albrecht. 2010.

“[T]he opportunity for a U.S. registrant to select IFRS...is a gigantic step forward on this 25-year discussion of convergence...one set of standards as it relates to auditing, and then one regulatory regime? That would be an ideal world for someone who leads a global professional services firm with a very large audit business.” (James Quigley, CEO of Deloitte (Solomon 2008)).

To persuade the SEC, in November 2006 the chief executive officers of the six biggest accounting firms (Big 4 + 2) published a joint white paper where they advocated and prioritised global convergence of accountancy standards as the most critical and important issue for capital markets and for the accountancy and auditing professions (Albrecht 2008). Beyond the evidence that the big accounting firms were cooperating in advocacy and lobbying, it is important to note that they also strongly favoured adopting a standards regime which was based on principles rather than on detailed rules. IFRS, in contrast to US GAAP, served exactly that purpose, where judgement and interpretation replaced detailed rules. For the Big 4, IFRS was a big advantage since it allowed them to speak and practice a common language throughout the partnership network, and enabled easier internal movement of labour and referral of clients. Furthermore, an international standards regime based on principles reduces liability risks resulting from complying with detailed standards in different locations. Transition to IFRS also has major financial advantages for the Big 4, from the revenues generated from transforming their clients' financial reporting and systems.⁹⁶

To persuade the SEC and public opinion, several major accountancy firms issued industry and business surveys which support transition to IFRS. PricewaterhouseCoopers' survey argued that 53% of chief financial officers and managing directors of US-based MNEs view

⁹⁶ A similar revenue-raising effect took place when companies had to implement Sarbanes-Oxley in 2002.

IFRS conversion to be of high priority. KPMG produced another survey showing that almost 50% of US executives favour adopting IFRS earlier than 2015. IFAC, largely influenced by the Big 4, surveyed 143 leaders from 91 countries of whom 90% said that they saw having a single set of international financial reporting standards as important for economic growth in their countries (Gill 2007).⁹⁷

A key component in the success of the Big 4 to influence the creation of the IFRS as a global and private international accounting standards setting regime, is their connection with the political sphere. Having being able to minimise the constraints of the SPT through the adoption of the partnership model as an organisational basis, the Big 4 were able to concentrate vast economic resources. These resources have been used to directly lobby politicians in many countries, particularly in the US. Tables 5.5 and 5.6 respectively report the scale of financial donations made by the Big 4 and their partnership network in the US, the UK and Australia.

⁹⁷ <http://www.ifac.org/globalsurvey>

Table 5.5: Big-4 Political Contributions 1990-2010, United States

Deloitte Touche Tohmatsu									
Cycle	Total	Democrats	Republicans	% to Dems	% Rep	Individuals	PACs	Soft (individuals)	Soft (Organisations)
2010	\$1,350,333	\$604,782	\$733,901	45%	54%	\$263,833	\$1,086,500	\$0	\$0
2008	\$2,755,310	\$1,361,710	\$1,388,600	49%	50%	\$1,048,310	\$1,707,000	\$0	\$0
2006	\$2,180,294	\$632,537	\$1,534,028	29%	70%	\$366,667	\$1,813,627	\$0	\$0
2004	\$2,233,483	\$640,986	\$1,588,047	29%	71%	\$760,930	\$1,472,553	\$0	\$0
2002	\$1,873,011	\$434,269	\$1,438,742	23%	77%	\$228,750	\$1,225,761	\$2,300	\$416,200
2000	\$1,982,826	\$590,931	\$1,384,895	30%	70%	\$576,606	\$1,092,095	\$2,225	\$311,900
1998	\$1,430,614	\$479,463	\$949,401	34%	66%	\$348,210	\$820,379	\$35,000	\$227,025
1996	\$1,345,244	\$488,570	\$855,274	36%	64%	\$380,894	\$697,602	\$7,415	\$259,333
1994	\$662,503	\$264,997	\$395,406	40%	60%	\$226,750	\$252,003	\$0	\$183,750
1992	\$507,542	\$242,570	\$262,522	48%	52%	\$199,721	\$124,504	\$12,917	\$170,400
1990	\$239,149	\$120,530	\$118,119	50%	49%	\$82,694	\$156,455	N/A	N/A
Total:	\$16,560,309	\$5,861,345	\$10,648,935	35%	64%	\$4,483,365	\$10,448,479	\$59,857	\$1,568,608
Ernst & Young									
Cycle	Total	Democrats	Republicans	% to Dems	% Rep	Individuals	PACs	Soft (individuals)	Soft (Organisations)
2010	\$1,024,541	\$516,176	\$507,865	50%	50%	\$335,041	\$689,500	\$0	\$0
2008	\$2,250,481	\$1,025,544	\$1,223,187	46%	54%	\$1,374,228	\$876,253	\$0	\$0
2006	\$1,594,650	\$653,135	\$927,315	41%	58%	\$483,142	\$1,111,508	\$0	\$0
2004	\$2,115,864	\$776,655	\$1,330,696	37%	63%	\$1,066,537	\$1,049,327	\$0	\$0
2002	\$2,012,978	\$658,895	\$1,353,833	33%	67%	\$374,946	\$865,906	\$33,001	\$739,125
2000	\$2,847,336	\$1,245,127	\$1,597,459	44%	56%	\$850,333	\$1,193,886	\$17,017	\$786,100
1998	\$1,720,281	\$781,663	\$934,329	45%	54%	\$170,674	\$1,029,741	\$1,000	\$518,866
1996	\$2,046,730	\$1,021,000	\$1,020,155	50%	50%	\$678,180	\$1,006,365	\$23,350	\$338,835
1994	\$1,110,077	\$666,756	\$441,571	60%	40%	\$152,032	\$600,510	\$0	\$357,535
1992	\$559,655	\$324,493	\$227,162	58%	41%	\$253,007	\$273,296	\$1,000	\$32,352
1990	\$227,031	\$127,570	\$99,211	56%	44%	\$80,120	\$146,911	N/A	N/A
Total	\$17,509,624	\$7,797,014	\$9,662,783	45%	55%	\$5,818,240	\$8,843,203	\$75,368	\$2,772,813
KPMG									
Cycle	Total	Democrats	Republicans	% to Dems	% Rep	Individuals	PACs	Soft (individuals)	Soft (Organisations)
2010	\$1,030,303	\$484,557	\$545,046	47%	53%	\$102,007	\$928,296	\$0	\$0
2008	\$1,953,052	\$915,046	\$1,039,256	47%	53%	\$578,786	\$1,374,266	\$0	\$0
2006	\$1,321,146	\$448,832	\$865,814	34%	66%	\$210,217	\$1,110,929	\$0	\$0
2004	\$1,466,428	\$411,996	\$1,053,432	28%	72%	\$436,628	\$1,029,800	\$0	\$0
2002	\$1,742,939	\$319,693	\$1,423,246	18%	82%	\$134,487	\$1,283,502	\$7,850	\$317,100
2000	\$1,371,159	\$394,130	\$969,779	29%	71%	\$448,172	\$733,437	\$2,350	\$187,200
1998	\$851,065	\$226,630	\$624,185	27%	73%	\$150,005	\$633,785	\$0	\$67,275
1996	\$759,317	\$241,965	\$513,352	32%	68%	\$218,384	\$427,750	\$2,600	\$110,583
1994	\$348,401	\$212,080	\$136,321	61%	39%	\$89,393	\$258,008	\$0	\$1,000
1992	\$211,275	\$84,620	\$126,655	40%	60%	\$183,275	\$0	\$0	\$28,000
Total	\$11,055,085	\$3,739,549	\$7,297,086	34%	66%	\$2,551,354	\$7,779,773	\$12,800	\$711,158

Table 5.5: Big-4 Political Contributions 1990-2010, United States (continued)

PricewaterhouseCoopers									
Cycle	Total	Democrats	Republicans	% to Dems	% Rep	Individuals	PACs	Soft (individuals)	Soft (Organisations)
2010	\$1,436,368	\$655,199	\$780,169	46%	54%	\$206,618	\$1,229,750	\$0	\$0
2008	\$2,736,321	\$1,291,964	\$1,439,357	47%	53%	\$1,075,021	\$1,661,300	\$0	\$0
2006	\$1,388,604	\$403,499	\$968,105	29%	70%	\$363,944	\$1,024,660	\$0	\$0
2004	\$1,882,353	\$464,126	\$1,415,977	25%	75%	\$979,227	\$903,126	\$0	\$0
2002	\$1,360,980	\$289,701	\$1,069,940	21%	79%	\$189,238	\$782,932	\$48,790	\$340,020
2000	\$1,868,674	\$529,102	\$1,337,502	28%	72%	\$633,116	\$912,591	\$8,267	\$314,700
1998	\$1,650,690	\$566,444	\$1,082,496	34%	66%	\$231,480	\$1,159,675	\$1,000	\$258,535
1996	\$1,672,839	\$638,658	\$1,028,956	38%	62%	\$478,120	\$966,413	\$500	\$227,806
1994	\$1,009,124	\$531,715	\$473,409	53%	47%	\$257,589	\$692,035	\$0	\$59,500
1992	\$648,651	\$348,617	\$298,634	54%	46%	\$234,801	\$384,225	\$2,500	\$27,125
1990	\$349,403	\$204,242	\$145,161	59%	42%	\$116,142	\$233,261	N/A	N/A
Total	\$16,004,007	\$5,923,267	\$10,039,706	37%	63%	\$4,765,296	\$9,949,968	\$61,057	\$1,227,686

Note: The numbers are based on contributions of \$200 or more from PACs and individuals to federal candidates and from PAC, individual and soft money donors to political parties, as reported to the Federal Election Commission. Election cycles represent two-year periods. For example, the 2002 election cycle runs from January 1, 2001 to December 31, 2002. Soft money contributions were not publicly disclosed until the 1991-92 election cycle and were banned after the 2002 cycle.

Source: <http://www.opensecrets.org/>

Table 5.6: Big-5 Contributions, United Kingdom General Elections 2010

Firm	Labour	Conservative	Lib Dem
Deloitte	£13,500.00	£323,501.75	£0.00
Ernst & Young	£0.00	£63,989.08	£0.00
Grant Thornton	£0.00	£15,000.00	£0.00
KPMG	£284,766.00	£435,973.00	£242,587.24
PWC	£184,193.00	£533,063.68	£78,710.00
Total	£468,459.00	£1,371,527.51	£321,297.24

Source: (Murphy 2010)

Two of the main twenty lobbying firms (10%) in the US are Big 4 companies. In the period of 1998 and 2010, Ernst & Young spent \$154,296,737 on lobbying Capitol Hill and the

White House, with PricewaterhouseCoopers spending \$102,844,084 for similar purposes.⁹⁸ Empirical studies of Political Action Committees (PACs) found that, as reported in table 5.5, members of the accountancy profession gave significantly higher contributions to legislators who were members of Congress committees that affect accounting affairs (Koenigsgruber 2009: 3). For the Big 4, attempting to influence standard-setting and particularly the adoption of the IFRS, lobbying Congress was a priority since the latter can veto any standard decided by the SEC through its legislative powers. It is notable from table 5.5 that the Big 4's financial contributions to lobbying the political process have considerably grown since the SEC began reviewing the possible adoption of IFRS in 2001.

Big 4 financial contributions to political parties and candidates take place in other countries, such as the UK and Australia. In Australia, the Big 4 became one of the most prominent lobby actors, using former senior politicians to influence Parliament.⁹⁹ Between 2000 and 2010, KPMG donated \$972,916 to political parties, followed by PricewaterhouseCoopers who gave almost \$400,000; Ernst & Young donated \$191,463 and Deloitte gave \$921,500 to the Liberal Party and \$344,326 to the Australian Labour Party (Ferguson and Johnston 2010; Ferguson and Johnston 2010).

It is noteworthy that the Big 4 expects high returns from their considerable political investments around the world. Beyond the arguments raised earlier for the motivation of the Big 4 to push for the IFRS (e.g. common rules for the various partners in the network), they also benefit from further financial and international expansion. The creation of a global private standard setting governance regime benefits the Big 4 firms in terms of their ability to

⁹⁸ All lobbying expenditure data come from the Senate Office of Public Records. Data for the most recent year was downloaded on July 26, 2010. Source: <http://www.opensecrets.org/lobby/top.php?indexType=1>

⁹⁹ Examples include Wayne Goss, former Premier of Queensland, at the services of Deloitte and Steve Bracks, former Premier of Victoria, consulting KPMG.

convert the accountancy profession and their clients. Such a conversion process entails significant fixed costs which are not beneficial to smaller accountancy firms with clients of a lesser international orientation. For the Big 4, the investment in training their own global staff and converting their operations is spread over a large number of clients. For this reason, all of the Big 4 firms have created specialised global IFRS centres to train their staff and to further facilitate the cross-border movement of their employees within their internal labour markets. Training in the Big 4 “global IFRS-centres” is also aimed at professional staff from Big 4 clients.

To further global demand for the adoption of IFRS, the Big 4 teamed up with universities around the world to provide IFRS education, with the aim of transforming the accountancy and auditing profession. The Big 4/Academic twinning preceded national regulators’ decisions to adopt international standards in order to create demand (as well as supply of IFRS-trained accountants) for the standards they have very much shaped (Harris 2008; Whitehouse 2008; Hail, Leuz et al. 2009: 65).

An understanding of why accountancy firms were able to construct the current international accountancy standard setting governance requires a look at the distribution of powers within the IASB. This analysis follows the work of Nolke and Perry (Perry and Nolke 2005; Nolke and Perry 2007).

Accountancy firms’ power can be viewed in four dimensions: institutional setup, funding structure, formal lobbying and control of knowledge resources. From a funding perspective, the IASB is dependent on financial contributions, coming largely from the private sector. Large accounting firms contribute most of the budget, with the Big 4 accounting firms

funding well over 60% of it, each annually contributing more than US\$2 million. Funding in itself does not necessarily translate into control, but if any or all of the Big 4 accountancy companies were to stop their funding, the consequences for the organisation would be dramatic. Thus, dependency exists despite an organisational separation between the IASB and the International Accounting Standards Committee Foundation (IASCF), which is intended to prevent the IASB from fundraising. Various cases in the FASB show that, regardless of this separation, funders have had a strong influence over decision making (Mattli and Buthe 2005).

An analysis conducted into formal lobbying of the IASB and EFRAG found that the Big 4 accountancy firms have been the most prominent group among all actors who try to influence the process of accounting standards setting. Professional accounting associations, which represent accounting firms as well, were the next most influential group.

Institutionally, the constitutional change introduced in the IASB replaced the part time decision-making structure with a professional, expert and experience-led mechanism. This change gives clear preference to practitioners, particularly those coming from the large accountancy firms, over regulators or academics. Furthermore, the adoption of the FASB apparatus further increased the Anglo-American dimension of the IASB, favoured by the large accountancy firms. Examination of the IASB and its various organs shows that members of accountancy firms, particularly from the Big 4 firms, are significantly represented (for example, as board members in the IASB and trustees in the IASCF). Table 5.7 shows the connection between funding institutions and membership in the various boards of the IASB (as well as EFRAG), with all entities being private companies. The Big 4 account for almost

60% of total ties with the IASB and EFRAG, while financial institutions (banks, insurance companies and funds) account for only 30%.

Finally, in terms of knowledge resources, the emphasis on experience and expertise privileges knowledge accumulated largely within the boundaries of the practicing accountancy profession. This knowledge, which is generated in the large accountancy firms, is then transformed into standards setting.

Table 5.7: Linkage between Funding and Membership in the IASB and EFRAG

Organisation	Type	IASB Funding	Total ties (IASB & EFRAG)	IASB	IASB-IFRIC	IASB-SAC	IASB-WG-F	IASB-WG-I	IASB-WG-P	IASCF	EFRAG Fin	EFRAG Ins	EFRAG Super	EFRAG Teg
Big 4	Private	12	33	3	5	8	3	2	1	2	3	3	0	3
Banks, funds and insurance companies	Private	10	17	0	1	2	3	3	1	0	0	0	0	1
Non-financial companies (NFCs)	Private	5	6	0	1	1	1	1	0	1	3	3	0	1

Source: Perry and Noelke, 2005

International Trade in Healthcare Services and the SPT

Big accountancy and auditing firms effectively minimised the constraints of the SPT through the adoption of the partnership model of firm organisation. The creation of a network comprised of a multitude of domestic firms, enabled internationalisation through localisation. This magnitude of this internationalisation is unmatched in other sectors, where firms traditionally organise themselves through other structures, such as multinational enterprises made of subsidiaries tied to a parent company. Rather than nullifying the SPT, the

internationalisation of the big accountancy firms shows how the SPT's constraints can be leveraged as an advantage for accelerated internationalisation through commercial presence.

The empirical results in Chapters 2 and 3 indicate that, although accountancy services and healthcare services considerably differ from each other in their essence, they nevertheless internationalise following similar patterns, favouring close proximity to services' consumers. Co-production leading to proximity explains why international trade in services follows specific trajectories. This research shows that, within these similar patterns, the level of trade can vary between service sectors. The partnership model has been suggested as one type of firm organisation which can be used for greater internationalisation within the boundaries of the SPT.

This section examines the role of healthcare multinationals in international trade, explaining why, in contrast to accountancy firms, their internationalisation remained lower. While several impediments to trade in healthcare were reviewed in Chapter 1 (e.g. competition with government provision), this section focuses on the organisational structure of international healthcare firms.

Table 5.8 shows the total number of hospitals which were operated by healthcare MNEs between 1978 and 1985. The data shows that healthcare MNEs' penetration abroad was somewhat slow during these years, except for Anglo-Saxon countries. More recent data on specific healthcare MNEs is reported in table 5.9. The data show that leading MNEs have been internationalising in recent years throughout the world, though to a much lesser extent

than accountancy firms in terms of the number of countries in which they operate (“No. of foreign operations”) and revenues.¹⁰⁰ The data are consistent and complement the findings of Chapter 3 concerning moderate levels of international trade in healthcare through commercial presence. It is also important to note that the data on revenues of healthcare multinationals are highly inflated since they report both domestic operations in their country of origin (i.e. domestic trade) and international activities. For many of those healthcare multinationals, home country operations are a major source of total revenues.

Table 5.8: Total Number of Hospitals Operated by Multinational Hospital Corporations by Country 1978-85

Country	1978	1979	1981	1983	1985
Australia	1	14	10	13	23
Austria	-	-	-	1	2
Brazil	-	-	7	7	7
Canada	-	-	-	1	2
France	3	2	2	3	5
Saudi Arabia	1	3	9	14	5
Singapore	2	-	-	1	2
Spain	-	-	2	2	2
Switzerland	1	-	3	3	7
United Kingdom	4	8	12	24	38
United States	-	-	-	12	21
Other-total	4	8	6	5	7
TOTAL	16	34	51	86	121

Source: (Berliner and Regan 1987)

¹⁰⁰ The data reported under “No. of foreign operations” lists all the countries in the world in which the company operates and is not confined to the geographical region that the company comes from.

Table 5.9: Leading Healthcare Multinationals International Spread and Revenues (US\$ millions)

	Company	Country of origin	No. of foreign operations	2005	2006
Asia*	Apollo	India	5	171	217
	Parkway Holdings	Singapore	3	339	566
	Columbia Asia Healthcare	Malaysia	4		
Africa	Life (formerly Afrox)	South Africa	2	275	
	Netcare	South Africa	1	1,159	1,161
	AAR Health Services	Kenya	2		
Americas	United Health Group	United States	1		
	HCA	United States	2	24,455	25,477
	Cigna	United States	9	15,332	16,547
Europe	Alliance Medical		4		
	BUPA	United Kingdom	3	66,714	8,316
	Capio	Sweden	8		
	Cinven	UK	2		
	Euromedic International	Hungary	11		
	Fresenius	Germany	8	9,340	13,195
	Medicover	Hungary	5		
	Jose de Mello Saude		2		

* Revenue figures for Asia are for 2005-6 and 2006-7

Source: Author's calculations based on Lethbridge 2007

This relatively small group of companies delivers healthcare services in more than one country but, unlike accountancy firms, they have adopted the traditional model of the

multinational corporation (Lethbridge 2007: 8). This model is built around a parent company based in a particular country which is linked to one or more subsidiaries. Unlike the partnership model, these firms are connected to each other in terms of their ownership structure, their financial links, and their global operations. Decision-making regarding international operations is usually taken at the level of the parent company, with FDI being the preferred mode of operation for either segmenting global production or penetrating specific markets.¹⁰¹ The links between the parent company and its subsidiaries are either networked or non-networked. When relationships are networked, subsidiaries are also connected with other subsidiaries in various links, in contrast to the non-networked MNE where all subsidiaries are connected to the parent company but are not linked with each other (Mudambi and Ricketts 1998: 15-17).

The MNC organisational model has been applied by many international companies either in services or in manufacturing. Nevertheless, in the case of services, the MNC model has fewer advantages in facilitating internationalisation than the partnership model does. First, interdependence between the firm's units implies that some decisions and aspects of production are carried out remotely from consumers. The lack of proximity also results in greater adaption costs to local characteristics (culture, political and other variables) and regulation. As will be discussed in Chapter 6, regulation of services reflects at least partially the nature of producer-consumer co-production. As a consequence, service MNEs, including healthcare MNEs operating internationally, face high adaptation and regulatory costs. These costs are minimised by the partnership model where local firms team up in a diffused network structure. Furthermore, the complexity of healthcare provision, which depends also

¹⁰¹ Broadly speaking, FDI is used either to produce a certain product for sale in the local market, or as part of the global production chain.

on the availability of healthcare insurance, suggests that provision of healthcare services is further complicated by consumers' specific ties to other healthcare-related economic activities.

Table 5.10 examines the expansion modes of healthcare MNEs. It is evident that these firms invest in organisational structures which will enable them to minimise costs which are associated with the constraints of the SPT. These structures have nevertheless far fewer advantages than does the partnership model and therefore results in high costs which act as a barrier to further expansion. The importance of consumers for the production process is well reflected in the nature of consumers. Big international accountancy firms cater mostly for corporate clients, and their network structure has substantial advantages for international clients. Healthcare provision is mostly conducted at the level of the individual consumer, which reduces the logic of partnership networking.

Many healthcare MNEs initially invested in building hospitals and infrastructure across the border. This was an expensive mode of investment, resulting in the sale of many hospitals, particularly in countries where adequate facilities and infrastructure already existed (Lethbridge 2007).¹⁰² Acquisitions and joint ventures cut across all firms as the main method of operation. Although acquisitions are also an expensive operational mode for cross-border market expansion, they enable foreign healthcare suppliers to have greater proximity to their consumers. Takeover and purchase of existing local healthcare providers can have some of the advantages discussed earlier that are enjoyed by local partnerships.

¹⁰² For example, HCA used to own and operate 184 hospitals and had sold more than 42% of them, as well as almost 50% of its surgical centres. Similarly, BUPA sold its 25 hospitals in 2007.

In joint ventures, the parties agree to create a new entity and assets for a specified period of time. The parties jointly contribute equity to the joint venture and share control over it, as well as sharing costs and revenues. As in the case of acquisitions, international joint ventures in healthcare allow healthcare MNEs to internationalise through commercial presence and greater proximity to consumers. However, as a preferred method of internationalisation for healthcare firms, joint ventures are an important avenue through which private healthcare providers can supply services in markets which are often characterised by significant governmental provision of healthcare. Healthcare services have a strong social impact, which is reflected in consumer-oriented regulation and governmental provision. As governments are faced with budgetary and other pressures to reform their healthcare sectors, joint ventures with the private sector allow them to retain greater control than in the situation where the service is completely privatised. From the vantage point of healthcare MNEs, joint ventures with foreign governments are appealing since they allow the MNEs to create greater proximity in production with healthcare consumers in terms of time, space and relationship. The latter is of particular importance, and proximity in co-production benefits from greater trust regarding provision on behalf of the consumer who, in many cases, still enjoys a governmental service. This proximity is also influenced by the fact that in most of these joint ventures, consumers are not required to substitute universal (or a variant of universal) healthcare insurance with a private one. Finally, joint-ventures, particularly when carried out with foreign governments, enable healthcare MNEs' access into local and often consumer-specific knowledge that is required for healthcare production and supply.¹⁰³ Indeed, most joint ventures of healthcare MNEs involve foreign governments in the form of Public-Private

¹⁰³ The focus on joint venture advantages is analysed here in the context of services co-production. There are, of course, other advantages to joint ventures such as risk-reduction through the usage of the partner's assets, diversification of risk, access to technology and local knowledge, influence of local partners on regulation and decision-making processes, etc.

Partnerships (PPP)¹⁰⁴ and Private Finance Initiatives (PFI) (Lethbridge 2007; Lethbridge 2007).¹⁰⁵

Table 5.10: Healthcare Multinationals Expansion Mode

	Company	Building Hospitals	Acquisitions	Joint Ventures	Medical Tourism	Health Insurance	IT services for Health Finance
Asia	Apollo	YES	YES	YES	YES	YES	YES
	Parkway Holdings	-	YES	YES	YES	YES	-
	Columbia Asia Group	YES	YES	-	-	YES	-
Africa	Afrox/ Life healthcare	-	-	YES	-	YES	YES
	Netcare	YES	YES	YES	-	YES	YES
	AAR	-	-	YES	-	YES	YES
Americas	United Health Group	-	YES	YES	-	YES	YES
	HCA	-	YES	-	-	YES	YES
	Cigna	-	YES	-	-	YES	YES
Europe	Alliance Medical	-	YES	YES	-	-	-
	BUPA	YES	YES	YES	-	YES	-
	Capio	-	YES	YES	-	-	-
	Cinven	-	YES	YES	-	-	-
	Euromedic International	YES	YES	YES	-	YES	YES
	Fresenius	YES	YES	YES	-	-	-
	Medicover		YES	YES	-	YES	YES
Jose de Mello Saude	YES	YES	YES	-	YES	YES	

Source: (Lethbridge 2007)

Concluding, healthcare MNEs are organised in a structure that considerably differs from the partnership model used in the accountancy sector. Those healthcare providers which have successfully managed to internationalise their services, did so in a manner which is biased towards commercial presence resulting from the SPT constraints. Joint ventures with

¹⁰⁴ PPPs take the form of private sector contracts, services supply, and private management of public hospitals.

¹⁰⁵ In PFIs, the government contracts long term services to private providers in return for their willingness to undertake financial risks. Financing new hospitals in return for long term concessions to provide hospital services has been done with healthcare MNEs.

governments have been instrumental in minimising the constraint of the SPT, but to a far lesser degree than has been used by the partnership networks of the big accountancy firms.

Conclusions

This chapter showed that the SPT acts as an important constraint in directing the way in which international trade in services is conducted. This is true even in sectors where international trade is exceptionally high (compared to other service sectors) such as accountancy and auditing services. The chapter also analysed ways in which service firms can internationalise within the boundaries of the SPT through the analysis of the partnership model and the Multinational Corporation Model. Contrary to the latter, the former has particular advantages for internationalisation. Extending the analysis to the political economy of accountancy standards setting, the chapter shows that, by organising themselves within partnerships, the big accountancy firms succeeded in gaining a truly global spread and vast economic resources, which they then applied to constructing an exceptional international private standards setting regime that further enables their internationalisation and growth.

The emergence of international standards-setting governance was neither a clear top-down delegation of authority to private actors, nor was it a bottom-up process of setting-up a new regime. Rather, the creation of this international private governance was the result of several different attempts to harmonise accounting standards at both regional and international levels by states and non-state actors. Accountancy firms played a crucial role for two main reasons: they were able to play all levels at the same time and were in possession of power assets, accumulated from their unique organisational structure.

Governments were trying to find solutions to harmonise accounting standards through cooperation and unilateral actions. They tried cooperating at an international level in several

key international organisations. At the same time, the main governmental actors also pursued unilateral approaches. EU member states attempted to harmonise their standards towards a European accounting code, partly as a counterweight to the relative supremacy of US GAAP. The inability of states to find or dictate a solution for international harmonisation expanded the scope for accountancy firms to play a major role in bringing all actors together under the IASC and later the IASB, an international private organisation, set up and heavily influenced by accountancy firms.

The accountancy firms' ability to do so was the result of several unique political and economic assets they possess which emanate from their firms' organisational structure. Organised as a network of many independent firms under a single management, accountancy firms were able to spread globally in a way that is not replicated in any other economic sector. This centralised and, at the same time, diffuse structure enabled accountancy firms to concentrate market powers, to the degree where only a handful of firms dominated the vast majority of an international sector with great economic significance. In contrast to the accountancy sector, healthcare MNEs are structured around the multinational corporation model, which did not permit them to leverage the constraints of the SPT as advantages. Thus, for international healthcare firms, internationalisation through commercial presence comes at high proximity costs, such as direct investment in infrastructure, acquisitions of local firms, as well as joint ventures.

Using their economic and political powers and resources—based on geographical spread, market power and specialisation—accountancy firms were able to follow several strategies towards the international harmonisation of accountancy rules at the same time. Firstly, they followed insider strategies of lobbying and cooperating with governments in their

harmonisation attempts. Secondly, they created an external alternative of new international accountancy standards. As governments and other actors were facing collective action problems, accounting firms were able to gradually co-opt them directly and indirectly into the IASC. Through cooption and engagement strategy, and continuous lobby efforts in national governments, the solutions proposed by the IASC became a real alternative.

The success of accountancy firms to bring states and non-state actors together under international private governance, should not be viewed as a zero-sum outcome. The harmonisation of accounting standards was largely in the interest of many actors, though they differ considerably in their preferences as to how such an outcome should be, particularly with regard to influence over standards setting. Private governance in accounting standards became a solution to a collective action problem which was not solved at an inter-governmental level. This solution took place as a spillover effect of a particular market structure generated by the partnership model. The partnerships network enabled accountancy firms to be insiders and outsiders at the same time with a strong incentive to find a common solution, enabling them to bring governments from outside into the solution.

International private governance through the IASC and IASB can be regarded as a “network of networks”. It is a forum where private organisations representing numerous other private organisations cooperate with accountancy firms, which are global networks themselves. Nevertheless, within this “network of networks”, accountancy firms retain considerable control and influence.

Chapter 6: Some Implications for International Political Economy

The previous chapter showed that the big international accountancy firms leveraged the proximity constraint of the SPT into an advantage for global internationalisation through the expansion of local partnerships. This internationalisation enabled global accountancy firms to acquire unique economic and political powers, which they have used to set-up an international private governance regime in the area of financial reporting standards.

The case study of the accountancy sector highlights the fact that the co-production of services by producers and consumers has implications for the domestic and international political economy. International political economy can be defined broadly as an interdisciplinary field exploring the relationships between the domestic and international spheres of markets and politics. Thus, the study of international political economy encapsulates, on the one hand, exchange systems between producers and consumers coordinated by a price mechanism, and, on the other hand, a political process involving sovereign states, international and non-governmental organisations, multinational enterprises, other non-state actors, and civil society.¹⁰⁶

This chapter explores the implications of services co-production and the SPT on the international political economy of services trade. It aims to shed light on several problems and to open up issues in the political economy of international trade in services, such as liberalisation and protectionism, multilateralism and regionalism, and the role of

¹⁰⁶ The field of international political economy has different and often contested meanings for economists, political scientists, international relations scholars, sociologists and others. For further introduction and readings see: Caporaso and Levine (1992), Drazen (2001), Balaam and Veseth (2008), Oatley (2010), Friden, Lake and Broz (2010) and Cohn (2010).

regulation.¹⁰⁷ It should be stressed at the outset that, while in some areas of investigation the co-production relationship offers new explanations, it is not an all-encompassing explanation. In several instances, such as the effects of regulation as a barrier to trade, the SPT is partially an underlying reason for existing explanations. In other cases, such as the role of interests, ideas and institutions, standard explanations still matter, with little or no relationship to the issue of co-production. Hence, the SPT has important consequences for international political economy, but these should be understood within a greater context.

The chapter begins with the key issue of liberalisation and protectionism of trade in services. This section explores several standard arguments in the area of services, as well as their relationships with the multilateral and regional levels. It then continues with observations of the specific case of the EU with several general implications for market integration.

The International Political Economy of Services Trade Liberalisation and Protection

Protectionist policies, preferences and outcomes are often explained as an output of interest groups and sectors concerned by adverse income consequences of trade liberalisation. Much of the empirical literature on protectionism is devoted to trade in manufactured and agricultural products, and focuses either on the conflict between factors of production and their owners, or between different sectors and industries. Based on the Heckscher-Ohlin theory of comparative advantage and the Stolper-Samuelson Theorem on factor price equalisation, the factor incomes model argues that international trade leads to income distribution effects on factors of production (labour, capital, and land). As a consequence, these effects determine factor owners' preferences towards liberalisation which are then

¹⁰⁷ It should be noted that specific literature on the political economy of international trade in services is rather limited. This is a surprising issue on its own merits particularly due to the growth of the service economy, the adoption of the GATS and the proliferation of bilateral and regional trade agreements including services chapters and provisions.

transformed into class conflicts and state policies. Economic interests inform the political process, where the relative abundance or scarcity of a given factor of production determines its protectionist or liberal preferences. Conversely, the sector income model argues that trade divides society along industry lines (in contrast to factor lines) with income consequences resulting from trade affecting various industries or sectors in a different way. Policy is determined and shaped by the political conflict between the export-oriented sector and the import-competing industry (Rogowski 2000; Alt and Gillian 2010; Gourevitch 2010; Oatley 2010: 71-93).

The role of consumers in determining trade policy preferences is usually considered to be weak. According to economic theory, consumers have much to gain from the liberalisation of trade but nevertheless their collective action power within the political economy of competing interest groups and sectors is minimal due to the absence of selective interests and concentrated gains (Olson 1982). The limited literature on the political economy of protectionism in trade in services maintains an emphasis on conflicts between factor owners and economic sectors. Thus, while acknowledging the effects of regulation as a barrier to trade, resistance for regulatory reforms is predominantly explained by the supply-side. An exception to this rule is the case of social and public services, where consumers are more vocal in resisting privatisation and liberalisation (IMCO 2004).

One possible explanation for consumers' protectionist preferences and resistance to regulatory reform in services is the fear that the benefits of liberalisation—lower prices, an increase in the number of services offered and in the number of suppliers—will result in welfare reduction as a consequence of service quality erosion and a possible increase in the market power of firms (Hoekman, Mattoo et al. 2007). As argued in Chapter 4, while quality

depends on the skills and capabilities of service producers, it is also determined by the specific joint production interaction of producers and consumers. For that reason, the co-production of services plays an important role in the political economy of regulatory reform in services.

The importance of consumers in the process of production has several consequences. First, those service producers favouring greater liberalisation may not necessarily see regulation only as a barrier. The importance of the consumer as an additional factor of production can explain why these producers may view certain elements of regulation as necessary and significant for cultivating and strengthening the proximity necessary to effectively produce services. There are several indications in trade lobbying which suggests that service producers might have internalised the SPT's constraint in their regulatory preferences. These indications include the little investment of service industries in lobbying international negotiations on the liberalisation of trade in services. While other industries are rather vocal, services' voice is almost completely unheard, as is the case of the current trade round negotiations that started in 2001. This phenomenon exists also in the area of preferential trade agreements where services industries' lobbying is relatively far weaker than in other sectors (Adlung and Roy 2005; Herman 2006; Hoekman, Mattoo et al. 2007: 367-372).

The internalisation of the proximity constraint does not suggest that service producers and providers are not interested in lowering regulatory barriers or that all regulation stems from the co-production of services. Service providers have an interest in liberalising elements of regulation when there are potential gains to be made and to shield themselves from liberalisation when they are interested in defending existing rents. Nevertheless, their attempts to deregulate and lower regulatory barriers are concentrated in those areas of

regulation that are less affected by the co-production relationship. This is evident from the OECD Product Market Regulation (PMR) database where regulatory reforms and changes carried out in the field of services regulation over time lead to deregulation of those aspects of regulation that have less to do with producer-consumer proximity, while regulation dealing with quality, asymmetry of information and aspects of consumer protection is maintained and is less affected by reforms (OECD 2010).¹⁰⁸

A second consequence resulting from the co-production of services concerns the role of regulators. Regulators are not directly engaged in the co-production process, but since a significant portion of regulation derives from the consequences of co-production, regulators tend to protect consumers' interests even when consumers are not as active in lobbying and advocacy as service firms are.¹⁰⁹ A case in point is the different historical trajectories of the regulation of goods and services. For hundreds of years, the regulation of goods has, been about administering and directing human and societal behaviour. At the same time, it served as an infrastructure to lock in the protectionist preferences of domestic incumbents against foreign and domestic competition. The regulation of services is considered to be more extensive and deeper than the regulation of goods. Yet, while serving similar societal purposes, the regulation of services did not serve similar protectionist interests, since services were considered to be non-tradable and thus were not facing international competition.

¹⁰⁸ For example regulation remains high in the areas of licensing, education requirements and conduct, while other aspects such as quotas, business cooperation and prices and fees have been considerably deregulated.

¹⁰⁹ Financial services exemplify the deep entrenchment of consumer protection within regulation. On the one hand, the sector is dominated by powerful firms (banks, insurers, etc) who mobilise a lot of resources to advance their interests, while also trading in capital which favours greater globalisation and open borders. On the other hand, consumers of financial services tend not to be well associated and are far weaker than financial services providers in terms of their political economy resources. Nevertheless, deregulation and liberalisation of financial services maintains a strong emphasis on safeguarding consumers' interests, such as increasing greater certainty, information provision and disclosure, quality assurance, redress and more.

Since regulators of service markets have a greater emphasis on consumer protection than regulators of manufactured goods do, they view international negotiations on the liberalisation of trade in services in a different way. For services, international negotiations on liberalisation are, in fact, mostly negotiations on domestic regulatory reforms. The difficulty in negotiating liberalisation extends beyond the mere technical and cumbersome domestic coordination among the various ministries and agencies responsible for regulating services (Jara and Domenguez 2006: 118-120). It is also an issue of conceptual change. Regulators of services view a major part of their job as protecting consumers' interests and providing solutions to problems emanating from the SPT. For that reason, regulators are more reluctant to negotiate regulatory reform, which they do not necessarily view as negotiations over trade liberalisation.

A third consequence of the SPT on regulation is the effect of co-production on regulatory preferences regarding modes of supply services provision. Regulators and consumers will prefer the liberalisation of trade in services through commercial presence because, on the one hand, it allows for greater proximity between service providers and their clients, and, on the other hand, it does not impact the regulatory regime since foreign service suppliers need to comply with domestic regulation (Canoy and Smith 2008: 332). Conversely, the liberalisation of cross-border trade impacts negatively on proximity with service providers, and limits the ability to enforce domestic regulation on them. Likewise, regulators and consumers may oppose greater international trade through mode 4 if it is based on home-country recognition of qualifications and credentials. Thus, the loss of quality assurance of certificates and qualifications by the host-country regulatory system can lead to greater resistance for trade liberalisation by regulators and consumers.

An important qualification ought to be in place. The above issues also illustrate that regulators' resistance to regulatory reform and liberalisation does not solely derive from the SPT. Regulators can oppose liberalisation because cross-border trade enhances regulatory competition with the regulatory authorities in the home-country of foreign services providers (in contrast to mode 3). Their opposition can also be the result of agency capture and local incumbents' interests, as is often the case in the political economy of trade liberalisation.

The state-centred approach to the international political economy of trade deviates from the notion that policy-makers are constrained by interests. Rather, this approach views government as more autonomous and as often acting despite the prevalence of strong interests. It argues that, under specific conditions, trade protectionism through government intervention with tariffs, subsidies and other instruments can raise aggregate social welfare (Oatley 2010: 94-113). Two cases for protectionism suggested by this approach are the infant industry argument and strategic trade theory. According to the infant industry argument, new firms can gain efficiency in the long run if they are given time and protection to mature. Protectionism in the short run is critical to enable infant and non-efficient firms to transform into efficient companies able to compete in world markets through the process of learning-by-doing. Strategic trade theory emphasises the possibility of industrial policy to assist domestic industries in achieving competitive advantage through economies of scale and hence attempting to gain national comparative advantage vis-à-vis other trading partners (Cohn 2010: 167-171).

Policy-makers' relative autonomy from society and their constituencies renders the theory of co-production and SPT less relevant to the state-centred approach. Nevertheless, the role of the state in regulating market imperfections is pertinent to the SPT. As discussed earlier, co-

production of services by producers and consumers leads to market failures that often result in information problems. Another type of market imperfection resulting from the proximity-constraint is evident in sectors such as telecommunication and transport services. In these services, providers require a critical mass of consumers in order to take advantage of economies of scale, otherwise they may not supply at all. In these cases, policy-makers' actions can be understood as market correcting. Since those market imperfections are also connected to the consequences of the proximity-constraint, policy-makers will be willing to liberalise these services for commercial presence, while being more reluctant to do so for cross-border trade.

Multilateralism and preferential trade

The lack of interest of service industries, as well as WTO member states' reluctance to negotiate in the area of services at the Doha Trade Round is surprising given the proliferation of bilateral and regional trade agreements dealing with services liberalisation. Several explanations have been proposed for this phenomenon. First is that growing cross-border trade due to technological developments is less affected by domestic regulation and policies and hence governments have a lesser *de jure* role to play in the emerging *de facto* liberalisation taking place through mode 1. This explanation has shortcomings as various empirical tests, including this research study, have shown that cross-border trade is relatively insignificant. Furthermore, if cross-border trade moves freely, it is likely that governments would not have a problem to undertake multilateral (and preferential) commitments in mode 1.

Another argument for the lack of negotiations on trade liberalisation has been that countries' decision to liberalise trade in services is taken at the level of policy reform, rather than in the

sphere of international negotiations. Accordingly, countries' choices to liberalise services are carried out independently of international negotiations and are determined by whether they have strong internal incentives to undertake liberalisation or not. Rather than being influenced by quid pro quo interests, preferences motivating autonomous liberalisation are derived from expected benefits resulting from higher productivity, greater competition, efficiency gains, growth enhancement, welfare improvement and contribution to development through the establishment and expansion of backbone services (Markusen, Rutherford et al. 2005; Eschenbach and Hoekman 2006; Konan and Maskus 2006; Mattoo, Rathindran et al. 2006; Hoekman, Mattoo et al. 2007: 369-372; Jensen, Rutherford et al. 2007). Empirically it is also evident that WTO member states GATS bindings follow autonomous liberalisation measures and only in rare cases expand beyond what has been liberalised independently (Adlung and Roy 2005).

The regulatory consequences of the SPT affect autonomous liberalisation. Indeed, there are many gains to be made from autonomous liberalisation, but the choice of liberalising autonomously furthers the argument that policy-makers do not view regulatory reforms as an issue of trade negotiations. Instead, regulatory authorities undertake reforms in their regulatory systems to achieve greater efficiency, and to improve welfare and other desirable pro-market goals, while at the same time regulation is also skewed towards the effects of co-production. Binding autonomous liberalisation measures in GATS schedules of liberalisation commitments allows WTO members to continue playing the multilateral game without having to bear the effects of multilateral reciprocal bargaining. Policy-makers' fear of regulatory intrusion or erosion consequences from liberalisation are also reflected in the GATS structure. While the multilateral agreement on trade in goods, the GATT, includes an overriding national treatment requirement, this provision in the GATS is only confined to

bounded sectors. National treatment commitment is the requirement not to discriminate against foreign services and their providers in any way. In the GATT, this requirement is automatic for all goods, regardless of binding tariffs. However, GATS' national treatment applies only in cases where a member state has undertaken a specific binding. It should also be noted that GATS' preamble recognises "*the right of Members to regulate and to introduce new regulations on the supply of services within their territories in order to meet national policy objectives*" (Hoekman, Mattoo et al. 2007: 386). It seems that the possible impact of the national treatment and market access requirements on policy-makers' ability to restrict or discriminate against trade in services through regulatory measures explains why WTO member states are more willing to subject national treatment bindings in mode 3 but much less in mode 1.¹¹⁰

The fear of losing regulatory powers is also evident in the ongoing disagreement at the WTO on the issue of electronic commerce. While members are willing to undertake liberalisation commitments under commercial presence, they are less willing to do so for cross-border trade. At the heart of the debate is a definitional question with implications for sectors whose regulation is traditionally consumer-oriented, such as audio-visual services (Wunsch-Vincent 2006; Herman 2010).

¹¹⁰ This issue was well exemplified in the WTO dispute between the US and Antigua and Barbuda on gambling. The WTO Panel ruling was that the US prohibition on internet gambling services (i.e. mode 1) was inconsistent with US commitments in this area on market access. This ruling, as well as a recent ruling on China's Measures Affecting Trading Rights and Distribution for Certain Publication and Audiovisual Entertainment Products, demonstrate regulators' caution in surrendering regulatory powers in services World Trade Organisation (2004). United States - Measures Affecting the Cross-Border Supply of Gambling and Betting Services: : Report of the Panel. [WT/DS285/R](#). Geneva, WTO.

, World Trade Organisation (2009). China-Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products: Report of the Panel. [WT/DS363/R](#). Geneva, WTO.

An important issue on which the SPT can shed light is the minimal liberalisation in mode 4 concerning the movement of workers. WTO member states have hardly taken on meaningful bindings in this area, either at the GATS or in their preferential agreements. Economic migration has been a sensitive policy area where economics, politics and sentiments blend together. The SPT contribution to understanding the resistance to greater liberalisation of service provision by foreign workers is that mode 4 is the juxtaposition between consumers' co-production concerns and domestic services providers' interests. Domestic labour tends to resist liberalisation of mode 4 for fear of losing jobs, of greater competition and of adverse effects on wages. Despite potential benefits from lower service prices, as well as greater availability and variety of services, consumers usually join labour in resisting liberalisation since proximity is about more than just distance. Hence, at least in the short run, service consumers prefer to nurture existing service relationships since they reduce quality uncertainty and information shortages. To a large extent, this is a problem of ontological security raised by the nature of co-production: the preference for continuing existing and known relationships even if they can be improved by new relationships whose exact nature is unknown.¹¹¹ The relationship dimension in proximity explains why service relationships between consumers and producers tend to be more fixed than relationships involving goods, whether consumers are individuals or firms. Many of the arguments voiced by consumers themselves in the debate over the EU Services Directive pointed to exactly this rationale (IMCO 2004).

¹¹¹ Ontological security, a term originally coined by Giddens, is the individual's sense of order and continuity with regard to experience. This concept has also been applied to states and firms: Mitzen, J. (2006). "Ontological Security in World Politics: State Identity and the Security Dilemma." European Journal of International Relations: 341-370
vol. 12:.

Another explanation for the lack of multilateral liberalisation at the WTO is that preferential trade agreements, such as bilateral and regional trade agreements, are substitutes for the WTO. Indeed, services liberalisation provisions have proliferated in preferential trade agreements, particularly over the last 15 years. To some extent, this phenomenon can be explained by the lack of progress at the WTO and in the lagging behind of negotiations in the current trade round. Nevertheless, empirical assessments of the core issues of liberalisation that can be affected by co-production show that very limited progress has been achieved in areas such as domestic regulation (e.g. mutual recognition agreements), the movement of labour and cross-border liberalisation bindings. Hence, while WTO member states have indeed expanded their liberalisation commitments in preferential agreements into new sectors and have also developed new rules in several areas, minimal advancement has been achieved in trade issues which are more sensitive to the proximity-constraint (Roy, Marchetti et al. 2006; Fink and Molinuevo 2007; Fink and Molinuevo 2008; Heydon and Woolcock 2009; Sauve, Poulsen et al. 2009).

The European Union and Integration of Service Markets

European integration has been a laboratory for closer economic integration of goods, services and factors of production. The success of the European Single Market has been particularly noticeable in the area of trade in goods and the free circulation of capital. The movement of workers is not restricted, yet many obstacles still impede a fuller exploitation of this freedom of movement. EU integration in services, as briefly surveyed in Chapter 1, is the area in which the least progress has been achieved save for a few specific sectors. The Services Directive and the political economy behind its adoption testify to the difficulty of achieving closer market integration in the area of services. The Services Directive originally aimed at realising the long standing goal of integrating Europe's service markets into the framework of

the Single European Market, allowing the free circulation of services between member states through a holistic rather than a sector-specific approach. Nevertheless, the attempt to liberalise Europe's service markets had cut across old and new Member States alike, and had excavated deeply rooted political, social and economic confrontations, eventually leading to a significant watering down of its final adopted text.

An observation into some of the implications of service co-production and the SPT on the EU can elucidate and further our understanding of some of the problems concerning deeper integration in services in the EU and beyond. Two aspects distinguish the EU Single Market from other preferential trade agreements on services. First, the Single Market is also about the movement of factors of production. Free movement of both capital and labour are important for the provision of services. Movement of labour is of particular significance as mode 4 of services provision is part of it. Second, the EU as a form of integration has its own legislative capabilities which allow it to address regulatory barriers across all member states. The latter mechanism does not exist in other trade agreements. As the lack of these two unique and distinguishing traits are often used to explain non-integration in preferential trade agreements, maintaining a focus on the Single Market allows isolation of those elements and concentration on several implications of co-production.

Co-production of services favours closer proximity between consumers and producers. The first implication for the Single Market in that regard is the importance of positive integration. Hence, the removal of barriers through negative integration is insufficient since mechanisms and rules must be in place in order to advance proximity and mitigate the negative consequences on trade resulting from the SPT. Even the watered-down Services Directive

had moved towards minimising the adverse consequences of the proximity constraint. It did this through positive integration that creates new bodies and rules requiring greater transparency related to services and their providers, as well as to the enhanced provision of information. The directive also set specific measures to promote better quality of service provision and requires closer cooperation between member states in the supervision of services and their providers, which is important for quality assurance.

Mutual recognition has been an important vehicle in driving the integration of the Single Market after years of stagnation of attempts to achieve harmonisation among all member states. In its original version, the Services Directive sought to promote the integration of services through the Country of Origin Principle, which was to allow service providers to supply services in more than one member state without being subject to the regulation of those member states, and to comply with the laws and regulations that apply only in the country where they have established themselves. In other words, the service providers' established country of origin was to be responsible for their supervision, even when they provided services in other member states.

The Country of Origin Principle was attacked by many groups and particularly by consumers and labour unions. Criticism focused particularly on the possibly dangerous consequences that mutual recognition would bring about, such as a regulatory race to the bottom, lowering of standards, poor quality, as well as growing problems for consumers seeking redress from providers located or established elsewhere. Whether this criticism was right or wrong, it points directly at the problems arising from the SPT, whereby consumers seek proximity with their service providers to avoid the problems mentioned above.

Surprisingly, even though the harmonisation approach for market integration proved to be rather ineffective in the case of goods, it may prove to be more useful in addressing SPT consequences for services than the mutual recognition approach. Indeed, harmonisation is a sub-optimal approach for many reasons, including being a compromise between the regulatory systems of 27 member states. Nevertheless, from the consumer's point of view, harmonisation can have better possibilities for generating and maintaining proximity than mutual recognition does. For similar reasons, integration might be advanced better through sector-specific initiatives rather than through an all encompassing initiative, as was pursued by the Services Directive.

For integration theory, one observation resulting from the SPT that follows the rationale of generating greater proximity as well as the necessity of positive integration is that Neo-functionalism is not a one way process.¹¹² According to Neo-functionalism, economic interdependence between countries in specific sectors incentivises further integration in other sectors through a process of spillover, leading eventually to integration in non-economic sectors (Wiener and Diez 2004). In the case of market integration in the area of services, the logic of Neo-functionalism might be reversed. Further regulatory intimacy and harmonisation requires greater political impetus. Furthermore, proximity between consumers and foreign producers can be facilitated by greater cultural, social and political convergence. This convergence necessitates political integration, which will eventually (according to a Neo-functionalist rationale) spill over for further market integration in services.

An important consequence of the theory of services co-production for economic integration is that the constraints on the international tradability of services imply that the law of one price

¹¹² It should be noted that positive integration is also a necessary element in the integration of other economic sectors. The discussion on services' focus on the SPT aspects related to positive integration in services.

may not hold for services. According to the law of one price, in an efficient market adjusted for transport costs, goods and services and their close substitutes will have similar real prices in different locations.¹¹³ The SPT has three repercussions for the law of one price. First, the consumer dimension in production implies that, subjectively, consumers may not recognise close substitutes. Quality dependence on joint production can mean that consumers, whether they are firms or individuals, view close substitutes or similar services to be very different. Difference in quality is perceived as difference in the actual services provided.

Second, the co-production of services encourages regulation and increases its “stickiness”. It also influences and affects variation in domestic regulation between different geographic locations. Local costs of services production and provision vary according to differences in regulation. The constraints outlined above to converge services regulation (or to allow mutual recognition) between countries, even in the case of closely integrated economies such as the EU, mean that removing price differences is perhaps impossible. Finally, the SPT may limit the possibility of factor price equalisation, thus limiting price convergence. The bias towards international trade in services through commercial presence stemming from the proximity constraint implies that foreign suppliers who wish to supply locally will prefer reliance on local labour, as discussed above for mode 4. The result is location-specific labour production factor price differentials.

¹¹³ Empirical and theoretical work shows evidence that the law of one price does not necessarily function in other markets as well. See Burdett, K. and K. Judd (1983). "Equilibrium Price Dispersion." *Econometrica* 51(4): 955-969.

, Lamont, O. A. and R. H. Thaler (2003). "Anomalies: The Law of One Price in Financial Markets." *Journal of Economic Perspectives* 17: 191-202.

, Choi, J. J., D. Laibson and B. C. Madrian (2010). "Why Does the Law of One Price Fail? An Experiment on Index Mutual Funds." *Review of Financial Studies* 23(4): 1405-1432.

These consequences on the law of one price mean that the economic integration of service markets may not be fully possible in the sense of price convergence. This observation has been noted also by Horn and Shy when discussing the idea of services embodied in goods, such as maintenance services, where the service input is non-tradable as it has to be provided locally. The consequence that they observe is that liberalisation will not necessarily lead to greater market integration because of different local prices of services required for the “product bundle” (Horn and Shy 1996). Hindley also makes reference to the need for local factors of production as not being likely to lead to price uniformity and hence to an integrated world market (Hindley 1990).

Another issue related to economic integration which is influenced by service co-production is its effect on economies of scale. Economic integration is often justified as furthering the possibility to exploit economies of scale as a consequence of bigger markets, standardisation and more. Since international trade in services favours proximity, it follows that these effects can be achieved through commercial presence trade but much less through cross-border trade. Hence, neither technology nor economic integration (in the institutional sense of it) is sufficient to ensure that economy of scale advantages will be exploited.

Finally, the importance of modes of supply analysis and the consequences of service co-production are significant for furthering understanding of several key concepts in economic integration. Trade creation and trade diversion are the building blocks of economic integration theory. Trade creation happens when trade created between members of an economic integration unit (e.g. Free Trade Area (FTA)) substitute local production. Trade diversion is when the trade created between members of the economic integration unit (e.g. FTA) substitutes imports from non-members of the economic integration framework. Trade

creation and trade diversion are often used also in the context of economic integration in services. While it seems intuitively justified to apply them to services, the analysis so far suggests that such application might be feasible, yet difficult to assess. The trade consequences of integration in the area of goods can relatively easily be measured on the basis of data on existing tariffs and quota barriers. Hence, tariff levels between countries predict the impact on bilateral trade of removing those barriers between two or more countries. In services, the situation is rather different, as barriers to trade are not as quantifiable as tariffs and quotas are. In services, where there are no tariffs, most barriers are regulatory. The specificity of the co-production process generates variation in regulation between countries. This variation is quantitative, as the intensity of regulation differs from one location to another, and is also qualitative, as the nature of barriers varies between countries. It is possible to quantify regulatory barriers into equivalent tariff levels or other quantitative scales, but since regulation qualitatively differs between countries, such an attempt has its limitations. This problem exists to a lesser extent in international trade in goods, with regard to non-tariff barriers and “behind the border” issues.

Trade creation and trade diversion are also important in the context of modes of supply. Further research is needed for greater understanding of the effects of liberalisation in one mode of supply on trade in other modes of supply. One effect suggested in Chapter 4 is that complementarities exist between trade through commercial presence and cross-border trade. Accordingly, greater trade through commercial presence may enable a degree of proximity between consumers and producers that will also facilitate additional cross-border trade between them. Thus, the removal of barriers to trade in services can generate trade creation and diversion effects that will be observed in a different way across modes of supply.

Conclusions

This chapter explored the importance of service co-production and the SPT to the political economy of international trade in services. While Chapter 5 addressed the specific consequences of the SPT on the political economy of international governance in the area of standards setting, the analysis in this chapter furthered the relevance of the SPT to the core issues of the political economy of international trade in services.

Indeed, the SPT and its impact on international political economy should not be taken as completely dismissing standard international political economy analysis, such as the role of interests and institutions. These continue to be fundamental building blocks in explaining political and economic processes, as well as the aggregation of conflicting interests and conditioning bargaining (Lake 2009: 226-228). Nevertheless the SPT provides new explanations and opens up several avenues for further research. One important area affected by the SPT is the effects of co-production on regulation and the resulting regulatory barriers. Hence, while existing arguments concerning the impact of regulatory barriers on international trade are valid, they are a derivative of a fundamental production problem, namely, the co-production of service by producers and consumers.

The theory of service co-production and the SPT has many implications for the international political economy of service trade. These implications illustrate the greater impact of consumers, which is mostly channelled through regulation and its impact on policy-makers as well as services providers' preferences. The SPT impact on international political economy is different with regard to given modes of supply. These effects are evident in the international political economy of multilateral and preferential trade liberalisation and promote understanding of why countries tend to autonomously liberalise rather than engage in

reciprocal liberalisation negotiations. The SPT also explains why, despite foreseen economic gains, consumers often join labour in opposing liberalisation of the movement of labour, and how the proximity-constraint is manifested in GATS' architecture. The consequences of the SPT are also useful for the analysis of economic integration in services and its limitations in general and also in the particular case of the EU. They also show how greater integration might be achieved by reverting to harmonisation and sector-specific policies.

Chapter 7: Conclusions

The market is the meeting place between supply and demand, where sellers and buyers exchange goods and services through the intermediation of a price mechanism. This research shows that, for services, production and exchange are inseparable processes. While goods are first produced and then exchanged, service producers and consumers (and / or goods under their control) already interact with each other in joint production of the service, prior to or simultaneously with exchange. Thus, the service outcome does not exist ontologically without at least some participation by the consumer in the process of production. There are significant political economy consequences and implications stemming from this very essence of services.

This study began with an empirical investigation into the patterns through which healthcare and accounting services are internationally traded (Chapters 2 and 3). It found that, despite being very different in nature, these two services follow similar patterns of international trade. Trade is significantly higher when producers and consumers are in close proximity to each other. The findings show that the largest share of trade in a given service sector takes place through commercial presence (mode 3). In this mode of trade, service providers produce and exchange in the territory of their consumers. Trade through the movement of natural persons (mode 4) is lower than trade through commercial presence but is relatively higher than other modes of trade. When services are traded through the movement of natural persons, people, either as providers or as factors of production, relocate physically to produce in the territory of the consumer. Consumption abroad trade (mode 2) takes place when consumers use services in the territory of the suppliers. Trade through this mode is

significantly lower than trade through commercial presence and the movement of natural persons. Finally, international trade is the lowest through cross-border trade (mode 1), where only the service crosses the border.

These findings show that proximity is important in determining producers' and consumers' choice of international trade mode. Indeed, technology enables cross-border tradability of all services with, often, significant reduction of transaction costs. Nevertheless, proximity remains a determining factor for international trade. These results advance international trade literature in several ways. First, they expand traditional analysis of international trade in services to provide a detailed and comprehensive measurement. These are rare in the literature, particularly for both healthcare and accounting services. Second, the results provide a more accurate picture of international trade by going beyond absolute figures into an analysis of relative trade in each mode of services supply. Finally, the measurement of trade through consumption abroad and the movement of natural persons is highly lacking in trade literature. The findings show that the movement of natural persons is very important and fits in with conventional trade theory on factor movement.

Methodologically, this research contributes to existing methods of measuring trade in services. So far, few studies have measured international trade in services through the four modes of supply. Although it requires greater statistical collection effort, this approach is useful in providing a more accurate account of international trade and can enable greater insights into the relationships between different modes of trade. As suggested in this study, complementarities exist between commercial presence and movement of natural persons, as well as between commercial presence and greater cross-border trade. The findings on the

specific ways in which international trade takes place are largely missed in existing studies, which often take cross-border trade or commercial presence as the sole measurements for international trade. The four modes of supply framework also reports international service transactions which, in the absence of border measures, are not captured by conventional statistics. As such, the framework provides a better understanding of the determinants and motivations of trade, and identifies barriers and impediments to trade in services. Greater availability of bilateral statistics on all four modes of supply would help to extend this framework, allowing the application of advanced statistical methods which could not have been effectively applied in this study.

The empirical findings complemented by an extensive investigation of the concept of services lay the foundations for the development of the theory of service co-production and the Services Production Trap (SPT). According to the theory developed in Chapter 4, consumers and the goods under their control are an integral part of the production of services. The production of a service is a process through which technical and human capacities owned or controlled by the supplier are used to produce useful effects on the consumer or goods she or he owns. It follows that it is necessary for the consumer or goods owned by the consumer to be part of the production process which eventually generates the service as a final or intermediate product. Hence, in contrast to goods which have an independent existence and which can first be produced and then consumed, the service product does not exist without the involvement of the consumer or goods owned by the consumer in the process of producing the service. Co-production is an ideal-type characteristic of services and, while it exists in all services, consumer's co-production intensity varies from one service to another.

The concept of co-production between producers and consumers fills important theoretical gaps, as both trade and international political economy theories (reviewed in Chapters 1 and 4) fall short of explaining why services are different from goods, what the patterns of international trade in services are and why they take the shape they do. Joint production in services leads to the SPT since it creates a proximity bias between producers and consumers. Joint production favours proximity, although international trade in services can take place when producers and consumers are remote from each other, as in the case of cross-border trade. This explains why services are traded internationally more through commercial presence and the movement of natural persons than through cross-border trade or consumption abroad. The SPT's proximity constraint also explains why international trade in services remained relatively low during the last 40 years, despite services' growing importance in the economy. Required to co-produce with consumers, service providers are biased towards commercial presence production. On the one hand, this leads to greater costs suppressing the incentive to trade. On the other hand, commercial presence trade is often not captured in trade in services statistics, thus downplaying the real magnitude of trade.

The notion of proximity developed in this study extends economic literature treatment of distance as a determining factor in trade. According to the SPT, proximity encapsulates three dimensions. Proximity as space includes the notion of distance in a quantitative and qualitative way. In that regard, geographical distance matters, but its qualitative attributes favour localisation. Proximity also has a time dimension which relates to simultaneous production and consumption of many services, as well as to the fact that some services production continues over time. Finally, proximity is also a matter of relationship in terms of trust and commitment, generated from quality differences resulting from co-production.

Technology, analysed through the measurement of cross-border trade (Chapters 2 and 3) reduces transport and other transaction costs, but does not substitute proximity.

The theory of services co-production and the SPT also has significant political consequences reflected in the international political economy of trade in services. Chapter 5 shows the effects of the SPT on firms' choice of organisational structure. Firms organise within the limitations imposed by the SPT in order to optimise their internationalisation. In contrast to healthcare multinationals organised as multinational corporations, international accountancy and audit firms adopted an organisational structure based on networks of partners. These partnership networks allow accountancy firms to harness the proximity constraints of the SPT for greater internationalisation through localisation. Organised as networks of local firms and sharing an international brand name and back-offices, accountancy firms garner the proximity advantages of domestic firms without having to share financial commitments across the network. Furthermore, this structure allows them to create an internal labour market within the network and to attract international clients. In that regard, they differ significantly from healthcare multinationals which consist of a parent company linked to subsidiaries across the world. The parent company-subsidary model has been less effective in generating proximity with consumers and has also forced healthcare multinationals to concentrate on private-public partnerships to increase proximity advantages.

Chapter 5 also shows that, from a political economy perspective, the Partnership Model afforded international accountancy and audit firms significant political and economic advantages over other actors in the political economy arena. The partnership organisation, along with increased competition, led to the consolidation of the market into an international

oligopoly of four firms, known as the Big 4. The firms were able to concentrate vast economic resources which were used to influence the accountancy profession as well as national and international politics for the creation of a private governance regime for international financial reporting standards. This regime, known as International Financial and Reporting Standards (IFRS), was largely created, shaped and is managed by the direct and indirect influence of the Big 4. It is an exceptional case in the area of governance where private and international governance exists to such an extent. Furthermore, this governance regime has been created despite countries' interests to remain in the driving seat and retain control over accountancy standards setting.

The application of the SPT and its political economy consequences in the accountancy sector, contributes also to the literature on governance. The literature on IFRS and international governance has so far focused on issues of control, accountability and the delegation of authority from states to a private standards setting organisation. The analysis in this research of the political, professional and economic role of the big accountancy firms fills a literature gap concerning the reasons that have led to the IFRS' international private governance.

Chapter 6 furthers the implications of services co-production and the SPT as it extends the analysis into exploring core issues in international political economy. Exploring the political economy of international trade in services liberalisation and protection, this research shows how consumers' preferences are translated into preferences and policy-making in several layers. The consequences of co-production underlie the foundations of services regulation, of which an important part is to safeguard consumers against various problems emanating from the SPT, such as information problems, quality, trust and more. Regulation has been an

important explanatory variable in the literature on trade liberalisation and negotiations, yet it is largely a derivative of services co-production. The effects of co-production inform producers' preferences towards regulation and regulatory reform. It explains that regulation more directly linked with co-production has been less relaxed than other areas of regulation. Service providers have largely internalised the SPT constraints and therefore lobby less to reduce regulatory levels that are associated with co-production. Co-production also explains that national regulators are less willing to negotiate regulatory reform and trade liberalisation than they were to negotiate international trade in goods. Liberalisation of regulatory barriers is also affected by co-production in the sense that regulators are more inclined to liberalise commercial presence trade than cross-border trade. In the latter case, they are less able to ensure that liberalisation will not have adverse proximity consequences on consumers.

Co-production also explains countries' preferences towards multilateralism and preferential trade. Countries are reluctant to negotiate reform of liberalisation of their services regime, but are ready to commit themselves to liberalisation measures which they undertook autonomously. This nature of liberalisation allows countries to engage in the multilateral game without eroding their regulatory regimes. Furthermore, while preferential trade agreements have proliferated in the last two decades, their extension of the WTO framework has been mainly in issue areas which are less sensitive to the proximity-constraint.

Services co-production is also important for understanding why proximity constraints still play a role even in closely integrated economies such as the EU. Attempts to liberalise and integrate Europe's service markets fell short of creating a single European market in services because they did not provide an appropriate positive integration mechanism to mitigate the

adverse effects of liberalisation on proximity. This research also suggests that, from a wider perspective on integration, full integration in services may not be a feasible goal, as the quality differences resulting from the SPT constrain the realisation of the law of one price and the exploitation of economies of scale.

This research paves the way for future research concerning co-production of services jointly between producers and consumers. Specifically, there is scope for further research on the political economy effects of the SPT, both internationally and domestically. These implications merit greater empirical and theoretical investigation into specific service sectors, as well as political economy topics, such as policy determination, market integration, time-inconsistency and collective action problems, and more.

Furthermore, from an economic perspective, the theory of co-production challenges several conventions, which merit additional exploration into the dynamic effects of joint production on demand and supply. Since consumers are part of the production function of services, it follows that demand is already endogenised within the supply curve. Hence, greater attention is needed to understand the effects of co-production on the concept of markets and how market equilibrium is achieved. Finally, as noted in Chapter 4, the notion of co-production necessitates further analysis of the concept of services' productivity. Even though productivity is a function of consumer contribution, it is greatly absent from current productivity analysis.

Bibliography

(1965). Proximity. The Concise Oxford Dictionary of Current English. Fowler, H. W. and Fowler, F. G.. Oxford: Clarendon Press.

(1966). Proximity. Webster's Third New International Dictionary of the English Language Unabridged. Chicago, William Benton.

Adler, E. (1992). "The Emergence of Cooperation: national epistemic communities and the international evolution of the idea of nuclear arms control." International Organization 46(1): 101-145.

Adlung, R. (forthcoming). "Trade in Healthcare and Health Insurance Services: WTO/ GATS as a supporting actor (?)." Intereconomics.

Adlung, R. and Roy, M. (2005). "Turning Hills into Mountains? Current Commitments under the General Agreement on Trade in Services and Prospects for Change." Journal of World Trade 39(6): 1161-1194.

Aharoni, Y. (1993). Coalitions and Competition: the globalization of professional business services. London, Routledge.

Aharoni, Y. (1997). Changing Roles of State Intervention in Services in an era of Open International Markets. Albany, State University of New York Press.

Albrecht, D. (2008). Bob Jensen–IFRS Critic in Albrecht, D., The Summa. 2010.

Albrecht, D. (2008). Dave Albrecht–IFRS Critic in Albrecht, D. The Summa. 2010.

Alchian, A. A. and Demsetz, H. (1972). "Production, Information Costs, and Economic Organization." American Economic Review 62(5): 777-795.

Alt, J. E. and Gillian, M. (2010). The Political Economy of Trading States: factor specificity, collective action problems, and domestic political institutions. International Political Economy: perspectives on global power and wealth. Frieden, J. A., Lake, D. A. and Broz, L. J. (eds). New York, W. W. Norton and Company: 376-392.

American Medical Association (2007). International Medical Graduates in the U.S. Workforce: discussion paper, American Medical Association.

Andersen, B. and Corley, M. (2003). "The Theoretical, Conceptual and Empirical Impact of the Service Economy: a critical review." World Institute for Development Economics Research (WIDER) Discussion Paper WDP 2003/22.

Andersen, O. (1993). "On the Internationalization Process of Firms: critical analysis." Journal of International Business Studies 24: 209–231.

Anderson, J. E., and van Wincoop, E. (2004). "Trade Costs." Journal of Economic Literature 42(3): 691–751.

Armstrong, C. S., M. E. Barth, A. D. Jagolinzer and E. J. Riedl (2008). Market Reaction to the Adoption of IFRS in Europe. Working Paper 09-032. Cambridge, Harvard Business School.

Baida, Z., H. Akkermans and J. Gordijn (2005). "Service Classification versus Configuration." GI Jahrestagung 2: 464-468.

Balin, S. and Giard, V. (2006). "A Process Oriented Approach to the Service Concepts." Service Systems and Service Management, 2006 International Conference 1: 785-790.

Baumol, W. J.. and Bowen W. G. (1966). Performing Arts—the economic dilemma: a study of problems common to theatre, opera, music and dance. New York, Twentieth Century Fund.

Berliner, H. S. and Regan, C. (1987). "Multinational operations of US for-profit hospital chains: trends and implications." American Journal of Public Health 77(10): 1280-1284.

Berry, L. L., and Parasuraman, A. (1993). "Building a New Academic Field – The Case of Services Marketing." Journal of Retailing 69(1): 13-60.

Berthelon, M., and Freund, C. (2008). "On the conservation of distance in international trade." Journal of International Economics 75(2): 310-320.

Bhagwati, J. (1988). Protectionism. Cambridge MA, MIT Press.

Bhagwati, J. N. (1984). "Splintering and Disembodiment of Services and Developing Nations." The World Economy 7(2): 133-144.

Bhagwati, J. N. (1987). International Trade in Services and its Relevance for Economic Development in Giarini, O., The Emerging Service Economy. Oxford, Pergamon Press: 3-34.

Birrell, B., L. Hawthorne and S. Richardson (2006). Evaluation of The General Skilled Migration Categories, DIMA.

Birrell, B. and Rapson, V. (2005). Migration and the Accounting Profession in Australia: report prepared for CPA Australia by The Centre for Population and Urban Research Monash University. Victoria, The Centre for Population and Urban Research, Monash University.

Björkman, I. and Kock, S. (1997). "Inward International Activities in Service Firms – Illustrated by Three Cases from the Tourism Industry." International Journal of Service Industry Management 8(5): 362-376.

Blitz, B. K. (2005). "Brain circulation: the Spanish medical profession and international medical recruitment in the United Kingdom" Journal of European Social Policy 15(4): 363-379.

Boland, G. W. L. (2008). "Teleradiology Coming of Age: Winners and Losers." AJR 190: 1161-1162.

Boscheck, R. (2005). "Healthcare Reforms and Governance Concerns – the cases of the United States, the United Kingdom and Germany." Intereconomics 40(2).

Botzem, S. and Quack, S. (2006). Contested Rules and Shifting Boundaries: international standard-setting in accounting in Djelic, M. L. and Sahlin-Andersson, K. (eds.). Transnational governance: institutional dynamics of regulation. Cambridge; New York, Cambridge University Press: 266-286.

Bowen, J. and Ford, R. C. (2002). "Managing Service Organizations: does having a "thing" make a difference." Journal of Management 28(3): 447-469.

Boys, P. (2005). "What's in a name: firms' simplified family trees on the web." Retrieved 1/10, 2008, from http://www.icaew.com/index.cfm/route/155661/icaew_ga/en/Home/About_us/History_of_accounting/What_s_in_a_name_Firms_simplified_family_trees_on_the_web.

Bradford Jensen, J. (2008). "Trade in High-Tech Services." Journal of Industry, Competition and Trade 8(3): 181-197.

Bratton, W. W. (2007). "Private Standards, Public Governance: a new look at the financial Accounting Standards Board." Boston College Law Review 48(5): 5-53.

Buch, C., M., I. Kesternich, A. Lipponer and M. Schnitzer (2010). Exports versus FDI revisited: Does Finance Matter. Discussion Paper Series 1: Economic Studies No 03/2010. Frankfurt am Main, Bundesbank.

Buch, C. M., and Lipponer, A. (2004). FDI versus cross-border financial services: the globalisation of German banks. Discussion Paper Series 1: Studies of the Economic Research Centre No 05/2004. Frankfurt am Main, Bundesbank.

Buchan, J. (2006). Migration of health workers in Europe: policy problem or policy solution? Human resources for health in Europe. Dubois, C. A., McKee, M. and Nolte, E. (eds.). New York, European Observatory on Health Systems and Policies Series, Open University Press: 41-62.

Buchan, J. (2007). "Health Workers Migration in Europe: assessing the policy option." Eurohealth 13(1): 6-8.

Burdett, K. and Judd, K., (1983). "Equilibrium Price Dispersion." Econometrica 51(4): 955-969.

Burgess, R. and Venables, A. (2004). Toward a Microeconomics of Growth, Annual World Bank Conference on Development Economics. in Bourignon, F. and Pleskovic, B. (eds.). Accelerating Development. Washington DC, World Bank and Oxford University Press.

Burne, J. (2008). "A World of Medical Opportunity: special report on health tourism." Retrieved 10/05/2008, 2008, from <http://www.treatmentabroad.net/medical-tourism/a-world-of-medical-opportunity/>.

Burt, R. S. (1992). Structural holes: the social structure of competition. Cambridge, MA, Harvard University Press.

Canibano, L. and Mora, A. (2000). "Evaluating the statistical significance of de facto accounting harmonization: a study of European global players." European Accounting Review 9(3): 349-369.

Canoy, M. and Smith, P. (2008). "Services and the Single Market." Journal of Industry, Competition and Trade 8(3): 319-347.

Chanda, R. (2001). Trade in Health Services. CMH Working Paper Series, Commission on Macroeconomics and Health, World Health Organisation: Paper No. WG 4: 5.

Choi, J. J., D. Laibson and B. C. Madrian (2010). "Why Does the Law of One Price Fail? An Experiment on Index Mutual Funds." Review of Financial Studies 23(4): 1405-1432.

Cicic, M., P. G. Patterson and A. Shoham (1999). "A Conceptual Model of the Internationalization of Service Firms." Journal of Global Marketing 12(3): 81-106.

Clark, C. (1957). The conditions of economic progress, Macmillan; St. Martin's Press.

Coase, R. H. (1937). "The Nature of the Firm." Economica 4: 386-405.

Coase, R. H. (1960). "The Problem of Social Cost." Journal of Law and Economics 3(1): 1-44.

Cohn, T. H. (2010). Global Political Economy: theory and practice. New York, Pearson.

Cooper, D. J. and Robson, K. (2009). Practitioners, Work and Firms. The Routledge companion to accounting history. Edwards, J. R. and Walker, S. P. New York, NY, Routledge: 274-296.

Daniels, P. W. (2000). "Export of Services or Servicing Exports?" Human Geography 82(13): 1-15.

Deardorff, A. (1985). "Comparative Advantage and International Trade and Investment in Services."

Delaunay, J. C. and Gadrey, J. (1992). Services in economic thought: three centuries of debate. Boston, Kluwer Academic Publishers.

Deloitte (2008). 2008 Survey of Health Care Consumers. Washington, The Deloitte Center for Health Solutions.

Deloitte (2009). Medical Tourism: update and implications. Washington, The Deloitte Center for Health Solutions.

Deloitte Touche Tohmatsu (2008). "History, the Journey to Today: select moments in the history of Deloitte." Retrieved 01/10, 2008, from http://www.deloitte.com/dtt/section_node/0,1042,sid%253D76339,00.html.

Derst, P., B. Heß and H. D. von Loeffelholz (2006). Labour Market Participation of Non-Germans in the Health Sector in Germany, German National Contact Point, Bundesamt für Migration und Flüchtlinge.

Dewing, I. and Russell, P. O. (2004). The Role of Private Actors in Global Governance and Regulation: US, European and international convergence of accounting and auditing standards in a post Enron world. Inaugural Workshop. Amsterdam Research Centre for Corporate Governance Regulation, Vrije Universiteit Amsterdam.

Díaz Benavides, D. (2002). Trade policies and export of health services: a development perspective in Drager, N. and Veirica, C. (eds.). Trade in Health Services: global, regional and country perspectives. Washington DC, Pan American Health Organisation and World Health Organisation.: 53-69.

Disdier, A. C. and Head, K. (2008). "The Puzzling Persistence of the Distance Effect on Bilateral Trade." The Review of Economics and Statistics 90(1): 37-48.

Djelic, M. L. and Quack, S. (2003). Globalization and institutions: redefining the rules of the economic game. Cheltenham, Edward Elgar.

Djelic, M. L. and Sahlin-Andersson, K. (2006). Transnational governance: institutional dynamics of regulation. Cambridge; New York, Cambridge University Press.

Dorrenbacher, C. (2000). "Measuring Corporate Internationalisation." Discussion Paper. Retrieved 28/04, 2008, from <http://skylla.wzb.eu/pdf/2000/i00-101.pdf>.

Drake, W. J. and Nicolaidis, K. (1992). "Ideas, Interests, and Institutionalization: 'Trade in Services' and the Uruguay Round." International Organization 46(1): 37-100.

Ebbert, T. L., Meghea, C. (2007). "The State of Teleradiology in 2003 and Changes Since 1999 " AJR 188.

Ehrbeck, T., C. Guevara and P. D. Mango (2008). "Mapping the Market for Medical Travel." The McKinsey Quarterly May.

Einhorn, B. (2008). Top Medical Tourism Destinations. Business Week. 08/03/2008.

Epstein, K. (2008). An SEC Timetable for Global Accounting Rule. Business Week.

Ernst & Young (2008). "Two people. One vision". Retrieved 01/10, 2008, from http://www.ey.com/global/content.nsf/International/About_EY_-_Key_Facts_and_Figures_-_History.

Erramilli, M. K. (1988). "Entry Mode Choice in Service Industries." International Marketing Review 7(5): 50-62.

Erramilli, M. K. and Rao, C. P. (1990). "Choice of Foreign Market Entry Modes by Service Firms: Role of Market Knowledge." Management International Review 30(2): 135-150.

Erramilli, M. K. and Rao, C. P. (1993). "Service Firms' International Entry-mode Choice: a Modified Transaction-Cost Analysis Approach." *Journal of Marketing* 57: 19-38.

Eschenbach, F. and Hoekman, B. (2006). "Services Policy Reform and Economic Growth in Transition Economies, 1990-2004." *Review of World Economics* 142(4): 746-764.

Ethier, W. and Horn, H. (1991). "Services in International Trade" in Helpman, E. and Razin, A. (eds.). *International Trade and Trade Policy*. Cambridge MA, MIT Press.

EuroActiv (2004). "eHealth." Retrieved 28/04, 2008, from http://www.euroactiv.com/en/health/ehealth/article-1174747?_print.

European Commission (1995). Communication from the Commission – Accounting Harmonisation: a new strategy vis-à-vis international harmonisation.

European Commission (1997). Panorama of EU Industry 1997. Luxembourg, Office for Official Publications of the European Communities.

European Commission (2004). Extended Impact Assessment of Proposal for a Directive on Services in the Internal Market. *COM (2004) 2 final*.

European Commission (2008). Benchmarking ICT use among General Practitioners in Europe: final report. Bonn, Information Society and Media Directorate General.

European Migration Network (2006). *Managed Migration and the Labour Market – the Health Sector*. Luxembourg, European Union: Directorate-General Justice, Freedom and Security.

Ferguson, A. and Johnston, E. (2010). Lobbyist control plans in disarray. The Age. Sydney.

Ferguson, A. and Johnston, E. (2010). Lobbyists find back door to power. The Sydney Morning Herald. Sydney.

Fillat-Castejon, C., J. F. Francois and J. M. Woerz (2008). *Cross-Border Trade and FDI in Services*. Working Paper No. 0812 September 2008. Linz, Johannes Kepler University of Linz.

Fink, C. and Molinuevo, M. (2007). "East Asian Free Trade Agreements in Services: roaring tigers or timid pandas?"

Fink, C. and Molinuevo, M. (2008). "East Asian Free Trade Agreements in Services: key architectural elements." Journal of International Economic Law 11(2): 263-311.

Fisher, A. G. B. (1935). The clash of progress and security. London, Macmillan.

Fisher, A. G. B. (1945). Economic progress and social security. London,, Macmillan & co. ltd.

Fligstein, N. (2001). The architecture of markets: an economic sociology of twenty-first century capitalist societies. Princeton, N. J., Princeton University Press.

Fligstein, N. and Dauer, L. (2007). "The Sociology of Markets." Annual Review of Sociology 33: 105-128.

Fligstein, N. and Stone Sweet, A. (2002). "Constructing Politics and Markets: an institutionalist account of European integration." American Journal of Sociology 107(5): 1206-1243.

Fourastié, J. (1960). The causes of wealth. Glencoe, Ill., Free Press.

Francois, J. and Woerz, J. (2008). "Producer Services, Manufacturing Linkages, and Trade." Journal of Industry, Competition and Trade 8(3): 199-229.

Francois, J. F. and Hoekman, B. (2009). Services Trade and Policy. Working Papers. Vienna, The Vienna Institute for International Economic Studies. 60.

Freund, C. and Weinhold, D. (2002). "The Internet and International Trade in Services." American Economic Review 92(2): 236-240.

Freund, C. and Weinhold, D. (2004). "The Effect of the Internet on International Trade." Journal of International Economics. 62: 171-189.

Fuchs, V. R. (1968). The service economy. New York,, National Bureau of Economic Research; distributed by Columbia University Press.

Fung, K. C. and Siu, A. (2008). "Political Economy of Service Trade Liberalization and the Doha Round." Pacific Economic Review 13(1): 124-133.

Gadrey, J. (2000). "The Characterization of Goods and Services: an alternative approach." Review of Income and Wealth 46(3): 369-387.

Gallhofer, S. and Haslam, J. (2007). "Exploring Social, Political and Economic Dimensions of Accounting in the Global Context: the International Accounting Standards Board and accounting disaggregation " Socio-Economic Review 5(4): 633-664.

Giarini, O. and Stahel, W. R. (1993). The limits to certainty. Dordrecht; Boston, Kluwer Academic Publishers.

Gill, L. M. (2007). "What CPAs Need to Know About the New Global GAAP." Journal of Accountancy(June).

Gluszynski, T. and Peters, V. (2005). Survey of Earned Doctorates: a profile of doctoral degree recipients. Statistics Canada, Culture, Tourism and the Centre for Education Statistics Research papers.

Gourevitch, P. A. (2010). International Trade, Domestic Coalitions, and Liberty: Comparative Responses to the Crisis of 1873-1896 in Frieden, J. A., Lake, D. A. and Broz,

L. J. (eds.). International Political Economy: Perspectives on Global Power and Wealth. New York, W.W. Norton and Company: 98-118.

Gravelle, H. S. E. and Rees, R. (1992). Microeconomics. Harlow, Longman.

Greenaway, D. and Winters, L. A. (1994). Surveys in International Trade. Oxford, Blackwell.

Grönroos, C. (1984). "A Service Quality Model and its Marketing Implications." European Journal of Marketing 18(4): 36-45.

Grönroos, C. (1988). "Marketing services: the case of a missing product." Journal of Business and Industrial Marketing 13(4/5): 322-339.

Grönroos, C. (2004). "Service productivity: towards a conceptualization of the transformation of inputs into economic results in services." Journal of Business Research 57(4): 414-423.

Haas, P. M. (1992). "Introduction: epistemic communities and international policy coordination." International Organization 46(1): 1-35.

Hail, L., Leuz, C. et al. (2009). "Global Accounting Convergence and the Potential Adoption of IFRS by the United States: an analysis of economic and policy factors." SSRN eLibrary.

Hall, R. B. and Biersteker, T. J. (2002). "The Emergence of Private Authority in Global Governance." from Electronic resource for LSE members only. Requires LSE username and password <https://gate2.library.lse.ac.uk/login?url=http://www.mylibrary.com?id=43465>

Haller, A. (2002). "Financial accounting developments in the European Union: past events and future prospects." European Accounting Review 11(1): 153-190.

Hancké, R. (2009). Intelligent Research Design: a guide for beginning researchers in the social sciences. Oxford, Oxford University Press.

Hanlon, G. (1991). "The emigration of Irish accountants: economic restructuring and producer services on the periphery." Irish Journal of Sociology 1(52-65).

Hanlon, G. (1994). The commercialisation of accountancy: flexible accumulation and the transformation of the service class. Basingstoke, Macmillan.

Hanlon, G. (1999). "International Professional Labour Markets and the Narratives of Accountants." Critical Perspectives on Accounting 10: 199-221.

Harpaz, G. and Herman, L. (2007). "Editorial—Approximation of Laws by non-EU Countries to the EU Acquis: setting the scene, Special Issue: approximation to EU Law." Journal of European Law Reform 9(3): 357-360.

Harris, R. (2008). Big Four Make Big Plans for IFRS. CFO.

Hazopoulos, V. (2006). The ECJ Case Law on Cross Border Aspects of Health Services: briefing note. Brussels, European Parliament (DG Internal Policies of the Union, Policy Department Economic and Scientific Policy).

Heinz, F. F. and Ward-Warmedinger, M. (2006). Cross Border Labour Mobility within an Enlarged EU. ECB Occasional Papers, No. 52. Frankfurt, European Central Bank.

Herman, L. (2006). "An Action Plan or a Plan for Action: Israel and the European neighbourhood policy." Mediterranean Politics 11(3): 371-394.

Herman, L. (2006). Looking Ahead: business and policy implications of the Hong Kong ministerial, international trade policy unit roundtable, The London School of Economics. 11.

Herman, L. (2010). Multilateralising Regionalism: the case of e-commerce. OECD Trade Policy Working Paper No. 99. Paris, OECD.

Heydon, K. and Woolcock, S. (2009). The Rise of Bilateralism: comparing American, European and Asian approaches to preferential trade agreements. Tokyo, United Nations University Press.

Hill, P. (1977). "On Goods and Services." Review of Income & Wealth 23(4): 315-338.

Hill, P. (1999). "Tangibles, Intangibles and Services: a new taxonomy for classification of output." Canadian Journal of Economics 32(2): 426 – 447.

Hindley, B. (1990). Principles in Factor-related Trade in Services in Messerlin, P. A. and Sauvant, K. P., The Uruguay Round: services in the world economy. Washington, D.C., World Bank ;The United Nations Centre on Transnational Corporations: 12-18.

Hindley, B., Kierzkowski, H. et al. (1987). International Trade in Services: comments in Giarini, O., The Emerging Service Economy. Oxford, Pergamon Press: 35-57.

Hindley, B. and Smith, A. (1984). "Comparative Advantage and Trade in Services." The World Economy 7(4): 369-389.

Hoekman, B. (2006). "Liberalizing Trade in Services: a survey." World Bank Policy Research Working Paper(4030).

Hoekman, B. (2006). "Liberalizing Trade in Services: a survey." World Bank Policy Research Working Paper(4030).

Hoekman, B., A. Mattoo and A. Sapir (2007). "The Political Economy of Services Trade Liberalization: A Case for International Regulatory Cooperation." Oxford Review of Economic Policy 23(3): 367-391.

Hoekman, B. M. and Kostecki, M. M. (2001). The political economy of the world trading system: the WTO and beyond. Oxford, Oxford University Press.

Holden, C. (2002). "The Internationalization of Long Term Care Provision." Global Social Policy 2(1): 47-67.

Holden, C. (2005). "The Internationalization of Corporate Healthcare: extent and emerging trends." Competition & Change, 2005 9(2): 185-203.

Honeck, D., B. (2002). Developing Regulatory Disciplines in Professional Services: the role of the World Trade Organisation in Aharoni, Y., and Nacum, L., Globalization of Service: some implications for theory and practice. London, Routledge: 52-72.

Hopwood, A. (2004). "Some reflections on 'The harmonization of accounting within the EU'." European Accounting Review 3(2): 241-253.

Horn, H. and Shy, O. (1996). "Bundling and International Market Segmentation." International Economic Review 37(1): 51-69.

Ietto-Gilles, G. (1998). "Different Conceptual Frameworks for the Assessment of the Degree of Internationalization: an empirical analysis of various indices for the top 100 transnational corporations." Transnational Corporations 7(1): 17-40.

IMCO (2004). Public Hearing on the Proposal for Directive on Services in the Internal Market. Committee on the Internal Market and Consumer Protection in Association with the Committee on Employment and Social Affairs. Rapporteur Evelyne Gebhardt, 11th November.

Institute of International Education (2006). Open Doors 2006: Report on International Educational Exchange.

Irwin, D. A. (1996). Against the tide: an intellectual history of free trade. Princeton, N. J, Princeton University Press.

Iversen, T. and Wren, A. (1998). "Equality, Employment, and Budgetary Restraint: the trilemma of the service economy." World Politics 50(4): 507-546.

Jara, A. and del Carmen Domenguez, M. (2006). "Liberalization of Trade in Services and Trade Negotiations." Journal of World Trade 40(1): 113-127.

Jasso-Aguilar, R., H. Waitzkin and A. Landwehr (2004). "Multinational corporations and health care in the United States and Latin America: strategies, actions, and effects." Journal of Health and Social Behavior 45(Extra Issue): 136-157.

Jenkins, G. J., D. R. Deis, J. C. Bedard and M. B. Curtis (2008). "Accounting Firm Culture and Governance: A Research Synthesis." Behavioral Research in Accounting 20(1): 45-74.

Jensen, J., T. Rutherford and D. Tarr (2007). "The Impact of Liberalizing Barriers to Foreign Direct Investment in Services: The Case of Russian Accession to the World Trade Organization." Review of Development Economics 11(3): 482-506.

Johanson, J. and Vahlne, J. E. (1977). "The Internationalisation Process of the Firm: a model of knowledge development and increasing foreign market commitment." Journal of International Business Studies 8: 22-32.

Johanson, J. and Vahlne, J. E. (1990). "The Mechanism of Internationalisation." International Marketing Review 7(4).

Johanson, J. and Wiedersheim-Paul, F. (1975). "The Internationalisation of the Firm – four Swedish cases." Journal of Management Studies 12(3): 305-322.

Jones, R. W. and Kierzkowski, H. (1989) The Role of Services in Production and International Trade: theoretical framework in Jones, R. W., Krueger, A. O. and Baldwin, R. E. (eds.). The Political Economy of International Trade: essays in honor of Robert E. Baldwin. . Oxford, Basil Blackwell: 330p.

Judd, R. C. (1964). "The Case for Redefining Services." Journal of Marketing 28(January): 58-59.

Katouzian, M. A. (1970). "The Development of the Service Sector: a new approach." Oxford Economic Papers 22(3): 362-382.

Katsikas, D. (2006). Explaining Non-State Regulatory Authority: the case of the International Accounting Standards Board. Garnet Conference. Amsterdam.

Keck, M. E. and Sikkink, K. (2001). "Transnational Advocacy Networks in International and Regional Politics." International Social Science Journal 51(159): 89-101.

Kerwer, D. (2008). Reducing the Cost of Capital: the International Accounting Standards Board and its quest for legitimacy. International Studies Association. San Francisco.

Khadria, B. (2004). Human Resources in Science and Techonology in India and the International Mobility of Highly Skilled Indians. STI Working Paper 2004/7. T. a. I. Statistical Analysis of Science. Paris, OECD.

Kindleberger, C. P. (1975). "The Rise of Free Trade in Western Europe, 1820-1875." The Journal of Economic History 35(1): 20-55.

Klaassen, J. and Buisman, J. (2008). "International Auditing" in Nobes, C. and Parker, R. H., Comparative international accounting. Harlow, England; New York, Prentice Hall/Financial Times: 437-462.

Konan, D. E. and Maskus, K. E. (2006). "Quantifying the Impact of Services Liberalization in a Developing Country." Journal of Development Economics 81(1): 142-162.

Koncept Analytics (2008). Medical Tourism Market in Asia: focus on Thailand, Malaysia, Singapore & India.

Koncept Analytics (2009). Medical Tourism Market Report: 2009 Edition.

Königsgruber, R. (2009). "A Political Economy of Accounting Standard Setting." Journal of Management and Governance: 1-19.

KPMG International (2008). "History." Retrieved 01/10, 2008, from <http://www.kpmg.com/Global/WhoWeAre/Performance/Pages/History.aspx>.

Kravis, I. B. (1983). "Services in the Domestic Economy and in World Transactions " NBER Working Paper W1124.

Krommenacker, R. J. (1984). World-traded services: the challenge for the eighties. Dedham, MA, Artech House.

Krugman, P. (1983). "New Theories of Trade Among Industrial Countries." The American Economic Review 73(2): 343-347.

Krugman, P. (1991). The Move to Free Trade Zones: symposium sponsored by the Federal Reserve Bank of Kansas city. Policy Implications of Trade and Currency Zones. Kansas City, Federal Reserve Bank of Kansas City: 7-41.

Krugman, P. R. and Obstfeld, M. (2006). International economics: theory and policy. Boston, Addison Wesley.

Kuznets, S. (1957). Reflections on modern economic growth of nations.

Lake, D. A. (2009). "Open Economy Politics: a critical review." The Review of International Organizations 4(3): 219-244.

Lamont, O. A. and Thaler, R. H. (2003). "Anomalies: the law of one price in financial markets." Journal of Economic Perspectives 17: 191-202.

Langhammer, R. J. (2004). "Revealed Comparative Advantages in Service Trade of the USA, EU, and Japan. What Do They Tell Us?" Journal of World Investment and Trade 5(6): 887-896.

Lee, T. A. (2001). "US public accountancy firms and the recruitment of UK immigrants: 1850-1914." Accounting, Auditing & Accountability Journal 14(5): 537-565.

Lee, T. A. (2002). "UK immigrants and the foundation of the US public accountancy profession." Accounting, Business & Financial History 12(1): 73-95.

Lejour, A. and de Paiva Veerheijden, J. W. (2004). Services trade within Canada and the European Union: what do they have in common? CPB Discussion Paper. The Hague, CPB Netherlands Bureau for Economic Policy Analysis. 42.

Lejour, A. and Smith, P. (2008). "International Trade in Services – Editorial Introduction." Journal of Industry, Competition and Trade 8(3): 169-180.

Lennon, C. (2008). Trade in Services and Trade in Goods: differences and complementarities. Working Paper 2008 - 52. Paris, Paris School of Economics.

Lennon, C. (2009). Trade in Services: cross-border trade vs. commercial presence. Evidence of Complementarity. Working Paper 2009 - 59. Paris, Paris School of Economics.

Lethbridge, J. (2007). European Healthcare Services and Multinational Companies: major trends and eligibility for European works councils. Public Services International Research Unit. Greenwich, University of Greenwich.

Lethbridge, J. (2007). A Global Review of the Expansion of Multinational Healthcare Companies. Public Services International Research Unit. Greenwich, University of Greenwich.

Leuz, C., D. Pfaff and A. G. Hopwood (2004). The Economics and Politics of Accounting : International Perspectives on Research, Trends, Policy, and Practice. Oxford, New York, Oxford University Press.

Loft, A. and Jeppesen, K. K. (2003). Harmonising Auditors? A Case Study of the Implementation of the EU Eighth Directive in Denmark 1984-2003 Working Paper. Copenhagen, Copenhagen Business School.

Lovelock, C. (1983). "Classifying Services to Gain Strategic Marketing Insights." Journal of Marketing 47(3): 9-20.

Malthus, T. R. (2001). "An Essay on the principle of population" from http://www.theacademiclibrary.com/login_cat.asp?filename=1843270056&libcode=EBP

Markusen, J., T. Rutherford and D. Tarr (2005). "Trade and Direct Investment in Producer Services and the Domestic Market for Expertise." Canadian Journal of Economics 38(3): 758-777.

Markusen, J. R. (1989). "Trade in Producer Services and in other Specialized Intermediate Inputs." American Economic Review 17(1): 85-95.

Marshall, A. (1920). Principles of economics: an introductory volume. London, Macmillan.

Martinez-Diaz, L. (2005). "Strategic Experts and Improvising Regulators: explaining the IASC's rise to global influence, 1973-2001." Journal of Business and Politics 7(3).

Marx, K. and Burns, E. (1969). Theories of surplus value, Part 1. London, Lawrence & Wishart.

Matthews, D. (2006). A history of auditing: the changing audit process in Britain from the nineteenth century to the present day. London, Routledge.

Mattli, W. and Buthe, T. (2005). "Accountability in Accounting? The Politics of Private Rule-Making in the Public Interest." Governance: an international journal of policy, administration and institutions 18(3): 399-429.

Mattoo, A., Rathindran, R. et al. (2006). "Measuring Services Trade Liberalization and its Impact on Economic Growth: an illustration." Journal of Economic Integration 21(1): 64-98.

McCulloch, R. (1988). International Competition in Services. The United States in the World Economy. M. Feldstein. Chicago, University of Chicago Press: 367-406.

McKenna, F. (2010). The Big 4 Pro-IFRS Campaign Has Some Flaws. Going Concern. 2010.

Meier, H. H., Alam, P. et al. (1996). "Lobbying by auditors and financial institutions on proposed accounting standards." Journal of Bank Cost & Management Accounting.

Melvin, J. R. (1989). "Trade in Producer Services: a Heckscher-Ohlin approach." Journal of Political Economy 97(5): 1180-1197.

Mill, J. S. (1909). Principles of Political Economy, Longmans, Green and Co.

Mill, J. S. (1973). A system of logic, ratiocinative and inductive: being a connected view of the principles of evidence and the methods of scientific investigation.

Ministry of Justice (2006). Small Scale Study II: managed migration and the labour market – the health sector, The Netherlands. The Hague, Ministry of Justice, Immigration and Naturalisation Service.

Mitzen, J. (2006). "Ontological Security in World Politics: state identity and the security dilemma." European Journal of International Relations: 341-370
vol. 12:.

Moran, M. (1998). Explaining the Rise of the Market in Health Care in Ranade, W. Markets and health care: a comparative analysis. New York, Addison Wesley Longman: 17-33.

Morgan, G. (2008). "Market Formation and Governance in International Financial Markets: the case of OTC derivatives." Human Relations 61(5): 637-660.

Mudambi, R. and Ricketts, M. J. (1998). The organisation of the firm: international business perspectives. London, Routledge.

Murphy, R. (2010). Who did the Big 4 fund before the general election? Tax Research UK.
R. Murphy. 2010.

Nicholson, W. and Stapleton, D. C. (1992). Microeconomic theory: basic principles and extensions. London, Dryden Press.

Nobes, C. and Parker, R. H. (2008). Comparative international accounting. Harlow, England; New York, Prentice Hall/Financial Times.

Nolke, A. and Perry, J. (2007). "The Power of Transnational Private Governance: financialization and the IASB." Business and Politics 9(3).

Nordas, H. K. and Kox, H. (2009). Quantifying Regulatory Barriers to Services Trade. OECD Trade Policy Working Paper No. 85. Paris, OECD.

Nursing and Midwifery Council (2005). Statistical Analysis of the Register: 1 April 2004 to 31 March 2005.

Nursing and Midwifery Council (2006). Statistical Analysis of the Register: 1 April 2005 to 31 March 2006.

Nursing and Midwifery Council (2007). Statistical Analysis of the Register: 1 April 2006 to 31 March 2007.

O'Farrell, P. N. and Wood, P. A. (1998). "Internationalisation by Business Service Firms: towards a new regionally based conceptual framework." Environment and Planning A: 109-128.

Oatley, T. (2010). International political economy: interests and institutions in the global economy. New York, London, Pearson/Longman.

OECD (2009). Code of Liberalisation of Capital Movements,
<http://www.oecd.org/dataoecd/10/62/39664826.pdf>.

OECD (2009). Code of Liberalisation of Current Invisible Operations,
<http://www.oecd.org/dataoecd/41/21/2030182.pdf>.

OECD. (2008). International Migration Outlook: annual report 2008 Edition. Paris.

OECD. (2010). "Indicators of Product Market Regulation Homepage." Retrieved 10/06/2010, 2010, from
http://www.oecd.org/document/1/0,3343,en_2649_34323_2367297_1_1_1_1,00.html.

Olson, M. (1982). The rise and decline of nations: economic growth, stagflation, and social rigidities. New Haven; London, Yale University Press.

Oulton, N. (2001). "Must the Growth Rate Decline? Baumol's Unbalanced Growth Revisited." Oxford Economic Papers 53: 605-627.

Pacolet, J. and Merckx, S. (2006). Managed Migration and the Labour Market – The Health Sector: the Belgian case: Report prepared for the European Migration Network, Small Scale Study II. Leuven, Katholieke Universiteit.

Parker, R. H. (2004). "Accountancy on the periphery: the profession in Exeter to 1939." Accounting, Business & Financial History 14(1): 53 - 89.

Parrinello, S. (2004). "The Service Economy Revisited." Structural Change and Economic Dynamics 15: 381-400.

Pelkmans, J. (1994). "The Significance of EC-1992." The ANNALS of the American Academy of Political and Social Science 531(1): 94-111.

Pelkmans, J. (2006). European integration: methods and economic analysis. Harlow, England; New York, Financial Times Prentice Hall.

Perry, J. and Nolke, A. (2005). "International Accounting Standard Setting: a network approach." Business and Politics 7(3): 1136-1136.

Porter, M. E. (1998). The Competitive Advantage of Nations. London, Collier Macmillan.

PricewaterhouseCoopers (2008). "Facts & Figures." Retrieved 01/10, 2008, from <http://www.pwc.com/extweb/aboutus.nsf/docid/934FB1060A6C7D8F85256E58007B06AD>.

Quack, S. (2007). "Legal Professionals and Transnational Law-Making: a case of distributed agency." Organization 14(5): 643-666.

Quinn, E. (2006). Managed Migration and the Labour Market – the Health Sector in Ireland. Department of Justice, Equality and Law Reform Ireland.

Rada, J. F. (1987). Information Technology and Services in Giarini, O., The Emerging Service Economy. Oxford, Pergamon.

Ramesh, R. (2005). Is Health Tourism the Future? The Guardian. London. 01/02/2005.

Ranade, W. (1998). Markets and health care: a comparative analysis. New York, Addison Wesley Longman.

Rauch, J., E. (1999). "Networks versus Markets in International Trade." Journal of International Economics 48(1): 7-35.

Regan, W., J. (1963). "The Service Revolution." Journal of Marketing 27(3): 57-62.

Research and Statistics Service (2006). EMN Small Scale Study II: managed migration and the labour market – the health sector, United Kingdom. London, Research, Development and Statistics Directorate of the Home Office, European Migration Network.

Richardson, J., B. (1987). A Sub-sectoral Approach to Services' Trade Theory in Giarini, O., The Emerging Service Economy. Oxford, Pergamon Press: 59-82.

Riddle, D. I. (1985). Service-led growth: the role of the service sector in world development. New York, Praeger.

Roberts, J. (1999). "The Internationalisation of Business Service Firms: a stages approach" The Service Industries Journal 19(4): 68-88.

Rogowski, R. (2000). Commerce and Coalitions: how trade affects domestic political alignments in Frieden, J. A. and Lake, D. A. (eds.). International political economy: perspectives on global power and wealth. Boston, Bedford/St. Martin's: 318-326.

Roy, M. (2009). Endowments, Power and Democracy: political economy of multilateral commitments on trade in services WTO Staff Working Paper ERSD 2009-07. Geneva, World Trade Organization.

Roy, M., J. Marchetti and H. Lim (2006). Services Liberalization in the New Generation of Preferential Trade Agreements (PTAs): How Much Further than the GATS? Staff Working Paper ERSD-2006-07. Geneva, World Trade Organisation.

Sacramento, I., V. M. Cunha de Almeida and M. S. Marques da Silva (2002). "The Internationalization Process of Services Firms: A Two-Case Study in Brazil." Latin American Business Review 3(2): 43-64.

Sampson, G. P. and Snape, R. H., (1985). "Identifying the Issues in Trade in Services." The World Economy 8(2): 171-182.

Sapir, A. (1991). The Structure of Services in Europe: a conceptual framework. CEPR Discussion Paper. London, Centre for Economic Policy Research. 498.

Sapir, A. and Lutz, E. (1981). Trade in Services: economic determinants and development related issues. World Bank Staff Working Paper. Washington DC, World Bank.

Sapir, A. and Winter, C. (1994). Services Trade in Greenaway, D. and Winters, L. A. Surveys in International Trade. Oxford, Blackwell: 273-302.

Sauve, P., L. S. Poulsen, L. Herman and E. M. Graham (2009). Preferential Services and Investment Liberalisation in Asia: Implications for Switzerland. Mimeo. Berne, SECO.

Sawani, A. (2009). "The Changing Accounting Environment: International Accounting Standards and US implementation." Journal of Finance and Accountancy 1.

Say, J. B. (1821). A treatise on political economy. London,.

Schonhardt-Bailey, C. (1996). Free Trade: the repeal of the Corn Laws. Bristol, Thoemmes Press.

Schutz, B. (2006). Managed Migration and the Labour Market – the Health Sector, Austrian Report EMN Small Scale Study II. Vienna, European Commission, International Organisation for Migration, Austrian Ministry of Interior.

Shelp, R. K. (1981). Beyond industrialization: ascendancy of the global service economy. New York, N.Y., Praeger.

Simmons, B. A. (2001). "The International Politics of Harmonization: the case of capital market regulation." International Organization 55(3): 589-620.

Simoens, S. and Hurst, J. (2006). The Supply of Physician Services in OECD Countries OECD Health Working Papers. Paris, OECD.

Singer, P. (1971). Forca de Trabalho e Emprego no Brasil: 1920-1969. Sao Paulo, CEBRAP.

Sismondi, J. C. L. S. d. and Hyse, R. (1991). New principles of political economy: of wealth in its relation to population. New Brunswick, New Jersey, U.S.A, Transaction Publishers.

Slaughter, A. M. (2004). A New World Order. Princeton, N. J., Princeton University Press.

Smith, A. (2001). "An Inquiry into the nature and causes of the wealth of nations" from http://www.theacademiclibrary.com/login_cat.asp?filename=1843270404&libcode=EBP.

Solomon, I. (2008). "Conversations with the Big 4 Accounting Firms' Chief Executives." Current Issues in Auditing 2(1): C13-C27.

Stanback, T. M. (1979). Understanding the service economy: employment, productivity, location. Baltimore, Johns Hopkins University Press.

Steinbrook, R. (2007). "The Age of Teleradiology." New England Journal of Medicine 357(1): 5-7.

Stern, R. M. and Hoekman, B. M. (1987). "Issues and Data Needs for GATS Negotiations on Services." The World Economy 10(1): 39-60.

Sullivan, A. and Sheffrin, S. M. (2003). Economics: principles in action. Upper Saddle River, New Jersey, Pearson Prentice Hall.

Sutton, T. G. (1984). "Lobbying of Accounting Standard-Setting Bodies in the U.K. and the U.S.A.: a Downsian analysis." Accounting, Organizations and Society 9(1): 81-95.

Suzuki, T. (2003). "The Epistemology of Macroeconomic Reality: the Keynesian revolution from an accounting point of view." Accounting, Organizations and Society 28(5): 471-517.

Swann, D., (ed.) (1992). The Single European market and beyond: a study of the wider implications of the Single European Act. London, Routledge.

Swedish EMN NCP (2006). *Managed Migration and the Labour Market – the Health Sector*, Sweden, Statistics Sweden.

Treatment Abroad (2006). "Treatment Abroad Price Watch 2006." Retrieved 15/01, 2009, from <http://www.treatmentabroad.com/about/pricewatch-survey-2006/>.

United Nations Conference on Trade and Development (2009). World Investment Report 2009, UN.

United Nations Conference on Trade and Development and World Bank (1994). Liberalizing international transactions in services: a handbook. New York, United Nations.

Van Welsum, D. (2003). "International Trade in Services: Issues and Concepts."

Vandermerwe, S. and Chadwick, M. (1989). "The Internationalisation of Services." The Service Industries Journal 9(1): 79-83.

Veron, N. (2007). *The Global Accounting Experiment*. Bruegel Blue Print Series. Brussels, Bruegel.

Vogel, S. K. (1996). Freer markets, more rules: regulatory reform in advanced industrial countries. Ithaca, NY, Cornell University Press.

Wachter, R. M. (2006). "International Teleradiology." North England Journal of Medicine 354(7): 662-663.

Waeger, P. (2007). Trade in Health Services: an analytical framework. Advanced Studies in International Economic Policy Research. Kiel, Kiel Institute for the World Economy: Working Paper no. 441.

Walsh, K. (2006). Trade in Services: Does Gravity Hold? A Gravity Model Approach to Estimating Barriers to Services Trade. I. f. I. I. Studies. Dublin, Institute for International Integration Studies, Trinity College Dublin. 183.

Walter, A. (2008). Adopting International Financial Standards: convergence or divergence in the global political economy. Workshop on Global Financial Integration Thirty Years On. Venice

White, H. C. (2002). Markets from networks: socioeconomic models of production. Princeton, [N.J.], Princeton Univ. Press.

Whitehouse, T. (2008). Experts: Take Advantage of IFRS Training. Compliance Week, Haymarket Media, Inc.

Wiener, A. and Diez, T. (2004). European integration theory. Oxford; New York, Oxford University Press.

World Trade Organisation (1996, 28/04/2008). "The General Agreement on Trade in Services: an introduction." from www.wto.org/english/tratop_e/serv_e/gsintr_e.doc.

World Trade Organisation (1998). Accountancy Services: background note by the Secretariat. Council for Trade in Services, World Trade Organisation. S/C/W/73.

World Trade Organisation (1998). Health and Services: background note by the Secretariat. Council for Trade in Services, World Trade Organisation. S/C/W/50.

World Trade Organisation (2000). Communication from the United States: accounting services. Special Session. Council for Trade in Services. Geneva, World Trade Organisation, S/CSS/W/20.

World Trade Organisation (2004). United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services: report of the panel. WT/DS285/R. Geneva, WTO.

World Trade Organisation (2009). China-Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products: report of the panel. WT/DS363/R. Geneva, WTO.

WTO Secretariat (2001). Guide to the GATS: an overview of issues for further liberalization of trade in services. London; Boston, Kluwer Law International: World Trade Organization.

Wunsch-Vincent, S. (2006). The WTO, the Internet and Digital Products. Oxford, Hart Publishing.

Youngman, I. (2009). "Medical Tourism Statistics: why McKinsey has got it wrong." International Medical Travel Journal.

Zeff, S. A. (2003). "How the U.S. accounting profession got where it is today: part I." Accounting Horizons 17(3).

Zeff, S. A. (2003). "How the U.S. accounting profession got where it is today: part II." Accounting Horizons 17(4): 267-286.

Zeff, S. A. (2008). IFRS Developments in the USA and EU, and Some Implications for Australia. Paper prepared for the Ken Spencer Memorial Lecture, delivered on 28 May 2008 in Sydney, Financial Reporting Council.

Zeithaml, V. A., Parasuraman, A. et al. (1985). "Problems and Strategies in Services Marketing." Journal of Marketing 49(2): 33-46.

Zukin, S. and DiMaggio, P. (1990). Structures of capital: the social organization of the economy. Cambridge, Cambridge University Press.

Zund, A. (1983). Endeavours Towards the Harmonization of Standards of Accounting and Reporting in the OECD and UNO – Critical Appraisal in Bromwich, M. and Hopwood, A. eds.). Accounting standards setting: an international perspective. London, Pitman: 106-120.