6 Services

6.1 INTRODUCTION

Developed economies around the world have become increasingly service oriented, the EU being no exception. Services account for more than two-thirds of employment and GDP in the EU. In most other industrial countries services now typically account for around 70 per cent of output. Services also play an important intermediary role that is not easily reflected in statistics. Well functioning financial, transportation and distribution systems are critical for the smooth running of the economy.

The role of services in production is, however, not reflected in its share of world trade. Services account for no more than one-fifth of total cross-border trade, though this does not include the substantial volume of trade done through the other modes of supply – in particular through commercial establishments in the export market. All services are in principle internationally tradable. The non-tradability of a significant number of services has been mainly due to two reasons. First, the very nature of services and technical constraints make it difficult to disconnect production from consumption and to supply customers at a distance. In recent years, however, technological advances have enabled consumption of certain services (for example, online banking) without having to be physically present. Second, the low volume of trade in services has been policy induced; there have traditionally been significant barriers to service trade in many countries.

Within the EU core services such as telecommunications, air transport and to a lesser extent financial services have long been shielded from both internal and external competition. In recent years, the 1985 Single Market Programme in Services and the 1990s extensions to it such as the 1997 Single Market Action Plan (SMP)

have sought to liberalise intra-EU services trade. Liberalisation of services is also taking place outside the EU with the evolution of the General Agreement on Trade in Services (GATS). In spite of these measures, the expansion of services activities across national borders in Europe continues to be hampered by a wide range of barriers.

Section 6.2 of this chapter considers the structural shift from a manufacturing to a services economy in developed countries. It discusses the significance of services for output and employment in the EU and other industrial nations. Section 6.3 reviews the statistics on trade in services. It particularly focuses on the vital role of foreign direct investment in international trade in services. Sections 6.4 and 6.6 review and quantify barriers to trade in services. The main empirical findings concerning the welfare effects of services liberalisation are outlined in section 6.7. It considers the implications of further liberalisation and how it might impact on the EU economy.

6.2   THE ROLE OF THE SERVICE SECTOR

Since the 1980s the importance of the services sector for production and employment in most developed countries has increased substantially (Table 6.1). In all countries, the services sector accounts for more than 60 per cent of output. The shift towards the services economy is most pronounced in the US and the UK with services accounting for over three-quarters of employment and total value added.

Services, which are less capital intensive than manufacturing and benefit more from increased demand as incomes rise, hold the key to more jobs in developed economies. Many traditional services such as distribution, construction, education, health and social services are particularly labour intensive. At the same time, knowledge-intensive services are increasingly important for overall job creation, both because they are growing rapidly and because they play a role in the upgrading of workers' skills. At present, regulatory barriers, taxes and minimum wages impede the development of these types of services in a number of countries, particularly in continental European countries.

Job creation in services is exceeding overall job growth in the

Table 6.1: Share of services in total value added at current prices and employment (%)

Country	Share of total value added			Share of total employment		
	1989	1994	1999	1989	1994	1999
Austria	62.2	65.0	64.9	52.7	56.0	59.2
Belgium	63.9	68.6	70.8	70.4	72.0	74.2
Denmark	68.2	71.2	71.9	69.2	71.4	73.0
Finland	57.9	62.8	63.3	60.5	64.7	65.6
France	65.9	69.5	72.0	64.8	68.7	70.6
Germany	60.7	64.4	67.7	59.2	63.6	67.5
Greece	–	66.8	68.5	–	55.9	57.6
Ireland	55.4	55.3	60.3	–	61.5	63.2
Italy	61.5	65.3	67.3	60.1	62.7	64.9
Luxembourg	–	73.4	78.4	–	69.9	73.6
The Netherlands	63.8	67.2	70.4	67.9	70.5	72.9
Portugal	–	63.6	65.4	–	57.3	58.1
Spain	–	64.4	65.7	–	63.0	62.6
Sweden	–	67.5	68.8	–	73.2	73.1
United Kingdom	61.8	66.8	70.3	68.7	73.3	75.3
United States	71.1	73.5	75.4	73.1	75.2	76.3
Canada	62.9	65.7	64.7	70.6	74.0	74.1
Mexico	62.9	67.2	66.3	52.4	54.3	53.9

Source: OECD (2002b)

OECD area. By 1997, about 64 per cent of OECD civilian workers (which includes government workers, but excludes armed forces personnel) were engaged in activities related to services; in nine countries, the share exceeded 70 per cent. The overall level is up from about 55 per cent in 1980. The share is expected to rise over time as fast-growing knowledge-based services expand. While the largest proportion of persons engaged in service activities in 1997 were employed in community, social and personal services (45 per cent), implicit growth between 1980 and 1997 was strongest in the finance, insurance, real estate and business service sector (4 per cent per year), which increased its overall share by 4 percentage points, to about 15 per cent. Growth in community, social and personal services was also relatively strong (2.4 per cent), followed by distribution (1.9 per cent) and transport and communication (1.3 per cent). According to the OECD (2002c) some 20 million jobs (net) were created during 1993–99 in the US, close to 90 per cent of which were in service-related areas (including public utilities and government). Since 1980 the service sector in the UK has generated a net increase of over 3.75 million jobs (DTI, 2000), more than offsetting a continued sharp contraction in manufacturing jobs and taking the economy back to full employment.

Table 6.2 provides a summary of earnings differentials across services sectors relative to manufacturing. Average earnings in the service sector are higher or around the same as in the manufacturing sectors in most OECD countries (based on data for countries with complete coverage). The main exceptions are the US and Australia. Whereas earnings for full-time workers are substantially higher in the service sector in Australia, relative earnings for American workers in services industries are substantially lower.

6.3   TRADE IN SERVICES

The intangibility of services makes trade in services difficult to define. Although some services may be defined through their physical presence, for example, transport or hotel services, others such as education are conceptually more abstract. The need in many services for proximity between the consumer and the producer implies that one of them must move to make an international transaction possible. Since the conventional definition of trade – where a prod-

Table 6.2: Ratio of average earnings in each sector to average earnings in manufacturing

	Total	Producer services	Service sector Distributive services	Personal services	Social services
UK[*]	n.a.	1.15	0.85	n.a.	n.a.
Australia	1.32	1.42	1.12	0.94	1.43
Canada	0.98	1.04	0.89	0.71	1.17
France	1.02	1.22	0.95	0.73	1.03
Netherlands	0.99	1.02	0.90	0.84	1.11
United States	0.91	1.11	0.83	0.61	1.00

Notes:

* Based on partial coverage of sectors

Data: 1999 Netherlands and US, 1998 for others

Source: OECD (2001c)

uct crosses the frontier and is registered at the border – would miss out on such transactions in services, it is now customary to define trade in services – following the General Agreement of Trade in Services (GATS) – by four modes of supply:

1. Cross-border supply from the territory of one country into that of another (for example, airlines).

2. Consumption abroad, in which the service is supplied in the territory of one country to the consumer of another (for example, tourism).

3. Supply though commercial presence in which the service supplier is legally established in the export market (for example, retail banking).

4. Supply through the movement of natural persons, meaning the temporary presence of individuals without legal personality to supply services in a country's market (for example, migrant workers).

Measurement of trade in services is inherently more difficult than measurement of trade in goods and as a result statistics on international trade in services are incomplete. No country has ever published comprehensive data of services trade covering all four modes. However, it is known that cross-border supply (mode 1) and commercial presence (mode 3) are the economically most important modes. The main source of data to capture a part of service trade is through the balance of payments statistics. These record cross-border trade, consumption abroad and to some extent trade through movement of natural persons (even then the BOP-based data cannot be clearly broken down into modes 1, 2 and 4, and nor do they provide a complete picture of mode 4). However, they do not capture services trade under mode 3, the trade of services though commercial presence. This is because a subsidiary that establishes commercial presence is a resident of the country in which it is set up: accordingly its sales to the local population are transactions between residents and so escape BOP recording. At the same time, such sales are considered trade in services under the GATS definition.[1] The only data that are readily available on mode 3 trade are those published by the US Department of Commerce on sales of foreign affiliates in the US and the sales of US affiliates abroad. It is known that a large amount of trade in services takes place via this mode and the available evidence suggests that commercial presence has been the most dynamic model of service supply in recent years. US statistics show that indirect exports of services between Europe and the US via foreign subsidiaries are twice as high as the level of cross-border trade in services between the two regions. Sales of services in Europe by US-owned affiliates were $233.6 billion in 2001, while cross-border exports of services were $104.9 billion in the same year (BEA, 2004). Correspondingly, within the EU FDI in services has grown much faster than trade in services (Figure 6.1).

The growing importance of FDI in services trade has been confirmed by other studies. The World Bank estimates the total value of world exports of services amounted to US$3.5 trillion

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[1]A statistical domain known as Foreign Affiliates Trade in Services (FATS) is being developed by the UN Statistical Commission to measure international trade in services via mode 3. It would measure sales of services by affiliates established in foreign countries to local persons and so correspond to the GATS notion of service trade through commercial presence.
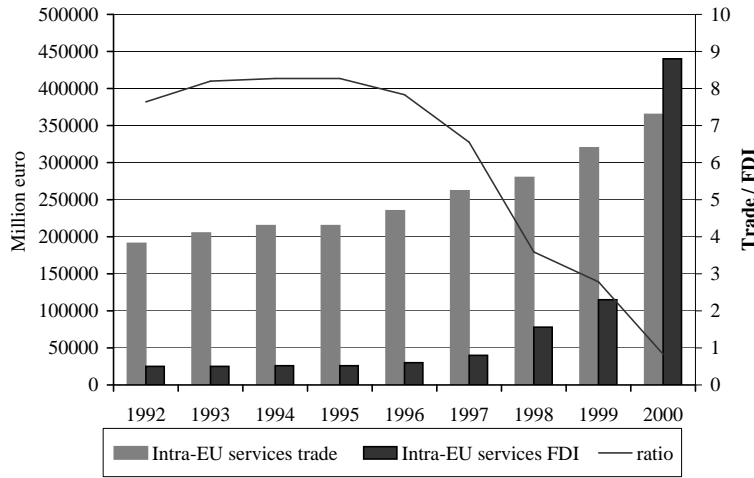
Figure 6.1: Comparative evolution of intra-EU trade and FDI in services, 1992–2000

in 2001 (Table 6.3). Twenty-eight per cent of services trade was via mode 1 and 14 per cent via mode 2, with mode 3 (commercial presence such as through FDI) accounting for the lion's share with 56 per cent (Figure 6.2). According to Karsenty (2000), in 1997 cross-border supply and commercial presence each accounted for approximately 40 per cent of total world services trade (Table 6.3).

It is clear, therefore, that FDI is an important aspect of international trade in services. For many service industries, a subsidiary abroad is indispensable if a market is to be developed. Banks, insurance companies and retailers rely on direct contact with their customers. Important contributions to services FDI are being made in retailing, banking, business services and telecommunications, and, to a limited extent, in hotels and restaurants. A major reason for the expansion of international investment in services is that there is relatively more liberalisation and deregulation of investment rules than there is deregulation of barriers to cross-border trade in services.

Table 6.3: World trade in services by modes of supply (billion US$)

	Category	1997	% in total	2001	% in total
Mode 1	Commercial services	890	41.0	1000	28.2
Mode 2	Travel	430	19.8	500	14.1
Mode 3	Commercial presence	820	37.8	2000	56.3
Mode 4	Movement of natural persons	30	1.3	50	1.4
Total		2170	100	3550	100

Sources: Karsenty (2000), World Bank (2003)
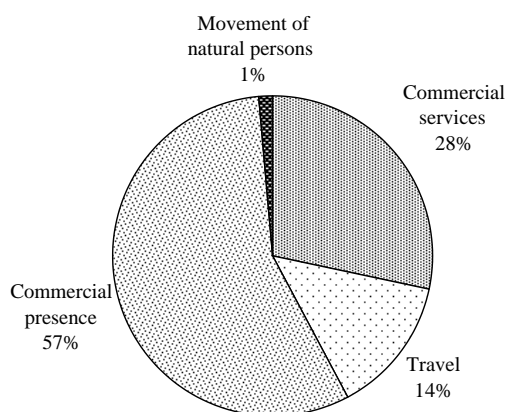
Source: Table 6.3

Figure 6.2: Value of world trade in services by mode (%) in 2001

Conventionally trade in services, which is measured excluding trade via FDI, is dominated by developed countries. OECD countries account for approximately 80 per cent of world service exports. Further intra-OECD exports account for some 80 per cent of total OECD exports (Table 6.4). The EU is the largest importer of services (39 per cent) followed by NAFTA (17 per cent). Intra-EU trade largely accounts for this dominant position of the EU in the OECD compared to other OECD regions. The US is the world's largest exporter of commercial services. US commercial services exports in 2000 were $279 billion – more than double their level 10 years ago. In addition, sales of services by US-owned affiliates overseas were $338 billion in 1999.

The quality of statistics for total trade in services is variable between pairs of countries and discrepancies persist: for example, US service exports to the EU in 2000 as recorded by US statistics were $93 billion while EU imports of services from the US were $109 billion, as recorded by EU statistics. Japan's service exports to the EU were $11.6 billion while EU imports from Japan were $9.4 billion. US exports to Japan were $35 billion while Japan's imports from the US were reported as $38 billion. The figures must be interpreted with this in mind.
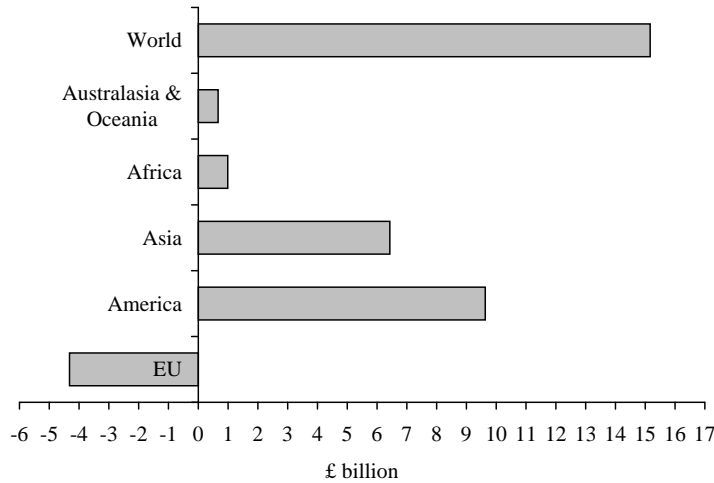
UK Trade in Services

In 2001 the UK accounted for almost 8 per cent of global exports and 6 per cent of the world's imports, making it the fourth largest importer of services after the USA, Germany and Japan (ONS, 2003). The overall value of UK exports more than doubled between 1991 and 2001, from just over £32 billion to just under £78 billion. In the same period the surplus has increased from £4.1 billion in 1991 to £11.3 billion in 2001.

In 2001 the UK had a surplus with all continents except Europe (Figure 6.3) and in all service categories except travel and transport, communications and government services. The deficit with the EU is driven by a combined travel and transportation deficit of £13 billion, which is partly offset by significant surpluses for financial and other business services. The UK's deficit with Spain and Greece continued to grow, due to the rise in the number of UK visitors to these countries. However, the deficit with France decreased from £2.6 billion to £2.2 billion. The UK recorded a

Table 6.4: Estimated patterns of world and OECD trade in services, % of total world exports, 2000

Exporting region	World	OECD Total	NAFTA	EU	Other Europe	America	A&O	Europe
World	100.0	75.8	21.4	39.9	4.2	27.0	24.7	45.3
OECD	77.5	61.7	16.5	34.0	4.2	20.8	14.4	40.2
NAFTA	22.5	15.9	4.9	6.9	0.6	7.8	6.2	8.0
EU	41.4	36.2	8.2	22.6	3.3	9.1	4.3	26.8
Other Europe	5.8	4.4	0.8	3.3	0.2	0.9	0.5	3.9
America	26.3	19.4	7.0	7.8	0.6	10.9	6.9	7.8
Australasia and Oceania (A&O)	22.9	12.4	4.8	3.8	0.1	5.4	12.5	4.1

Destination regions

Source: IMF (2002b)

Figure 6.3: UK trade balance in services, 2002

surplus of £4.8 billion with the USA in 2001 – the largest surplus for any country

The UK's single largest trading partner for both exports and imports of services, accounting for over 22 per cent of total exports and 19 per cent of total imports in 2001, is the US. The UK recorded a surplus of £4.8 billion with the US in 2001, driven mainly by insurance, financial and other business services. In comparison, the next most important export markets, Germany and France, together account for only 15 per cent of total trade in service exports.

6.4   BARRIERS TO SERVICE TRADE

Throughout the post-war period, trade in services was largely unaffected by the process of liberalisation taking place in merchandise trade. Even in industrialised countries that have relatively liberal merchandise trade regimes, barriers to trade in services and movements of natural persons remain restrictive, partly due to a possibility of market failures in some industries, but mainly as a

result of the domestic influence of special interest groups sheltered from foreign competitive pressures. Traditionally service markets such as transport and telecommunications have been reserved for the monopoly supplier or made subject to strict regulations and border control. Unlike trade in goods, governments usually apply restrictions on the sale of services of foreign origin inside their territories rather than at their borders.

Because of the nature of trade in services, measures restricting trade in services differ in important ways from those in goods. Firstly, border taxes equivalent to tariffs are difficult to impose on services imports because they are often not delivered across borders. Secondly, services trade can be greatly affected by numerous internal policies that discriminate against foreign producers. These include measures that directly provide a cost advantage to domestic producers, such as subsidies, measures that impose a cost or create a competitive disadvantage for foreign producers (for example, internal direct or indirect tax instruments) and other measures which wholly or partially block market access to foreign suppliers. Finally, because of the simultaneous nature of production and consumption of many services, restrictive measures that affect the movement of factors (labour or capital) must also be considered as part of the impediments to trade in services.

Hoekman and Braga (1997) identify the following types of barriers to services trade: (i) quotas, local content, and prohibitions; (ii) price-based instruments; (iii) standards, licensing, and procurement; and (iv) discriminatory access to distribution networks.

Quantitative restrictions (QR) affect all four modes of services trade. On cross-border trade, they are most evident in the transport sectors. Foreign providers are either completely shut out of certain segments, such as cabotage (domestic flights within the boundaries of one country by an air carrier of another country), or only given limited access. In many countries, there are prohibitions directed against foreign providers of services such as domestic transportation, basic telecommunications, and legal, insurance, education, surveying, and investment advising services. On consumption abroad, quotas are sometimes implemented through foreign exchange restrictions whereby the ability of citizens to consume foreign services, such as tourism and education, is curtailed. On commercial presence, quotas are imposed on the number of foreign suppliers in the domestic market or via restrictions on for-

eign equity ownership in individual enterprises. Finally, quotas are most stringent on the movement of service-providing personnel and affect trade not only in professional services, but also in a variety of labour-intensive services such as construction.

Price-based barriers may take the form of visa fees, discriminatory airline landing fees, and port taxes. Tariffs can be significant barriers to trade in goods that embody services (for example, films, television programmes, computer software) or goods that are used in producing services (for example, computers, telecommunications equipment, advertising material). Further, many service sectors are subject to government sanctioned or monitored price controls; examples include air transportation, financial services, and telecommunications. Government subsidies are commonly used in service sectors such as construction, communications, and road and rail transport.

Licensing requirements are imposed on foreign providers of professional and business services which can discourage or prohibit foreign participation in the provision of services. Environmental standards may also affect service providers, particularly in transportation and tourism. Government procurement policies are often designed to favour domestic over foreign providers of services by means of preference margins and outright prohibitions. Lastly, in many countries the foreign providers have discriminatory or limited access to distribution channels and communications systems.

Services Barriers within the EU and Progress in Deregulation

In spite of the Single Market Programme, the EU is highly fragmented by national service barriers. We now proceed to detail these by sectors.

Financial services

Adopted in June 1999 in Cologne, the Financial Services Action Plan (FSAP) aims to develop a single, integrated EU capital market by 2005. It aims to create a single wholesale financial market to allow companies to raise capital on an EU-wide basis, including improvements in the EU's financial reporting structure; to complete a single EU retail market, ensuring consumer choice while maintaining consumer confidence and protection; and to underpin

all this through state-of-the-art prudential rules and supervision.

According to a study by Notaro (2002) a single market for securities in the EU and improved market access could result in an increase in EU-wide GDP of 1.1 per cent in 2002 prices over a decade. Total employment could increase by 0.5 per cent. Reforms since 1992 have led to a fall in credit card fees and to a narrowing of the range of price divergence by about 30 per cent. And in securities, common rules against insider trading and a European passport for investment firms offering their services to investors in other Member States were adopted.

Significant work remains to be completed, especially on the key capital market directives. Further, the need to develop and administer the regulations successfully in each EU Member State will take an enormous effort. This was recognized in the Gyllenhammar Report (2002), which notes that 'Particularly for retail financial services, national borders still constitute a considerable de facto barrier. Even in the Euro age it is extremely rare for private individuals to compare domestic offers of, for example, life insurance or mortgages with offers from suppliers in other countries of the single currency area.'

Professional services

In the area of professional services, there are significant variations in EU Member State requirements for foreign lawyers and accountants intending to practice in the EU. While many of these are not explicit barriers, disparities among EU Member State requirements complicate access to the European market for foreign lawyers and accountants.

Legal services, and accounting and auditing services

Among other things, there are nationality requirements, bans on majority holdings, a requirement to pass local professional examinations and companies must have a registered office in one of the EU member states.

Energy services

The Barcelona European Council in Spring 2002 agreed that all non-household consumers should have freedom of choice of gas and electricity supplier by 2004 (that is, 60 per cent of the market is to

be opened up). Energy ministers recently also reached a political agreement that will lead to full market opening by July 2007, that is, for household users as well. It should be noted that electricity customers in the UK pay around 19 per cent less than in Italy and 11 per cent less than in France (Electricity Association, 2003).

Postal services

The prevalence of postal monopolies in many EU countries restricts market access and subjects their competitors to unequal conditions of competition. In 2001, the European Commission ruled against Deutsche Post (DP) in two complaints brought by competitors. The first decision, in March, found DP to have abused its dominant market position by granting fidelity rebates and engaging in predatory pricing in the business parcel services market. In July 2001, the Commission ruled again against DP, confirming that the company had blocked the delivery of mailings from within the EU. In October 2001, EU Member States agreed to open additional postal services to competition beginning in 2003 including all outgoing cross-border mail.

Air transport

Some of the most striking changes in the EU services sector have occurred in air transport. In the past, the industry was tightly regulated on the basis of bilateral agreements between Member States. But three successive packages of liberalising measures – adopted during the 1990s – have resulted in equal rights of access to all the Community's markets for all European-owned airlines.

These reforms have led to more competition. The number of routes linking Member States has risen by 46 per cent since 1992 – giving passengers a wider choice of destinations and carriers. The number of routes where more than two carriers are competing rose from 61 in 1992 to 100 in 2001. On such routes, business, economy and promotional fares were around 10 per cent, 17 per cent and 24 per cent lower (EC, 2002c).

Short-haul pricing by established airlines is now influenced by the need to compete with low-cost carriers such as Ryanair. In recent years Ryanair has opened 45 scheduled routes across 11 countries, offering fares that are at times less than 50 per cent of the lowest fares offered by the incumbent airlines. With this kind of competition, established carriers had to restructure their fare

strategies. For example, British Airways has lifted many of the restrictions on its cheaper fares, such as the requirement to spend a Saturday night at the destination.

Telecommunications

Since the late 1980s, there has been a general trend towards increased competition and openness in European telecommunications. Liberalisation and harmonisation, however, have been uneven across the EU. In most markets significant problems remain with the provisioning and pricing of unbundled local loops, line sharing, co-location and the provision of leased lines. The presence of government ownership in some EU Member States' incumbent telecommunications operators also has the potential to raise problems for new entrants. Enforcement of existing legislation by national regulatory authorities appears hampered by unnecessarily lengthy and cumbersome procedures in France, Italy, Austria and Portugal. The European Commission also found that incumbents in Germany, Greece, Spain, Italy, Ireland, Austria, Finland and Sweden have slowed the arrival of competition by systematically appealing against their national regulators' decisions despite the fact that in most cases the appeals have not been successful.

According to the EC (2003b), the long distance prices charged by incumbent operators have dropped 11 per cent since 2000, principally as a result of increased competition. The market share held by incumbents has fallen 10 per cent for local calls, 20 per cent for long distance calls and 30 per cent for international calls since liberalisation began in 1998. In twelve euro member states consumers can now choose between more than five operators for long distance and international calls. Prices charged by the old national monopolies for national calls have been reduced in nominal terms by around 50 per cent on average since liberalisation, and those for international calls by around 40 per cent. New operators in many Member States offer even lower prices, even for local calls: new entrant tariffs for national calls are up to 56 per cent lower and for international calls up to 65 per cent lower in some countries. As a result, the cost of a basket of national calls – including fixed charges and subscriptions – has fallen for both business and residential users since 1996. Business users pay, on average, 30 per cent less for the same service, while residential users pay 16 per cent less. The average level of internet penetration in EU house-

holds was around 40 per cent in June 2002 – up from 18 per cent in March 2000. Furthermore, high-speed internet access is progressively gaining ground, and in October 2002 there were around 11 million retail broadband customers in the EU. In spite of these positive results, incumbent operators remain dominant in many EU national markets.

Problems with the EU's Liberalisation Approach

The approach to the liberalisation of services markets in the EU seems against the spirit of competition. The thrust of the approach has been to negotiate common regulative standards for services. The focus has thus been placed on regulatory convergence between the Member States rather than on competition. The motive behind the choice of regulatory convergence has essentially been political since each Member State could then hope to insert parts of its own regulations into the common EU regulations (Messerlin, 2001).

In addition, the sectoral approach to liberalisation implies that many services, such as tourism and medical services, have as yet been left untouched. Even within the sectors where the Single Market Programme in Services (SMPS) has been implemented many restrictive measures have survived and substantial state aid or subsidies to service firms continue. For example, in air transport, preferential access to airport slots has restricted competition on existing routes as well as developments of new ones. Moreover the Member States and incumbent firms have adopted protectionist measures against new entrants, often relying on ambiguities in the EU directives (Amatori, 1999). As a result, protection of EU services is unlikely to have declined substantially since the beginning of liberalisation of services trade.

In December 2000 the EU announced a two-stage strategy for removing the remaining barriers to trade in services. In the first stage, during 2001 the EU undertook, for the first time since 1962, a review of existing directives as well as regulatory and administrative practices in member countries creating barriers to intra-EU trade in services. Based on the analysis completed in the year 2001, three types of initiatives were planned for 2002 – removal of barriers by direct application of treaty principles, actions of a non-legislative nature and actions that make use of targeted harmonisation to remove barriers. In spite of these measures, the

SMPS will remain incomplete in the near future. The EU still has to adopt some legislative proposals affecting trade in services from the 1985 white paper, particularly in the fields of company law, corporate taxation, and in VAT. There is an even greater delay in the translation of internal market rules relating to services into national laws. In a recent survey by the EU, half of the companies providing business services regarded the absence of transparency in national regulations as one of the main barriers restricting EU trade. The recent Commission report on the state of the internal market for services (2002b) has provided a comprehensive inventory of remaining barriers to cross-border activity in services sectors.

Thus, in sum, the progress of the SMPS is well short of the objective set out in the SMPS that the provision of services between Member States should be as easy as within a Member State.

Meanwhile, the worldwide liberalisation in services activities via the GATS has been a slow process. Although the GATS established a structure and framework of rules for global trade liberalisation in services, little actual liberalisation was achieved, with many countries' commitments often representing the status quo or in some cases less than the status quo.

Unless current obstacles to cross-border activities are removed, European firms and consumers will not be able to benefit from the competitiveness advantages offered by new technologies and the knowledge-based economy as concluded by Ark et al. (2003) who investigated the reasons for the significant difference in the economic performance of the US and EU economies. The difference in performance of the services sectors using information and communications technologies (ICT) is one of the main reasons behind the increasing competitiveness gap between the US and EU economies.

Figure 6.4 shows productivity growth in sectors that produce ICT technologies, sectors that use ICT technologies and non-ICT related sectors. The US ICT-producing manufacturing sector outperformed its European competitor whereas the European ICT-producing services sector outperformed its American counterpart. These sectors account for a very small share of their respective economies though, and therefore, they have a limited influence on the different overall performance of the US and EU economies. In contrast, ICT-using services sectors contribute to a large portion

Productivity Growth (%), left hand scale
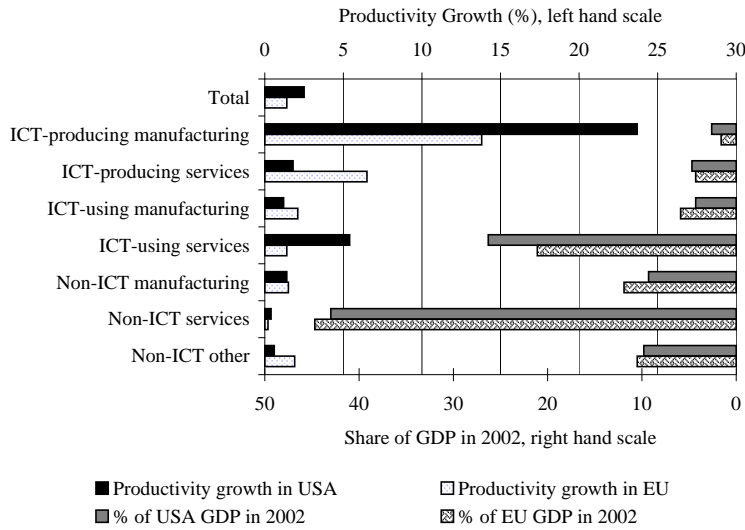
Notes:
EU includes Austria, Denmark, Finland, France, Germany, Ireland, Italy,
Netherlands, Spain, Sweden and the United Kingdom, which represents over
90% of EU GDP.
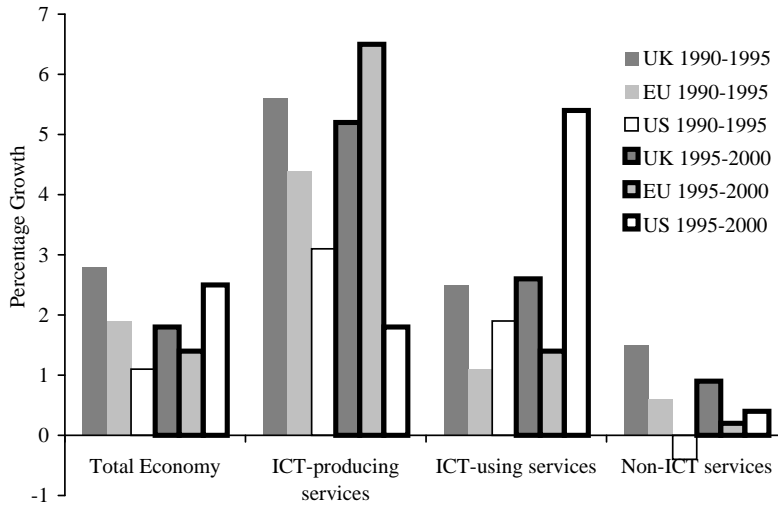Productivity is defined as value added per person employed.

Source: Ark et al. (2003)

Figure 6.4: Productivity growth by sector and sectoral share of
GDP in the US and the EU in 1995–2000

of both the European and US economies, and the large difference
in the productivity performance of these sectors in the US and
Europe explains to a large extent the difference in the overall eco-
nomic performance of the American and European economies.

Figure 6.5 shows that ICT-using services subsectors exhibit very
different labour productivity growth rates. Securities, wholesale
and retail distribution experienced remarkable growth rates in the
US in the second half of the past decade while productivity growth
was much more modest in Europe in those sectors.

Insufficient integration in services sectors may have been one of
the reasons (besides others such as labour market rigidities or plan-
ning regulations) delaying the diffusion of ICT and therefore pre-
venting European firms from benefiting from the large productiv-
ity increases experienced by their US competitors in recent years.

Figure 6.5: Labour productivity growth in ICT/non-ICT service sectors 1990–1995 and 1995–2000

This failure also holds back progress in other sectors using services, notably manufacturing.

6.5   RECENT EU PROPOSALS FOR THE INTERNAL MARKET IN SERVICES

In a departure from the previous attempts at liberalisation of EU service sectors as outlined in the forgoing section, the European Commission has launched a new proposal to reduce regulation-based impediments to intra-EU trade in services in recent months. In March 2004, the European Commission proposed a directive which aims to boost the EU's internal market in services by reducing impediments to trade and investment within the member states. The proposal aims to reduce differences in regulation across the EU by applying the country of origin principle, by enforcing the single point of contact, and by the elimination of discriminatory elements against service providers from other member states.

The directive does not cover extra-EU trade. Changes in extra-EU barriers would take place as per the GATS negotiations. The proposal amounts to a creation of an area similar to a free trade zone, which would reduce and harmonise service trade barriers between the members without a common external barrier with respect to non members. The proposed EU directive concentrates on construction, distribution and business services, and excludes finance and insurance, and transport. The directive is likely to cover over 60 per cent of the UK service sector, which is equivalent to 43 per cent of the UK economy, or around 400 billion of gross value added in 2002 (DTI, 2004).

The idea behind the latest proposal is that it is the heterogeneity in regulation rather than its level that adversely affects service trade between the member states. Once having incurred fixed costs of complying with regulations in one country, a common regulatory structure would allow firms to reap economies of scale by expanding their market access to other EU member states without any incremental cost.

The main proposals in the directive include:

- The establishment of EU subsidiaries in any member state to be facilitated by introducing a single point of contact in one country. A single point of contact will be the place where a firm can fulfil all their EU-wide administrative and regulatory obligations.

- The application of the country of origin principle, making a service provider subject only to the requirements of the country in which it is established.

- Aim to eliminate unnecessary and discriminatory regulation such as nationality and residence restrictions.

- Mutual assistance between national authorities with a view to effective supervision of service activities.

- Removal of specified prohibited requirements.

- A 'horizontal' approach to liberalisation which implies the same principles as applied to a large part of the EU service sector.

In addition, member States must also assess requirements imposed on access to, and exercise of, service activities and report to the commission on the results, specifying which requirements Member States plan to retain and their justifications for doing so. The proposed rules in the Directive are intended to complement other European Community law that covers services. The proposal differs from traditional free trade zones in one significant manner. Current proposals do not abolish all barriers to service trade between the member states, but aim to equalise the level of barriers across the board. In practice, it is likely that the EU-wide regulative barriers would be somewhere between the most liberal (currently the UK) and the most restrictive regimes currently in place with each member state continuing with its own extra-EU trade barriers against the rest of the world. The effect is therefore like a tariff cut on trade between EU members while maintaining existing country tariffs unchanged on external trade; the internal tariff would be standardised somewhere between the highest and the lowest external tariffs of the member countries.

The following diagrams (Figures 6.6–6.8) attempt to illustrate how such type of deregulation can benefit EU consumers while reducing EU production (presumably against producer lobbying) compared to the existing situation. Figure 6.6 shows the present situation in which the UK is subject to world prices while other EU countries have protective regimes. Under the deregulation proposal (Figure 6.7) prices are driven down in these EU countries – part of the mechanism being entry by UK firms into EU markets at the new price $P_W (1 + t_{EU})$. It shows two EU countries, A (like the UK, with no external barriers) and B (with high external barriers, like rest of EU countries). The original situation is shown by the thick lines. In A the price is low and there are net exports. In B trade is balanced and the price is high. After the proposed deregulation the internal EU tariff in B is lowered, allowing A firms to export to B at the price $P_W (1 + t_{EU})$. Presumably A firms would divert their output to the B economy to undercut firms supplying at $P_W (1 + t_B)$; B firms' output would be cut back and A firms would supply imports equal to the difference between B's demand and those B-firms' supplies. Notice however that A firms would in the end enjoy no difference in prices, as world prices would continue to prevail in A. Hence there would be no change in A's welfare; its net exports, supply and demand would be the same. The only

change would be that now it would divert enough output to B to satisfy its import demand and drive its prices down; this diversion of supply would be made up as necessary by extra imports. Therefore the only effect would be on prices in B; these would be lowered and B citizens' welfare would be increased. Notice that the directive in effect amounts to a lowering of the external tariff to the same level as the new within-EU tariff; this is because competition within the EU will force prices in the protected EU countries down to the internally-protected level.
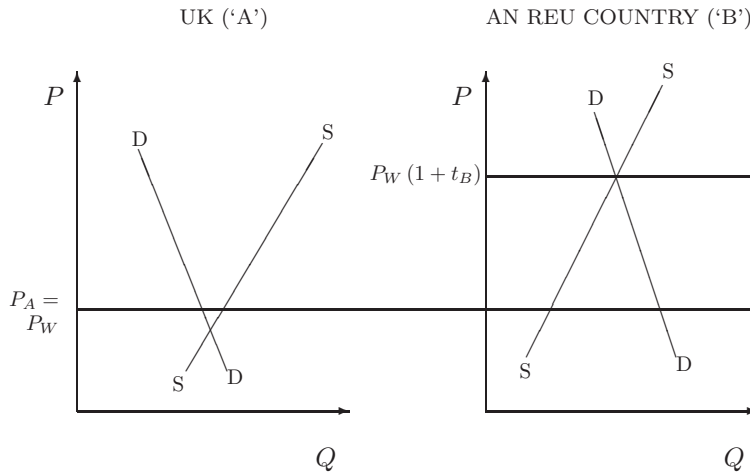
UK ('A')   AN REU COUNTRY ('B')

Figure 6.6: Services: the current situation

Other EU countries' interests in avoiding a customs union in services and instead proposing deregulation can be further illustrated by the following diagram. Figure 6.8 shows how under a customs union with the same rate t_{EU} EU consumers obtain the same price but now they also pay a transfer to UK firms (previously they paid this to their own governments who used this revenue to reduce other taxes). It is obvious that they are better off with deregulation than with a customs union. The UK might prefer a customs union but why should the rest of EU provide one?

The only possible qualification to the recent deregulation proposal lies in the 'harmonisation' of regulations proposed. The diagram assumes that this is mere standardisation of unnecessarily different and complex regulative regimes, as perhaps is intended

UK ('A')   AN REU COUNTRY ('B')

P P

D   S   D   S

$P_W(1+t_B)$

$P_W(1+t_{EU})$

$P_A = P_W$

S   D   S   D

Q Q
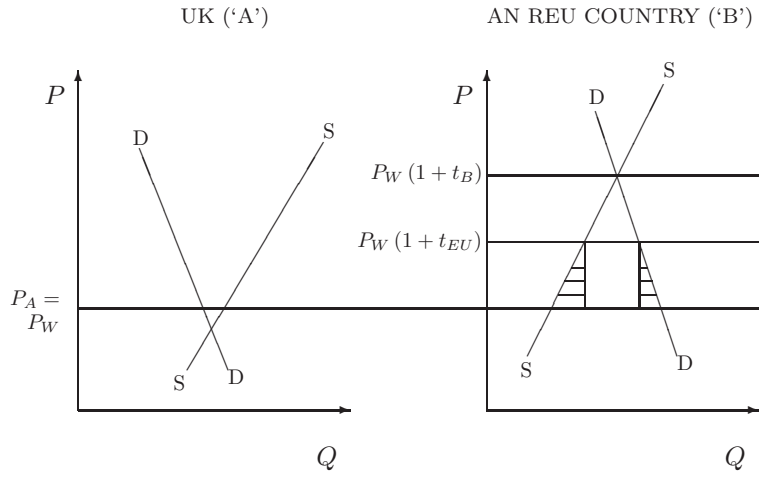
Figure 6.7: EU single market partial deregulation without common external barrier

UK ('A')   AN REU COUNTRY ('B')

P P

D   S   D   S

$P_W(1+t_B)$

$P_W(1+t_{EU})$

$P_A = P_W$

Payments to UK firms

S   D   S   D

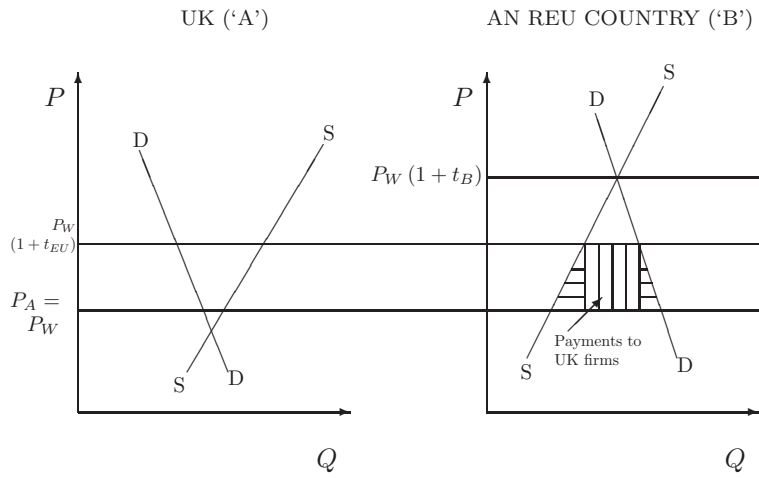Q Q

Figure 6.8: EU customs union

by the Commission. Were the harmonisation however to force on a reluctant (liberal-regime) A a rise in regulation that is intended to raise A's costs to reduce its competitive threat to B, then A would be damaged, in much the same way as is modelled in Chapter 3 under the heading of 'harmonisation'. In the diagram it could be seen as an enforced rise in A-firms' costs, shifting the A supply curve leftwards. Under this assumption the proposed directive would actually reduce A's welfare. It is hard at this stage to know how big a threat this is; given the difficulties of regulating services in this way against the wishes of a liberal-regime country like the UK, we will tentatively assume it away.

If so, then overall, as a result of this directive EU-wide competition would increase and result in a decline in prices in EU countries of the B-type, that is, the great majority (with the UK a general exception). Kox et al. (2004) estimates that after the implementation of this proposal bilateral trade in commercial services between member states is likely to increase by 15–30 per cent (1–3 per cent of total intra-EU trade including trade in goods) and FDI in commercial services may increase by 20 per cent to 35 per cent.

How does the proposed directive affect extra-EU firms? It may appear that foreign firms can first enter a member state with the lowest external barrier (the UK) and then gain access to the rest of the EU. However, the directive makes clear that the internal market rules will not apply to the operators from third countries who in future wish to establish in a member state (first establishment in the EU). As far as we can gather, a foreign firm established in the UK would still be subject to individual member country international rules if it wants to export to the rest of the EU.

Extra-EU firms may be able to get around this problem via two routes. First, by establishing themselves in one of the member states (the least protected) before this directive is implemented. If they are already in operation in 2010, apparently they may be considered as a 'local' firm.

Second, foreign firms which enter the EU after 2010 may take on a local partner with a majority-stake making it an 'EU-owned' firm in a legal sense.

How far they will do this depends plainly on how credible the EU liberalising proposals are; at this stage their credibility is weak, as we explain further below. What the diagram shows however is

that outside firms can be drawn into the EU's least protected A-type economies in as profuse a manner as needed to replace A-firms diverting their output to B-markets. Only in the unlikely case that the total output in A is exhausted by exports to B countries would any limit on outsiders bite; even then it appears that there are enough ways in which outsiders can masquerade as A firms via joint ventures to get around even that limit. In sum, the Commission's proposal is for more competition within the EU service economy, fuelled by supplies from the least restricted A-type countries, with those supplies in turn being replaced in A-markets by supplies from outside entrants. As such the proposal is beneficial to B-type countries in the EU while not affecting A-type countries; however the benefits in B-type countries are achieved at the expense of incumbent suppliers.

This last feature should make one wary of the prospects for the proposal's acceptance. Since it is intended to become effective only from 2010 onwards, the losing parties have substantial time to create political pressure to alter the directive. European trade unions have already criticised the directive on the basis that it comprises a direct threat to the European social model. The unions claim that the quality of public services will diminish due to the removal of many regulations. The unions have also targeted the country of origin principle, which according to them creates a legal incentive for companies to move to countries with the most relaxed legislation on social, fiscal and environmental issues and the creation of 'letterbox companies' offering services at low prices. The directive itself consists also of measures to protect the interests of buyers and users of services such as the system of providing assistance to consumers and the harmonisation of consumer protection. Inevitably these issues would lead to new regulations and regulatory bodies to protect consumers against the non-national firms. Lastly, this latest proposal does not include services such as financial/telecommunication and energy in which the UK traditionally has comparative advantage (although some form of deregulation in these services is on-going).

Even if the directive is implemented it will not affect important aspects of regulations in the service sector. Although the explicit barriers to trade and investment are likely to be lowered, other barriers to competition such as administrative burdens for start ups, the restriction of participation in public tendering, the restriction

on the number of firms in some service sectors will at best only be moderately affected. The regulations related to subsidies and state control will hardly be affected since they are exempt from the proposed directive. These regulations form a substantial form of regulatory burden in the service sectors. For example, out of 183 regulatory indicators considered in the Netherlands Bureau for Economic Policy Analysis study (2004), 61 were identified as barriers to competition and 45 were related to state control. By leaving out these important aspects of regulatory barriers the proposed directive (if successfully implemented) will only partially improve the competitive environment and not create a fully functioning single market in services.

In conclusion, given the problems discussed above and the past dismal record of the EU on such initiatives, we should not expect much benefit from this proposal for the rest of the EU and in any case there would be none at all for the UK; on the other hand we may worry that the initiative may perversely lead only to a rise in obstructive regulation in the name of harmonisation.

6.6 QUANTIFYING THE BARRIERS TO TRADE IN SERVICES

Quantification of barriers to services trade poses formidable challenges and only a few systematic attempts to do so have been undertaken. Much like the measurement of non-tariff barriers (NTBs) for trade in goods, it is hard to come up with a simple measure that is comparable across modes of trade, sectors and countries. Naturally, the analysis of estimates of services barriers suggests that they vary on the basis of the data sources and estimation techniques employed.

Roughly three types of estimates have been used in the empirical analysis:

1. Frequency measures first calculated by Hoekman (1995).

2. Quantity-based tariff equivalents estimated by Francois and Hoekman (1999).

3. Price-based tariff equivalents estimated by Francois and Hoek-

Table 6.5: Ad valorem tariff equivalent for the EU and the US (%)

	Construction	Wholesale and retail trade	Transport, storage and communication	Business and financial services	Social and personal services
EU	10.0	10.0	182.0	27.2	23.6
USA	5.0	4.6	111.4	21.7	31.4

Source: Hoekman (1995)

man (1999), Kalirajan et al. (2001), Warren (2000) among others.

The frequency ratio method involves calculating frequency of occurrence of NTBs across countries and sectors. Typically, to develop these indices, the actual restrictions on trade and investment in a service industry are compiled. These restrictions are then assigned scores and grouped into categories, each of which is assigned a numeric weight. Finally, the indices are computed using these scores and weights. Among these indicators of protection the most widely used measure of protection on service sector liberalisation was constructed by Hoekman (1995) (Table 6.5). He classifies GATS commitments by a country into three categories and assigns a numerical score to each category:

- If no restrictions are applied for a given mode of supply in a given sector, a value of 1 is assigned.

- If no policies are bound for a given mode of supply in a given sector, a value of 0 is assigned.

- If restrictions are listed for a given mode of supply in a given sector, a value of 0.5 is assigned.

Using these factors, Hoekman calculated sectoral coverage indicators and then assigned a value to each country and sector using a benchmark multiplied by the calculated frequency ratio. He

does so by first constructing a list of benchmark guesstimates of tariff equivalents for the most protectionist country. Then the tariff equivalent of a given country is obtained by multiplying this guesstimate by (1 minus sectoral coverage indicator). Thus, if the most restrictive country had restrictions equivalent to a 50 per cent tariff, then a country with a 0.9 restrictiveness index, as in the preceding example, would have a tariff equivalent of 45 per cent (that is 0.9×50).

Hardin and Holmes (1997) improve on Hoekman's methodology by using FDI restrictions and by incorporating information on the economic impact of different types of barriers. They constructed an index of FDI restrictions by calculating weights to reflect the relative restrictiveness of different barriers.

Various more elaborate frequency indexes and openness indicators have been constructed for specific service sectors. Such estimates are calculated among others, by the Pacific Economic Cooperation Council (1995), by Mattoo (1999), McGuire (1998), and McGuire and Schuele (2000) for financial services, by the OECD (1997b) for accounting services, by Warren (2000) for telecommunications, by McGuire et al. (2000) for maritime services, and by the OECD and the Australian Productivity Commission in a series of studies for various services sectors.

Recent research from the OECD (2000) allows an assessment of the level of protection in services across the OECD countries (Table 6.6). They measure the extent to which entry barriers and other regulations have affected energy and most marketable services over the past two decades. By 1998 the UK was the least restrictive area and Switzerland was the most. This relative level of liberalisation is reflected in the employment performance of the developed economies. Whereas these reforms have been estimated to have added 2.5 per cent to the employment rate in the UK and New Zealand, the low level of reforms in Greece, Italy and Spain have added only 0.5 to 1 per cent to their employment over the period 1982–98 (OECD 2001d). Additional industry-wide analysis of the regulatory and market environment in OECD countries shows considerable divergence among various EU members (Table 6.A.1), which confirms that the single market in services is not yet working. In 1998 among the EU Member States Britain had the most liberalised services sector in five out of seven sectors under consideration.

Table 6.6: Progress of regulatory reforms in OECD countries (scale 0–6 from least to most restrictive)

	1978	1988	1998
UK	4.3	3.5	1.0
REU	5.4	5.1	3.4
US	4.0	2.5	1.4
Australia	4.5	4.2	1.6
Canada	4.2	2.8	2.4
Japan	5.2	3.9	2.9
Switzerland	4.5	4.5	3.9

Note: Simple averages of indicators for seven industries – gas, electricity, post, telecoms, air transport, railways and road freight. Depending on the industry the following dimensions have been included: barriers to entry, public ownership, market structure, vertical integration, price controls. For the rest of the EU (REU), simple averages of individual EU countries.

Source: Nicoletti and Scarpetta (2001)

The fact that Britain's services sector is more open than the rest of the EU is also confirmed by Nguyen-Hong (2000) and McGuire and Schuele (2000) (Table 6.7). Both these studies calculate an index by identifying existing policies affecting entry and operations post-entry, assigning each a weight based on interviews with the private sector, and summing across weights to obtain an overall index. The domestic index measures the restrictions affecting domestic service providers and the foreign index quantifies the restrictions facing foreign service providers in seeking to provide services in the local market. The domestic and foreign restrictiveness index scores range from 0 to 1. According to these surveys the services sector in Britain is less restrictive in all services under review compared to the average for the rest of the EU Member States (Table 6.A.2). Given the fact that Britain is the world's biggest services exporter after the US, she has a vital economic interest in seeing services markets liberalised around the world. Colecchia (2001) calculates indices for trade barriers in accountancy services for four countries – the UK, France, Australia and the US. The restrictiveness index values in these four countries are 0.5, 0.7, 1.15

Table 6.7: Global welfare gains from services liberalisation

	Total gain $ bn (%GDP)	Services $ bn (%GDP)	Goods $ bn (%GDP)
Brown et al. (2001) projected gains of 33% removal of barriers	613 (2.5)	390 (1.6)	222 (0.9)
Brown et al. (2001) projected gains of removal of all barriers	1857 (7.6)	1169 (4.8)	689 (2.8)
Dee and Hanslow (2000) projected gains of complete removal of post-Uruguay Round trade barriers	270 (1.0)	133 (0.5)	133 (0.5)

Note: The figures in bracket are % of world real income.

and 1.55 respectively. These numbers suggest that, among the four countries, the UK is the most open while the US is the most restrictive for accountancy services.

The use of frequency indicators to measure service sector openness is, however, imperfect for several reasons. First, the method does not take account of the importance of certain service activities in international trade, as it assumes that all indicators are of equal value. Second, it does not take into account the relative importance of differing modes of supply, again due to data limitations. Third, frequency measures do not provide any information on the economic impact that barriers have on prices, production and consumption and the consequences of eliminating these barriers.

The second type of trade restrictiveness measure is quantity-based. This is derived using econometric models, typically the gravity model. In these models trade between the two countries is explained by their size and the distance between them (along with cultural factors). The size of barriers is measured either by the difference between the actual and predicted trade or by using dummy variables. Such studies include Francois and Hoekman (1999) for various services and Warren (2000) for telecommunications. Francois and Hoekman (1999) have fitted a gravity model to bilateral service trade for the US and its major trading partners (Table 6.8).

The differences between the actual and predicted imports were normalised relative to the free trade benchmark for Hong Kong and Singapore. Combining this with an assumed elasticity of demand of four yields the estimated tariff-equivalents. The results indicate that barriers to business and financial services are about the same magnitude as for trade in goods. Higher barriers were estimated for construction.

Table 6.8: Estimated tariff-equivalents in trade services gravity model-based regression method (%)

	Business/Financial Services	Construction
North America	8.2	9.8
Western Europe	8.5	18.3

Notes: North America values involve assigning Canada/Mexico numbers to the US

Source: Francois and Hoekman (1999)

Price-based measures derive estimates of barriers to trade from differences in domestic and foreign prices. The percentage difference between the domestic and foreign price is comparable to a tariff provided price differences are due to government-imposed barriers. Francois and Hoekman (1999) propose a method for calculating a price-based measure based on gross operating margin, defined as (total sales revenue minus total average costs) divided by total average cost. These margins provide an indication of the relative profitability of different industries, hence, the relative magnitude of barriers to entry that may exist. Hoekman (2000) suggests two methods to gauge the sizes of trade barriers through the use of these margins (Table 6.A.3). The first method is to use the differences between the average margins of a benchmark country with relatively free trade and the margins of the other countries in the sample. The second method employs the difference between manufacturing and service margins, with the margins in manufacturing serving as the benchmark.

Other studies which have calculated tariff-equivalents for the

services sector using price data include Kalirajan et al. (2001) and Warren and Findlay (2000)for banking services, Kang (2001) for maritime transport, Kalirajan (2000) for food distribution, and Nguyen-Hong (2000) for engineering services (Table 6.A.4). These studies estimate an equation where the domestic price for the industry is modelled as a function of variables that affect the price, one of which is the trade restrictiveness index. The estimated coefficients and trade restrictiveness index are used to calculate the sizes of price differences for individual economies.

Messerlin (2001) estimates relative price variability by examining prices of the same product in two economies. He estimates tariff-equivalents for telecommunications, passenger air transport and film for EU services at 45 per cent, 71 per cent and 77 per cent respectively. In telecommunications the costs of protection are estimated on the basis of the difference between average British-Finnish-Swedish prices and EC prices. The former group is taken to consist of a competitive benchmark market. For passenger air transport the differential between a fully flexible fare for a domestic flight within the UK (the least distorted market) and an international fare (intra- or extra-EU) for an equivalent flight is taken as a measure of protection. For films, an estimate of tariff-equivalence is calculated by summing up the seat tax[2] (11 per cent) and the tariff-equivalent of subsidies (66 per cent).

The above overview of current work on measuring barriers to trade in services suggests that the quality of estimates of barriers has been improving in recent years, both in terms of the range of the barriers included and of the measurement techniques employed. However, it is difficult to determine if these estimates are realistic as a number of limitations remain related to data availability and the weight-assignment for different restrictions. The wide range of the estimated service trade barriers is reflected in the differing welfare effects from services liberalisation to which we now turn.

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[2]The seat tax is a non-discriminatory excise tax imposed on both foreign and French films. An indirect tax of roughly 11 per cent is levied on every seat sold in French cinemas, independent of the nationality of the film shown. It is also one of the sources of subsidies which are granted to French film producers and cinema owners. As a result, in practice the seat tax is considered discriminatory.

6.7   GAINS FROM LIBERALISATION

Relatively little work has been completed on the potential gains from alternative liberalisation scenarios in services. The difficulties arise from poor data on international service transactions and the lack of a comprehensive measure of restrictions on trade in services. Modelling of trade in services also requires a modelling structure that can incorporate the various modes through which services are supplied and account for the movement of factors of production (OECD, 2000). As with goods trade, models used to analyse services liberalisation are either partial equilibrium or general equilibrium (CGE) in nature. They are calibrated with either the Global Trade Analysis Project model (GTAP) or the Michigan Model of World Production and Trade (MMPT). Parameter values are usually chosen from existing estimates; for example, most studies use the parameter values for service trade barriers from Hoekman (1995). Studies based on the GTAP models include Hertel et al. (2000), the Department of Foreign Affairs and Trade, Australian (DFAT, 1999), Dee and Hanslow (2001) and Verikios and Zhang (2004). Applications of the Michigan model are Brown et al. (1996), Chadha (2001), Chadha et al. (2000), and Brown and Stern (2000). OECD (2001d, 2003b), Dihel (2002) and Brown et al. (2002) provide an overview of current work on measuring and modelling gains from service trade liberalisation using CGE modelling.

Global Welfare Gains of Services Liberalisation

The estimates of benefits from services liberalisation vary for individual countries from under 1 per cent to over 50 per cent of total GDP – depending on the initial levels of protection and the assumed reduction in barriers. The studies indicate as one would expect that economies with high initial service trade barriers tend to gain most (in terms of percentage gains to GDP). As these estimated barriers are higher for developing countries than for developed countries, it suggests potentially large benefits for developing countries from liberalisation of barriers to trade in services.

Hertel et al. (2000) suggest that, while 40 per cent liberalisations in agriculture and manufacturing will each raise global welfare by about $70 billion per annum (0.24 per cent of world GDP), a

similar liberalisation in services could contribute over $300 billion (1 per cent of world GDP). Dee and Hanslow (1999) and Brown and Stern (1999) were the first CGE studies which explicitly allowed for FDI in services. Dee and Hanslow (1999) allow not only for entry through FDI, but also distinguish between entry and operating restrictions. The results indicate that the EU and the US would actually lose $6 billion (0.1 per cent of GDP), largely because of their loss of rents in the provision of FDI.

Verikios and Zhang (2004) find that complete liberalisation of telecommunications and financial services would increase world output by 0.2 per cent or $47 billion. According to a study by Brown et al. (2001), world income would increase (in base year of 1995) by 2.5 per cent if all services – not just telecommunications and financial – were liberalised by 33 per cent and by 7.6 per cent if all barriers were removed (Table 6.7).

A 1999 study published by the European Commission, quoted in Thum (2002), comes to similar conclusions, finding that trade liberalisation – a 20 per cent to 50 per cent global cut in applied protection in agriculture, industrial products and services, plus trade facilitation agreement – would increase annual global welfare by nearly $220 billion to $400 billion (1 to 1.5 per cent of GDP). In the first instance, the study looked at across-the-board cuts in trade protection across all agricultural, industrial, and services sectors by all countries. Two scenarios were considered – a 20 per cent cut and a 50 per cent global cut in protection. Each of these scenarios was combined with a WTO agreement on trade facilitation, which it is assumed leads to a modest reduction (conservatively estimated at 1 per cent) in the transactions costs associated with international trade. Their estimates indicate that the potential welfare gain for the EU would be between $US46 billion and $92 billion which represents a 21 per cent share of the global welfare gains and between 0.75 to 1 per cent of EU GDP.

OECD (1997c) looked at the effects of a plausible medium-term programme of regulatory reform in eight countries using estimates of efficiency gains in services industries. It reports long-run potential output gains ranging from 3 to 6 per cent in some European countries and Japan to 1 per cent in the US, reflecting the initial state of regulation in different countries.

Not much work has been undertaken to evaluate the effects of liberalisation of service trade via mode 4 – temporary movement

of natural persons (TMNP). Although TMNP currently accounts for only 1.4 per cent of the value of services trade (Karsenty, 2000) (this low figure arises from the very high barriers to TMNP), this mode of service delivery possibly offers the greatest potential returns to liberalisation. Based on the global applied general equilibrium model of south–north temporary movement of labour, Winters (2002) suggests that an increase in developed countries' quotas on the inward movements of both skilled and unskilled temporary workers equivalent to 3 per cent of their workforces would generate an estimated increase in world welfare of over $US150 billion per annum (0.75 per cent of world GDP). These gains are shared between developing and developed countries and owe more to unskilled than to skilled labour mobility.

Welfare Gains to the EU

Here we present a brief summary of studies which model the EU as a separate economy (see Table 6.9). Most of these studies conclude, as expected, that the EU will benefit from liberalisation in trade in services:

1. Brown et al. (1996) simulate the impact of a 25 per cent multilateral reduction using Hoekman's (1995) tariff equivalents of service barriers. The estimated welfare gains for the EU are US$29 billion (0.4 per cent of GDP) based on assumptions regarding market structure and product differentiation.

2. Robinson et al. (2002) evaluate the impact of service and non-service sector trade liberalisation on the world economy. The EU stands to gain between 0.2 per cent to 4.7 per cent of GDP depending on the underlying assumptions and reform scenarios.

3. In Chadha (2001) who estimates the impact of a reduction in protection to services trade using Hoekman's (1995) tariff equivalents, the estimated welfare gain for the EU is US$66 billion or around 1 per cent of GDP for a 25 per cent reduction in services trade barriers.

4. Chadha et al. (2000) estimate the gain to the EU and EFTA economies from a 33 per cent reduction in services protection to be US$210 billion.

5. Verikios and Zhang (2004) simulate the impact of elimination of barriers to trade in communication and financial services. The study finds that a complete liberalisation of trade in telecommunication leads to a gain of around $US3.5 billion or 0.05 per cent of GDP to the EU. The reform of the financial services industry results in similar gains to the EU.

6. Brown and Stern (2000) simulate the impact of removal of service barriers under different scenarios for international capital markets. According to the results, changes to the EU's welfare range from a welfare decline of US$83 billion (1 per cent of GDP) to a gain of US$292 billion (3.6 per cent of GDP). Welfare effects are strongly associated with whether or not a country attracts or loses capital.

7. Brown et al. (2001) study the impact of a reduction in tariffs on agricultural and industrial products and services barriers by 33 per cent (and 100 per cent) in a new WTO trade round. The EU and the EFTA stand to gain US$169 billion (and US$507 billion) or 2.8 per cent (and 8 per cent) of GDP.

Due to the use of different databases and base years as well as different assumptions about liberalisation policies the estimates from different studies are not strictly comparable. However, the results indicate that the welfare gains from liberalisation of trade in services would be substantial for EU member countries as well as for the global economy.

Given the high share of services in GDP, it is not surprising that the EU stands to make large gains by liberalising services. The prediction of potentially large welfare gains for the EU derives mainly from its current high level of protection. Liberalisation of the services sector will provide the incentive for resources to move out of relatively highly protected sectors and into sectors in which the EU has a comparative advantage or which benefit from scale economies. With further liberalisation, the EU services sector would be in a relatively stronger position to expand and take advantage of improved access to foreign markets.

From the above discussion it is clear that estimates of economic impact on the EU vary widely. At one extreme, Dee and Hanslow (1999, 2001) predict that the EU is likely to lose rather than gain from trade liberalisation in services. At the other extreme, Brown

Table 6.9: Brief summary of CGE studies that model the EU as a separate economy

	Base year	Regions/ sectors	Barriers estimates	Model
Brown et al. (1996)	1990	8/29	Hoekman (1995)	Michigan
DFAT (1999)	1995	45/50	Modification of Hoekman (1995)	GTAP framework
Chadha et al. (2000)	1995	20/16	Hoekman (1995)	Michigan (with implementation of Uruguay Round in 2005)
Hertel et al. (2000)	1995	19/22	Francois & Hoekman (1999) Hoekman (1995)	Modified GTAP (with implementation of Uruguay Round in 2005)
Dee and Hanslow (2001)		18/3	Kalirajan et al. (2000), Warren (2000)	FTAP model with capital mobility and FDI
Chadha (2001)	1995	7/25	Hoekman (1995)	Michigan
Robinson et al. (2002)	1995	10/11	Brown et al (1996), Hoekman (1995)	Standard static CGE
Verikios and Zhang (2004)		19/8	Kalirajan et al. (2001) Warren (2000)	FTAP model with capital mobility and FDI

Table 6.9 Brief summary of CGE studies that model the EU as a separate economy continued

Policy Simulations	Welfare gains to Europe, billion US$ (% of GDP)
25% multilateral liberalisation in services	29 (0.4) (0.1 terms of trade change)
50% liberalisation in services	73.4 (1)
33% reduction in bilateral import tariff in services	210 (2.5) EU and EFTA
33% reduction in bilateral import tariff in goods and services	253 (3) EU and EFTA
40% cut in agriculture and service protection 50% liberalisation in goods and services & transport	−4.7
Multilateral services liberalisation	−6 (−0.8)
Multilateral goods & services liberalisation	0.2 (0.1)
25% multilateral liberalisation in services	66 (0.9)
25% multilateral liberalisation in goods and services	79 (1.1)
50% liberalisation in services	(−1.2)
50% liberalisation in goods and services	(−1.7)
In post Uruguay Round environment, elimination of barriers to trade in communication	3.5 (0.5)
Elimination of barriers to trade in financial services	3.4 (0.5)

Table 6.10: Estimated welfare effects of liberalising selected services in the EU

	Ad valorem tariff-equi.	Induced increase in imports (€bn.)	Consumer surplus gain (€bn.)		Net welfare gain (€bn.)
			A	B	B
Films (France)	76.8	0.3	0.6	0.4	0.3
Air Transport	71.0	2.3	9.0	8.8	7.0
Telecom	45.2	5.7	5.9	4.0	2.8

Notes:

A   Based on Francois-Hall (1997) model

B   Based on Hufbauer-Elliott (1994) model.

Source: Messerlin (2001)

et al. (2001) show that the EU is expected to gain as much as 2.5 per cent of GDP. The magnitude of welfare effects is strongly dependent on the accuracy of the estimates of services barriers and on the various modelling assumptions. The estimates of different services barriers vary on the basis of the data sources and estimation techniques employed. The studies which use Hoekman's estimates for the initial interventions generally report large welfare gains from services trade liberalisation. By contrast, studies which employ the estimates determined on the basis of price or quantity impact measures tend to generate lower, though still sizeable, welfare gains. Even though the quality of estimates of barriers has been improving both in terms and the range of barriers addressed, it is difficult to determine if these estimates are realistic as a number of limitations remain, related mainly to data availability and the nature of the barriers.

Messerlin (2001) uses partial equilibrium analysis to assess the cost to EU consumers from protection in three service sectors (films, passenger air transport and telecommunications) and estimates the cost of protection as 16 per cent of their value added (Table 6.10). Dobson and Jacquet (1998) evaluate the impact of

the Financial Services Agreement (FSA) at the WTO in December 1997. The present value of total benefits from financial services reform by 2010 would be, with an assumed discount rate of 12 per cent, $US1 trillion. The EU would benefit in the region of 0.7 per cent of GDP. Empirical studies of efficiency differences among banks in Europe and the US indicate the following: banks could reduce their costs and increase profits by between 20 and 50 per cent by increasing productive efficiency; thrifts and credit unions could achieve 20 per cent efficiency gains by improving managerial efficiency and by using the same sophisticated technology as is used by best-practice institutions; national bank regulatory agencies could make efficiency gains of a similar magnitude by achieving greater economies of scale in clearing and payments services; and insurers (where comparable data are scarce) are estimated to be between 45 and 90 per cent efficient (Berger et al. 1993). In telecommunications it is estimated that the liberalisation would cut the cost of international calls by more than 80 per cent and the Institute of International Economics calculated that it could cut telecom bills by up to $1 trillion, equivalent to 4 per cent of world GDP (Artis and Nixson, 2001). Ian Taylor, the former UK science and technology minister has been quoted as saying 'the [telecom] market is already worth $600 billion annually and growing at 10 per cent a year. Some analysts predicted an extra £20 billion worth of telecom business for the UK alone over the next 10 to 15 years' (Williams and Cane, 1997).

6.8   CONCLUSION

Measuring trade in services and quantifying worldwide barriers to it is a difficult task. Naturally, calculating gains from liberalisation of services trade is a complicated matter. However, given that the UK is among the world's top services exporters and importers, she stands to gain from services liberalisation around the world, in particular from the formation of a EU single market in services. It is however, unlikely that the EU can successfully liberalise its services barriers – internal as well as barriers to trade with rest of the world – in the near future.

APPENDIX A   MEASURES OF RESTRICTIONS ON TRADE IN SERVICES

Table 6.A.1: Regulatory and market environment in 1998 (scale 0–6 from least to most restrictive)

	Britain	Rest of the EU	United States	Minima EU	Maxima EU
Air passenger transport	**2.2**	3.8	1.2	**2.2**	5.5
Road freight	**1.3**	2.8	1.5	**1.3**	4.6
Mobile telephony	**0.0**	2.9	n.a.	**0.0**	4.6
Fixed telephony	1.0	3.1	0.3	0.4	6.0
Electricity	**0.0**	4.1	4.3	**0.0**	6.0
Railways	**3.0**	5.1	1.5	**3.0**	6.0
Retail distribution	2.5	2.7	n.a.	1.2	4.7
Average	**1.4**	3.4	1.7	**1.4**	4.5

Source: Derived from table 5.2 of Messerlin (2001)

Table 6.A.2: Restrictiveness index scores (scale 0-1 from least to most restrictive)

	Index	UK	Rest of the EU	NAFTA	Rest of the world
Accountancy	Domestic	0.18	0.20	0.19	0.17
services	Foreign	0.19	0.36	0.37	0.43
Architectural	D	0.00	0.09	0.14	0.04
services	F	0.07	0.21	0.29	0.20
Engineering	D	0.03	0.09	0.09	0.04
services	F	0.07	0.16	0.23	0.17
Legal	D	0.18	0.19	0.25	0.16
services	F	0.31	0.40	0.50	0.47
Maritime	D	0.06	0.14	0.14	0.16
services	F	0.24	0.33	0.47	0.47
Telecommunications	D	0.00	0.12	0.13	0.25
	F	0.00	0.19	0.34	0.41
Banking	D	0.00	0.00	0.00	0.08
services	F	0.07	0.07	0.10	0.33
Distribution	D	0.05	0.09	0.02	0.08
services	F	0.19	0.24	0.15	0.21

Sources: Nguyen-Hong (2000), McGuire and Schuele (2000)

Table 6.A.3: Average gross operating margins of services firms, 1994–96

	EU	USA
Recreation	42.5	46.8
Business services	32.1	56.2
Construction	19.3	20.2
Consulting	22.1	−136.0
Finance	51.6	56.3
Health	22.3	37.0
Hotels	23.7	48.5
Retail trade	23.6	34.6
Wholesale trade	19.9	27.0
Transport/utilities	32.6	43.4

Source: Hoekman (2000)

Table 6.A.4: Price and cost effect measures (%)

| | Foreign | | | | Domestic | | |
| | Price | | | Cost | Price | | Cost |
	Banking	Telecoms	Engineering	Distribution	Telecoms	Engineering	Distribution
UK	5.32	0.00	2.54	2.76	0.00	0.00	1.39
US	4.75	0.20	7.38	2.26	0.20	0.00	3.79
Canada	5.34	3.37	5.31	3.09	1.07	0.98	2.68
Belgium	5.32	1.31	0.52	4.87	0.65	6.69	0.66
Denmark	5.32	0.20	1.14	n.a.	0.20	n.a.	0.69
Finland	5.32	0.00	2.28	n.a.	0.00	n.a.	0.73
France	5.32	1.43	0.92	5.16	0.34	7.10	0.69
Germany	5.32	0.32	10.17	n.a.	0.32	n.a.	2.93
Greece	5.32	4.52	n.a.	0.25	2.56	0.00	n.a.
Ireland	5.32	2.67	n.a.	2.70	1.46	0.00	n.a.
Italy	5.32	1.00	n.a.	n.a.	1.00	n.a.	n.a.
Luxembourg	5.32	1.05	n.a.	n.a.	1.05	n.a.	n.a.
Netherlands	5.32	0.20	3.67	2.73	0.20	0.00	5.25
Portugal	5.32	6.25	n.a.	n.a.	3.80	n.a.	n.a.
Spain	5.32	3.93	8.73	n.a.	2.03	n.a.	3.86
Sweden	5.31	0.65	6.76	n.a.	0.65	n.a.	0.74

Sources: Kalirajan et al. (2001), Warren (2000), Nguyen-Hong (2000) and Kalirajan (2000)