



making business sense

# The Importance of Wholesale Financial Services to the EU Economy 2007





making business sense

# The Importance of Wholesale Financial Services to the EU Economy 2007

centre for economics and business research ltd

Unit 1, 4 Bath Street  
London, EC1V 9DX  
Telephone 020 7324 2850  
Fax 020 7324 2855  
[www.cebr.com](http://www.cebr.com)

City Office in Brussels

Rond Point Schuman 6, Box 5  
1040 Brussels  
Belgium  
Telephone +32 (0)2234 7832  
Fax +32 (0)2234 7901



May 2007

**The Importance of Wholesale Financial Services to the EU Economy 2007** is published by the City of London. The authors of this report are Jonathan Said, Richard Snook, Douglas McWilliams and Mark Pragnell of the centre for economics and business research ltd.

This report is intended as a basis for discussion only. Whilst every effort has been made to ensure the accuracy and completeness of the material in this report, the authors, the centre for economics and business research ltd, and the City of London, give no warranty in that regard and accept no liability for any loss or damage incurred through the use of, or reliance upon, this report or the information contained herein.

May 2007

© **City of London**  
PO Box 270, Guildhall  
London  
EC2P 2EJ

<http://www.cityoflondon.gov.uk/economicresearch>

# Table of Contents

Foreword.....	1
Executive Summary.....	3
<b>1. Globalisation, finance and the European Union.....</b>	<b>5</b>
1.1 The growth of world trade.....	5
1.2 World wholesale finance markets.....	10
1.3 World equity markets.....	13
<b>2. Financial services: a European industry.....</b>	<b>16</b>
2.1 The importance of European wholesale finance.....	16
2.2 The integration of the European wholesale finance sector.....	24
<b>3. The European Union's wholesale financial markets.....</b>	<b>33</b>
3.1 The banking market.....	33
3.2 The equity market.....	34
3.3 The bond market.....	37
3.4 The foreign exchange market.....	39
3.5 The derivatives market.....	39
3.6 The funds under management market.....	42
3.7 The insurance market.....	44
3.8 The investment banking market.....	45
3.9 The private equity market.....	46
<b>4. Clustering to compete.....</b>	<b>48</b>
4.1 Financial clusters in the EU.....	48
4.2 Employment.....	50
4.3 Economic activity.....	52
4.4 Productivity.....	54
<b>5. The Financial Services Action Plan.....</b>	<b>57</b>
5.1 What makes up the Financial Services Action Plan?.....	57
5.2 The theory behind the Financial Services Action Plan.....	59
5.3 Quantifying the benefits of integrated EU financial markets .....	61
5.4 The economic impact of the Financial Services Action Plan.....	62
5.5 The compliance costs of the Financial Services Action Plan.....	66
<b>6. Conclusions.....</b>	<b>70</b>
<b>7. Annex.....</b>	<b>72</b>



## Foreword

**Michael Snyder**  
**Chairman, Policy and Resources Committee**  
**City of London**

This is the second edition of *The Importance of Wholesale Financial Services to the EU Economy* which aims to demonstrate the pivotal contribution of the wholesale financial services sector to the EU economy. This latest report, commissioned from the centre for economics and business research (cebr), continues to examine the contribution of wholesale financial services sector to the EU economy, with particular reference to the sector's development within the EU over the past five years. Moreover, there is a new chapter addressing the ongoing evaluation and assessment of the Financial Services Action Plan (FSAP) – the EU's programme for creating a single integrated financial market – which contains over 40 directives and other regulatory measures.

It is good news that EU wholesale financial activity reached €195bn in 2006, representing over 30% of the global total. While it only represents 1.7% of EU GDP, it is a highly productive sector and also confers a number of external benefits on other sectors of the economy, including lowering the cost of capital, enabling firms to invest and expand, and allowing resources to be directed to areas of greatest economic return. In that sense financial services are critical to the stronger growth of the EU economy and fulfilment of the Lisbon Agenda.

The average annual growth rate of wholesale financial activity in the EU has grown by an impressive 6.5% per year between 2001 and 2006 outperforming the equivalent US growth rate of 6.0%. This is over three times greater than the overall EU economic growth rate of 1.9% over the same period. The EU is already a world leader in exports of finance and insurance services, accounting for 68% of the world market in exports of insurance and 62% of the market in financial services exports.

The reasons behind the EU's recent impressive performance in wholesale finance are varied but can largely be categorised under three main headings. First, there is the increasingly integrated nature of the industry. This is evidenced by increasing cross-border transactions and narrowing price dispersions in various financial markets. For example, the proportion of EU inter-bank loans which are cross border within the EU has risen from 26% in 1997 to 42% in 2006.

Second, wholesale finance activity is highly clustered within the EU, which academic literature and empirical evidence indicates has led to higher productivity, growth and efficiency. Over half of the economic output of EU wholesale finance is concentrated in just eight of the EU's financial centres, with three – London, Ile de France and Frankfurt – accounting for 42% of the total. Moreover all eight of these clusters have higher levels of productivity in wholesale finance than in their overall economies.

Third, the EU's leadership of global wholesale finance is driven by the success of the London cluster, which alone accounts for 28% of EU wholesale finance. Its success is based on numerous factors, including its open, international character, its skilled and flexible workforce, its high quality communications infrastructure and its proportionate and effective regulatory framework.

In the final chapter, cebr address the European Commission's current work on the evaluation of the FSAP, highlighting a number of issues to be taken into account to ensure a sound analysis of the impact of the legislative programme. The importance of using mathematical analysis to separate the various drivers of the EU wholesale finance market is underlined and an attempt is made by cebr to provide an early assessment of the impact of the FSAP. Initial findings, based on existing data, suggest there may have been a one-off net increase in EU financial services output of around 2%. However, more time has to elapse before truly robust calculations can be made. Separately, cebr has estimated that the costs of the FSAP could amount to between 0.2%-0.3% of GDP to the UK economy, over a 10-year period.

The overall message from this report is positive: the EU wholesale financial sector has benefited strongly from the growth in world trade and wholesale finance, expanding more rapidly than the US sector over the last five years. Aided by geographical clustering and integration, EU wholesale financial services are playing an ever more important role in the economy: the contribution of wholesale finance has grown at three times the annual average growth rate of the EU economy as a whole in the period 2001-2006.

I suggest European policymakers should be encouraged to focus their efforts on strengthening the process of integration by ensuring the effective implementation of the FSAP's proportionate regulatory measures across all EU Member States. This will allow the EU's wholesale financial sector to contribute fully to the growth and international competitiveness of the EU.

*Michael Snyder  
London  
May 2007*

## Executive Summary

*The Importance of Wholesale Financial Services to the European Union Economy 2007* is a report examining the contribution of the wholesale financial services sector to the EU economy. It analyses the sectors development within the EU over the past five years and assesses the impact of the Financial Services Action Plan (FSAP) – the EU’s plan for creating a single integrated financial market.

**EU at the forefront of world trade in finance and insurance services.** World exports of finance and insurance services stood at €159 billion in 2005; this represents 8.2% of service sector exports and 1.6% of all world exports. The EU leads international trade in these sectors, holding 68% of the world market in insurance service exports and 62% of the market in financial service exports.

**Wholesale finance sector is outperforming the world economy.** The contribution of the wholesale finance industry to world economic activity was €644 billion in 2006. The industry has expanded by an average of 6.3% per year between 2001 and 2006 compared to average annual growth of the world economy of 3.7% over the period. The pace of wholesale finance growth has been quickest in the emerging economies of China and the Asia Pacific. Annual growth in these areas has averaged 10.7% and 8.0% respectively between 2001 and 2006.

**EU wholesale finance regains ground on the USA.** The EU wholesale finance sector has performed strongly over the last five years, expanding at three times the rate of the economy as a whole. Between 1997 and 2001 the wholesale finance sector in the EU expanded by an average of 3.7% per year, whilst the US sector expanded by 7.1%. Between 2001 and 2006 the rate of expansion in the EU has accelerated to 6.5% per year, whilst that in the USA has declined to 6.0% per year. By 2006 the contribution of the wholesale finance industry to the EU economy was €195 billion; this is 30% of the world total.

**Wholesale finance in the EU is becoming increasingly integrated.** Cross-border loans between EU banks now make up 42% of all inter-bank loans, up from just 26% in 1997. There is also evidence that EU equity markets are becoming increasingly integrated, with the dispersion of dividend yields between Member States falling from 5.5% in September 2000 to 1.4% in September 2006.

**EU leads the world in a number of wholesale finance markets.** The EU is the world leader in the international securities market, holding 57% of bonds by value. The EU also hosts the greatest volume of trade in foreign exchange with 60% of the world daily average turnover. Similarly it enjoys a leading share of the market in both interest rate and foreign exchange derivatives, with 68% and 53% of world daily average turnover respectively.

**Over half of the economic output of EU wholesale finance is concentrated in just eight of the EU’s financial centres.** Europe’s financial sector is highly clustered in a number of financial centres. 53% of EU wholesale finance GVA is derived from eight clusters. London, Ile de France and Frankfurt alone

accounts for 36% of EU wholesale finance jobs and 42% of EU wholesale finance output. All eight clusters have higher levels of productivity in wholesale finance than in their regional economies as a whole. Wholesale finance productivity is highest in London, Brussels and Stockholm.

**London's cluster is the key to the EU's leadership of global wholesale finance.**

London's wholesale finance cluster contributes €55.4bn to GDP, equivalent to 28% of EU wholesale finance GVA and 76% UK wholesale finance GVA. With other financial centres such as Edinburgh (8.2% of UK wholesale finance GVA) and Leeds (3.9% of UK wholesale finance GVA), the UK contributes nearly 38% of the EU total. The UK has increased its share of the sector in the EU by averaging 10.5% annual growth per year between 2001 and 2006. London is the location for over two-thirds of the EU's foreign exchange and derivatives markets – markets in which the EU is world leader. It also handles 39% of EU share trading and leads the EU's hedge fund, pension fund and insurance fund markets.

**Initial econometric analysis suggests a net positive impact of around 2% on the UK financial sector due to the EU's FSAP.**

We have constructed an econometric model which attempts to disentangle the impacts of the drivers of the wholesale finance market – such as international liquidity flows, the growth in international trade and the growth in new financial markets. Our results suggest that the cost of the FSAP which contains over 40 regulatory measures, will equate to between 2.8% and 3.3% of the economic output of the UK wholesale finance market, the costs to the whole economy amount to between 0.2% and 0.3% of GDP. These are, however, likely to be outweighed by the benefits arising from greater productivity and increased intra-EU trade in wholesale finance resulting from the measures contained in the Plan.

**The European Commission's evaluation of the economic impact of the FSAP needs to be based on econometric analysis.**

In order to establish a more complete model of the impact of the FSAP on the EU economy it is necessary for more time to elapse, with some of the key directives only coming into force in 2007. Furthermore, as this report highlights, the data available for such analysis is limited in certain areas, such as the economic output of the wholesale finance industry.

# 1 Globalisation, finance and the European Union

This chapter presents recent trends in world trade and the trade in wholesale finance. We demonstrate the increasing scale and breadth of world trade as the global economy becomes more integrated and dispersed.

## 1.1 The growth of world trade

Since the millennium there has been a sustained period of expansion in world trade. The value of merchandise exported world-wide has expanded by an average of 10% per year between 2000 and 2005<sup>1</sup>. Japanese and North American exports have performed relatively poorly, averaging annual growth of 4%, whilst the EU export market has grown in line with the world average. The world's emerging economies have been the real engine behind the expansion in trade. The value of exports from South and Central America grew by 13% per year over the period, that of the Commonwealth of Independent States (CIS) 18% whilst China saw its merchandise exports grow by an average of 25% each year from 2000 to 2005.

The story is similar in the service sector export market. China has again achieved rapid growth in the value of its exports averaging 20% expansion per year between 2000 and 2005. The CIS has also averaged 20% annual growth. The EU has proved more competitive in terms of service exports, its export values have grown by 12% per year against a background of 10% average annual growth world-wide. North America and Japan have again performed relatively poorly, achieving 5% and 8% annual growth respectively.

*World trade reaches equivalent of 28% of world GDP*

The value of all world exports has increased from less than €0.2 trillion in 1953 to €10.1 trillion in 2005. Much of this growth has occurred in the past fifteen years, with world export values more than doubling since 1993. Total world trade now represents 28% of the global economy.

Key factors which have been driving these trends include the advantages Chinese and Indian manufacturers and service providers have from low labour costs. China has also benefited from its fixed exchange rate mechanism, which has allowed its products to become relatively cheaper for many major importing nations. China's export market has advanced so rapidly that it became the world's third largest merchandise trader in 2004 and will overtake Germany and move into second position during 2007 if current trends continue. India, the other large emerging economy in the region, is also likely to become a major player in world trade. The value of its merchandise exports rose by 26% in 2005, however, it is still a long way from emulating the remarkable performance of China, with total merchandise exports in 2005 only 12.5% that of its neighbour.

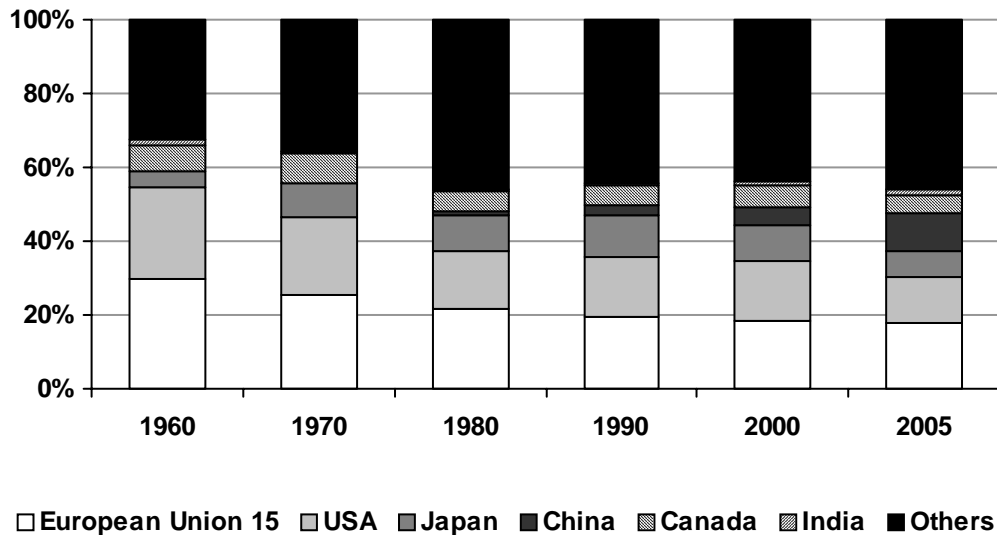
The rapid rise in the price of commodities has caused a substantial shift in regional trade flows. Oil was trading at between US\$20 and US\$30 per barrel

---

<sup>1</sup> World Trade Organisation, *International Trade Statistics*, 2006.

as recently as December 2003, since then prices have more than doubled. This has caused a sharp increase in the share of world exports and trade surpluses enjoyed by members of the Organization of the Petroleum Exporting Countries (OPEC) and other oil rich nations. Oil importing nations have tended to see a decline in their shares of world exports and many are running large trade deficits. In 2005, exports of fuels totalled €1.1 trillion representing 13.8% of all merchandise exports – the highest share in almost two decades.

**Figure 1-1: Share of world exports by value**



Source: Eurostat, *External and Intra-European Trade*, Statistical Yearbook 1960-2005.

*EU share of world exports falls to 18%*

Figure 1-1 portrays the regional shares of world export trade since 1960. The significance of the EU and North America has declined steadily, with the share of world exports held by the USA falling from 25% in 1960 to 12% in 2005 and the share of the EU-15 falling from 30% in 1960 to 18% in 2005. This trend has been driven by the increasing importance of emerging economies in international trade. China has seen its share of world exports double in five years, from 5% in 2000 to 10% in 2005. The value of Indian exports has increased by 74% in the past five years, although it still only commands 1% of the world market. The share of world exports held by all other countries has risen from 36% in 2002 to 46% in 2005, which is primarily due to the surge in commodity prices.

**Table 1-1: Breakdown of world exports<sup>a</sup>, 2005, € billion**

		World Exports
<b>Total world exports</b>		10,100
Of which:	Merchandise	8,200
	Services	1,900
	Of which:	
	Transportation	460
	Travel	550
	Communication services	37
	Construction services	37
	Insurance services	47
	Financial services	112
	Computer and information services	75
	Royalties and licence fees	131
	Personal, cultural and recreational services	28
	Other business services	467

Source: World Trade Organisation, *International Trade Statistics 2006*.

<sup>a</sup> Exports include Intra-EU trade; figures may not sum due to rounding.

*Finance and insurance trade only 1.6% of all world trade*

Table 1-1 presents World Trade Organisation data on the value of world exports by sector. Trade in merchandise is by far the largest component of world exports totalling €8.2 trillion in 2005 or 81% of the total. Exports in services totalled €1.9 trillion in 2005. Of these service sector exports, 78% are in transportation, travel and other business services. Exports in insurance and financial services were worth €47 billion and €112 billion respectively in 2005 and accounted for 1.6% of total world exports.

*Insurance and financial service exports 11% of all EU service exports*

Table 1-2 demonstrates that global trade in services is dominated by the EU, which exported €902 billion worth of services in 2005. This is more than double the value of its closest rival, Asia, which earned €423 from service exports. The value of North American service exports in 2005 was €343 billion. Exports of insurance and financial services are disproportionately important to the EU, representing 11% of all service exports compared to 5% in Asia. The proportion in North America is 9%.

**Table 1-2: Regional breakdown of service exports<sup>a</sup>, 2005<sup>b</sup>, € billion**

	EU-25	Non EU-25 Europe	North America	Asia
Transportation	205.2	22.8	59.9	118.8
Travel	231.8	26.7	102.4	107.2
Communication services	18.6	5.0	7.1	7.9
Construction services	21.3	8.1	2.5	8.3
Insurance services	31.6	0.5	7.9	4.9
Financial services	69.8	2.0	23.0	15.7
Computer and information services	41.9	2.0	8.9	19.7
Royalties and licence fees	41.9	1.5	49.6	17.7
Personal, cultural and recreation services	14.0	1.0	8.9	3.9
Other business services	226.2	28.7	73.1	119.0
<b>Total service exports</b>	<b>902</b>	<b>98</b>	<b>343</b>	<b>423</b>

Sources: World Trade Organisation, *International Trade Statistics 2006* and OECD *Statistics on International Trade in Services 2005*.

<sup>a</sup> Exports include Intra-EU trade.

<sup>b</sup> 2005 data is an estimate based on 2004 shares of total services trade and 2005 total services trade.

The EU is the world's foremost exporter of finance and insurance services with 64% of the market by value. North America and Asia are also significant exporters of these services, with 20% and 13% of the world market respectively.

**Table 1-3: Exports of finance and insurance services, € billion, current prices and exchange rates**

	Exports, 1995	Share of total world exports, 1995	Exports, 2004 <sup>a</sup>	Share of total world exports, 2004	Share of country service exports, 2004
EU 15 (to extra EU 15)	12.1	27.3%	42.8	31.2%	9.1%
Belgium-Luxembourg	3.6	8.3%	19.7	14.4%	28.7%
France	3.2	7.3%	2.4	1.7%	2.7%
Germany	2.7	6.1%	7.3	5.3%	6.4%
Italy	2.8	6.4%	2.1	1.5%	3.1%
Netherlands	0.4	0.9%	1.0	0.7%	1.7%
Spain	1.1	2.6%	2.1	1.5%	3.1%
Sweden	0.5	1.1%	1.6	1.2%	5.2%
UK	7.4	16.6%	32.6	23.8%	22.1%
Czech Rep.	0.1	0.1%	0.3	0.3%	4.4%
Hungary	0.1	0.3%	0.2	0.2%	2.8%
Poland	0.6	1.5%	0.2	0.1%	1.7%
Switzerland	5.0	11.3%	10.8	7.9%	31.2%
Turkey	0.1	0.3%	0.5	0.3%	2.4%
Brazil	0.2	0.4%	0.8	0.6%	7.0%
Japan	0.4	1.0%	4.4	3.2%	5.6%
Canada	2.1	4.8%	3.6	2.6%	9.4%
China	0.0	0.1%	1.2	0.9%	1.9%
India	0.1	0.2%	1.6	1.2%	-
Russia	0.2	0.4%	0.6	0.5%	3.1%
South Korea	0.1	0.1%	1.1	0.8%	2.6%
US	5.6	12.6%	27.0	19.7%	10.0%
<b>Total world</b>	<b>44.4</b>	<b>100%</b>	<b>158.7</b>	<b>100%</b>	<b>8.75%</b>

Sources: World Trade Organisation, *International Trade Statistics 2006*, OECD *Statistics on International Trade in Services 2004*, cebr analysis.

<sup>a</sup> Country exports include extra and intra EU trade.

Table 1-3 presents a breakdown of the value of exports of insurance and financial services of selected major economies and each country's share of world trade. It also shows the proportion of all service exports that are classified as insurance and financial services. There has been rapid growth in finance and insurance exports to non-EU-15 countries; the value of these having risen from €12.1 billion in 1995 to €42.8 billion in 2004. European

financial centres have been at the forefront in establishing links with developing nations such as Russia, China and India.

*24% of world finance and insurance exports are from the UK*

The UK was the world leader in exports of insurance and financial services in 1995 and maintains this position in 2004. Its share of the world market has risen during this period from 16.6% to 23.8%. This reflects the expansion of London's financial centre, which has experienced strong economic performance since 2002. The USA has expanded its share of the world market from 12.6% in 1995 to 19.7% in 2004, and maintains its position as the world's second largest exporter of financial and insurance services.

Other major exporters of finance and insurance services include Switzerland, Belgium and Luxembourg. These have had mixed fortunes since 1995, with Switzerland seeing its share of world exports fall from 11.3% in 1995 to 7.9% in 2004. Taken together Belgium and Luxembourg have overtaken Switzerland to become the world's third largest exporter of insurance and financial services. Together their share of world exports rose from 6.1% in 1995 to 14.4% in 2004.

Similarly, the UK, Switzerland, Belgium, Luxembourg and the USA are the countries where insurance and finance exports represent the greatest share of all service exports. The relative position of Germany has weakened since the dot com bust. Whilst in 2002 Germany had captured 8.8% of world exports in financial and insurance services, this share had slipped to 5.3% in 2004.

## **1.2 World wholesale finance markets**

We define wholesale finance as financial services which are conducted between financial services companies and institutions such as banks, insurers, fund managers, and stockbrokers. In this section we estimate the contribution of wholesale financial activities to GDP. We produce estimates because no internationally consistent data exists on the economic output of the world wholesale finance sector.

We estimate the gross value added<sup>2</sup> (GVA) of the wholesale finance sector in the EU-25, USA, Japan, China, the rest of Asia and Pacific, the rest of Europe and the rest of the world. We also produce an estimate for the global economic output of wholesale finance. In Chapter 2 we repeat this exercise for the 25 countries that made up the EU in 2006.

We use same methodology developed in the 2006 report:

- First we obtain data for the contribution of financial intermediation to GDP in all 25 EU countries, the US, Japan and China using data from

---

<sup>2</sup> In this context the term GVA measures the value of output and wages paid by the wholesale finance industry less the value of intermediate goods consumed by the industry. It is similar to GDP, except GVA does not include provision for tax and subsidy.

local national statistics offices, Eurostat and the International Monetary Fund;

- second we estimate the share of retail finance relative to all finance in each country using a benchmarking system against twenty European countries that are not highly dependent on the financial sector;
- third we deduct the share of retail finance from all finance to arrive at an estimate of the contribution of wholesale finance to GDP in each country;
- finally we estimate the size of wholesale finance in all other countries using financial variables in these countries, such as finance exports and the size of the stock market in the EU, US, Japan and China.

*World wholesale finance worth €644 billion annually*

The results from this analysis are presented in Table 1-4. We estimate the contribution of wholesale finance to world economic output to be €643.5 billion in 2006, up from €377.6 billion in 1997 in 2006 constant prices. This corresponds to 1.4% of gross world product, up from 1.1% in 1997. The EU-25 and USA have the greatest economic activity in wholesale finance holding 30.3% and 38.1% of the world market respectively.

Since 1997 the EU-25 has seen its share of the world wholesale finance market fall from 32.7% to 30.3% in 2006. Whilst its position appears to have improved from that in last year's report, when it held 27.5% of the world market in 2005, this difference is primarily due to the re-basing of the figures from 2004 euros to 2006 euros over which time the currency has appreciated measurably against the yen and the renminbi.

Japan's wholesale finance sector has declined in significance, with its share of the global market easing from 12.4% in 1997 to 11.1% in 2006. The main areas of growth have been in China and the Asia Pacific region which now share 3.7% and 6.2% of global wholesale finance output respectively. China has increased its share of world wholesale finance output from 2.5% in 1997, the rest of Asia and the Pacific has increased its share from 5.4%. The USA's share of the market has also expanded from 36.8% in 1997 to 38.1% in 2006.

**Table 1-4: Estimates of wholesale finance economic activity at 2006 constant prices, € billion**

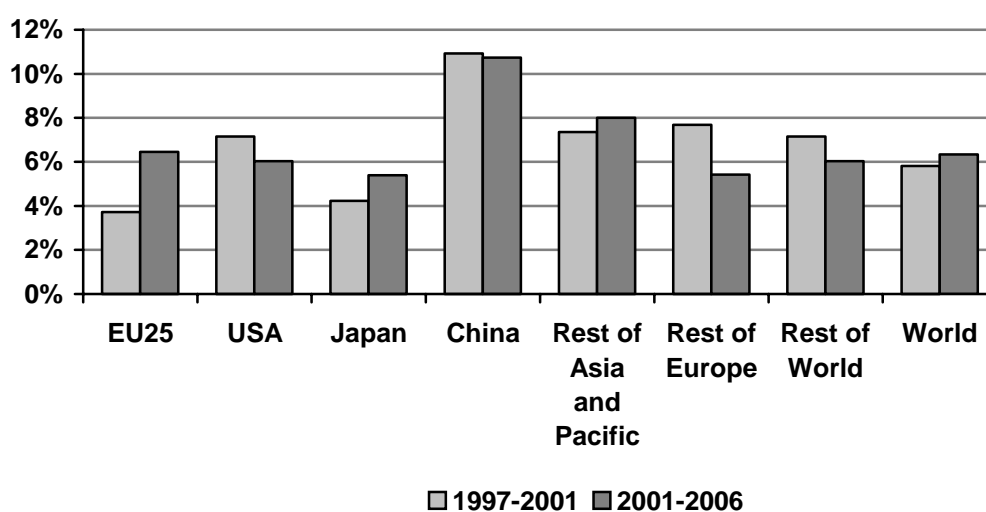
	1997	2002	2006	Share of world wholesale finance GDP, 1997	Share of world wholesale finance GDP, 2006
EU-25	123.3	155.1	195.5	32.7%	30.3%
US	138.9	188.6	245.4	36.8%	38.1%
Japan	46.7	57.8	71.7	12.4%	11.1%
China	9.3	17.8	23.5	2.5%	3.7%
Rest of Asia and Pacific	20.4	31.0	39.9	5.4%	6.2%
Rest of Europe	15.8	22.1	27.8	4.2%	4.3%
Rest of world	23.0	31.0	40.1	6.1%	6.2%
<b>World</b>	<b>377.6</b>	<b>503.5</b>	<b>643.5</b>	<b>100%</b>	<b>100%</b>

Sources: National Bureau of Statistics of China, *China Statistical Yearbook 2005*; Japan Statistics Bureau, *Japan Statistical Yearbook 2005*; US Bureau of Economic Analysis; Eurostat; Groningen Growth and Development Centre; cebr analysis.

*Wholesale finance GVA growing at 6.1% per year in real terms*

Figure 1-2 presents the real growth rates of wholesale finance GVA. The world wholesale finance market has grown by an average of 6.1% per annum between 1997 and 2006. This far exceeds the average annual growth in total gross world product of 3.7% during the same period.

**Figure 1-2: Estimated real growth in wholesale finance between 1997 and 2006 per annum**



Sources: National Bureau of Statistics of China, *China Statistical Yearbook 2005*; Japan Statistics Bureau, *Japan Statistical Yearbook 2005*; US Bureau of Economic Analysis; Eurostat; Groningen Growth and Development Centre; cebr analysis.

In almost all regions the wholesale finance industry has outperformed the economy as a whole. Wholesale finance in China and the Asia Pacific have grown the most rapidly in percentage terms, although a number of these markets remain in their infancy and the 10.8% annual expansion in the Chinese industry only translates to a €14.2 billion increase in the economic output of the sector between 1997 and 2006. The contribution of the wholesale finance sector to GDP in the EU-25 has expanded by €71.8 billion over the same period, although due to the larger size of the industry in 1997 this only gives an annual percentage increase of 5.3%.

In the US the economic output of the wholesale finance sector was expanding by an average of 7.1% per annum between 1997 and 2001, compared to just 3.7% in the EU-25. Since 2001, the EU-25 has caught up slightly with its wholesale finance sector growing by 6.5% per year, compared to 6.0% in the US.

### 1.3 World equity markets

#### *Developed countries stock exchanges dominate equity markets*

Stock exchanges in developed countries remain well ahead of their counterparts in emerging economies in terms of domestic market capitalisation. The New York Stock Exchange is by far the world's largest with capitalisation of €12.4 trillion in 2006<sup>3</sup>. The next largest exchanges are the Tokyo Stock Exchange with market capitalisation of €3.7 trillion followed by the NASDAQ and the London Stock Exchange with €3.1 trillion and €3.0 trillion respectively.

#### *Emerging exchanges in Asia experiencing rapid growth*

Of the emerging Asian economies the Hong Kong stock exchange remains the largest with a market capitalisation of €1.4 trillion followed by the Shanghai Stock Exchange with €0.7 trillion in 2006. The market capitalisation of the Shanghai exchange rose rapidly in 2006. Following three years of decline, the market capitalisation increased by 321% between end of trading December 2005 and December 2006. This was driven by large inflows of foreign equity eager to invest in Chinese productive capacity and rapidly expanding consumer markets<sup>4</sup>.

Figure 1-3 gives average annual growth of market capitalisation of key equity markets. Equity markets performed poorly between 1998 and 2002 as the dot com bust led to sharp reductions in the value of high-tech stocks; the world economic slowdown from 2001 also weakened investor confidence. The story since 2002 has been markedly different with growth in the market capitalisation of all major exchanges exceeding 10% per year. Between 2002 and 2006 the market capitalisation of the Bombay Stock Exchange grew by an average of 58.3% per year, whilst that of the Indian National Exchange expanded by 62.0% per year.

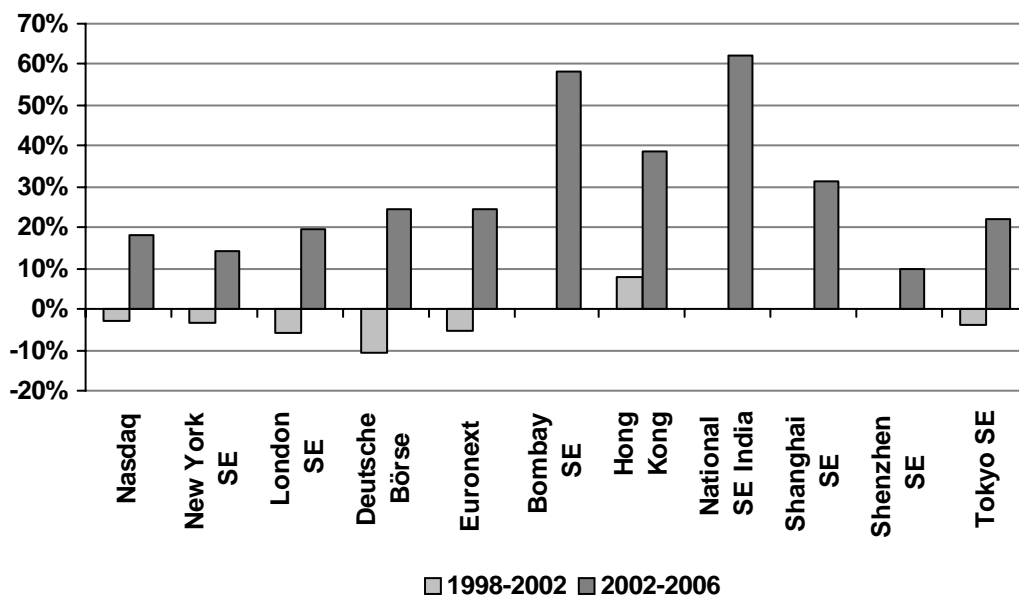
---

<sup>3</sup> World Federation of Exchanges, *Annual Report and Statistics, 2006*.

<sup>4</sup> Chinese stock exchange data is also sensitive to categorisations of major public companies.

Equity market volatility increased in early 2007, following rumours of the government introducing controls on the flow of international capital. The market capitalisation of the Shanghai Stock Exchange fell 8.8% on February 27, this year. The sell-off spread to other equity markets and was compounded by data pointing to weakness in the US economy. This volatility highlights the fact that the growth of emerging equity markets will face some interruptions when expectations are inconsistent with the economic fundamentals.

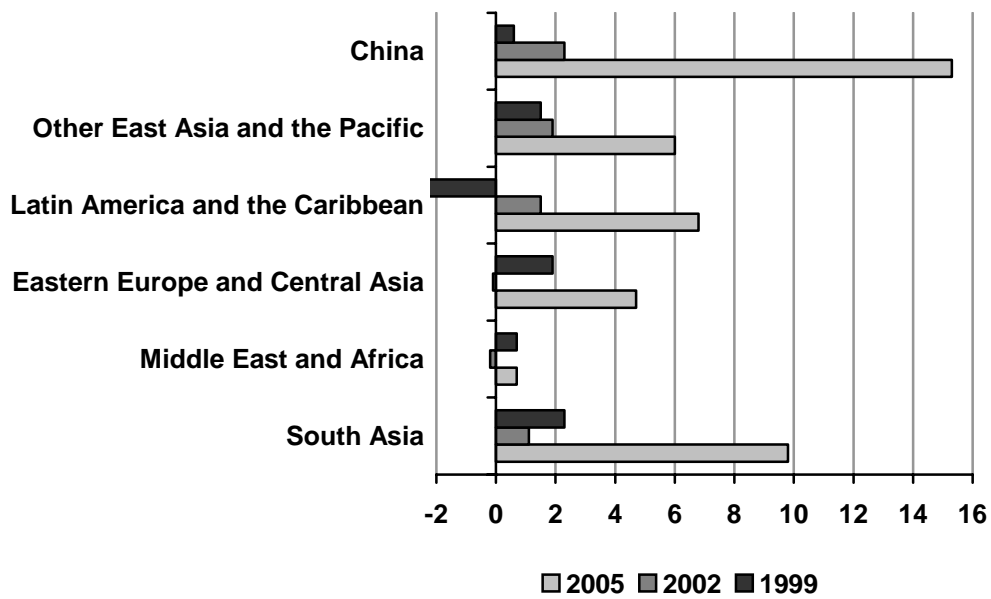
**Figure 1-3: Average annual growth in market capitalisation of domestic stock exchanges 1998-2006**



Source: World Federation of Exchanges, *Annual Report and Statistics 2006*

Figure 1-4 demonstrates the low levels of net inward portfolio equity flows to emerging economies in 1999 which persisted until 2002. Following the Asian financial crisis in 1998 there was a sharp decline in net inward portfolio equity flows as confidence in the financial and economic stability of emerging countries was shaken. Since 2002 the foreign investment in emerging economies has surged, driven by strong world economic growth, high international liquidity flows and globalisation.

Figure 1-4: Net inward portfolio equity flows to developing countries, € billion



Source: World Bank, *Global Development Finance 2006*.

The largest single recipient of equity flows has been China, which has benefited from a net inflow of €42 billion between 2000 and 2005. The rest of Asia has also attracted considerable investment; South Asia and East Asia excluding China received €31 billion and €18.5 billion respectively over the same period.

## 2 Financial services: a European industry

In this chapter we analyse the wholesale financial services sector in the EU. We describe the structure of the sector within Europe and then investigate the extent to which the sector is integrated across the bloc.

### 2.1 The importance of European wholesale finance

The European wholesale finance sector has proven important for the EU economy in recent years:

- i. The sector has consistently been more productive than the economy as a whole, raising prosperity, average earnings and living standards.
- ii. Efficient wholesale finance confers a number of external benefits on other sectors in the economy. It lowers the cost of capital, enables firms to invest and expand and allows resources to be directed to areas of greatest economic return.

In this section we estimate the contribution of financial intermediation and wholesale finance to economic output and employment in the EU in order to describe its importance and structure.

#### 2.1.a Wholesale finance economic activity

We first estimate the contribution of wholesale finance to the GDP of the EU. This exercise follows the same methodology as used in the previous chapter to estimate the contribution of wholesale finance to total world economic activity.

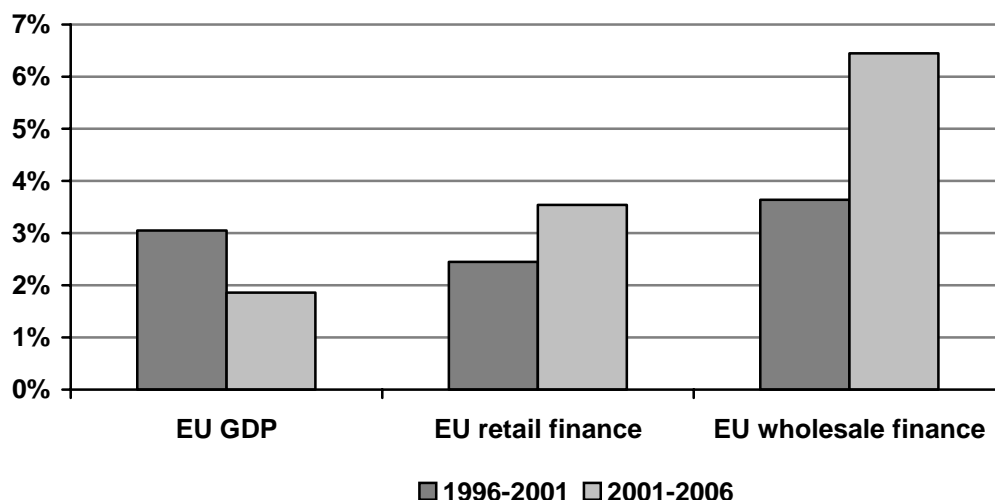
*EU wholesale finance is worth €195 billion*

We estimate that the total contribution of financial intermediation to the EU economy in 2006 was €663 billion. This equates to 5.8% of EU GDP. The contribution of wholesale finance was €195 billion, or 1.7% of EU GDP.

*Wholesale finance accounts for 1.7% of the EU economy*

Figure 2-1 presents growth in EU-25 GDP and the economic output of the retail and wholesale finance sectors over the previous ten years. Between 1996 and 2001 the economic output of the EU-25 grew at 3.1% per year on average. Between 2001 and 2006 growth slowed to an average of 1.9% per annum. Despite this the average annual growth rate in the GVA of wholesale finance has risen from an average of 3.6% per year between 1996 and 2001 to 6.5% per year between 2001 and 2006. This rate of growth is in excess of three times that of the EU economy as a whole over this period.

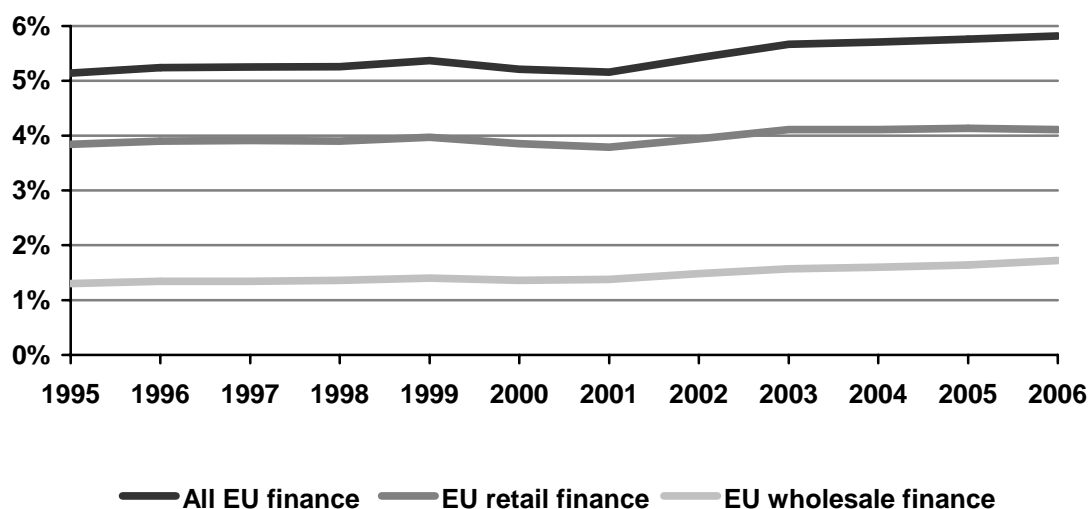
Figure 2-1: Average annual real growth in EU-25 economy and financial sectors



Sources: Eurostat, Groningen Growth and Development Centre, and cebr analysis.

*Wholesale finance expanding at three times the rate of EU economy*

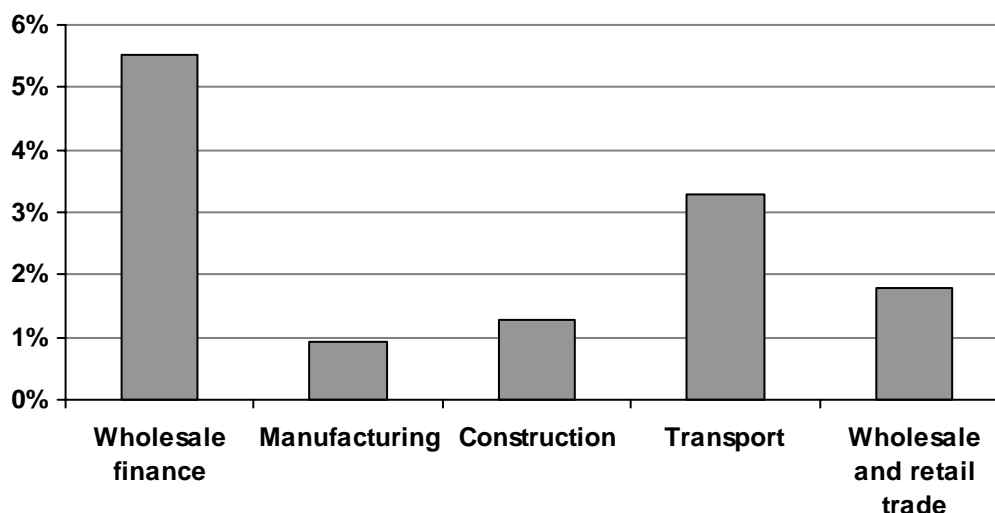
Figure 2-2: Financial intermediation as a share of EU GDP



Sources: Eurostat, Groningen Growth and Development Centre, and cebr analysis.

The growth trend of the finance sector and above all wholesale finance is presented in Figure 2-2, which tracks the decline in the percentage contribution of financial intermediation to EU GDP between 1999 and 2001 and the subsequent rise. This reinforces the data presented in the first chapter which pointed to strong performance in EU finance over this period. The rapid growth of wholesale finance in the EU has been driven by the boom of innovative financial markets – such as hedge funds, private equity and derivatives – and large inflows of liquidity from emerging and commodity producing nations. The Euro has also contributed to this performance by assisting the integration of EU financial markets.

**Figure 2-3: Average annual real growth in economic output of selected industries in EU-25, 2000-2005**



Source: Eurostat and cebr analysis.

The GVA of wholesale finance in the EU grew rapidly between 2000 and 2005, expanding by an average of 5.5% per year. This compares favourably with other major EU sectors such as transport and wholesale and retail trade, which expanded by 3.3% and 1.8% per year respectively. The growth in output of the manufacturing and construction industries has been sluggish, with output expanding by an average of 0.9% and 1.3% per year respectively over the period. Whilst wholesale finance has grown at a much faster pace than the more established industries, its contribution to GDP in 2005 was only €181 billion compared to €1,110 billion in wholesale and retail trade and €1,677 billion in manufacturing.

Table 2-1 presents estimates for wholesale finance's contribution to GDP in each of the EU's Member States<sup>5</sup>.

*UK contributes over one third of EU wholesale finance activity*

In 2006 the UK wholesale finance sector was worth €73.3 billion. Its share of EU wholesale finance expanded from 31.0% in 2001 to 37.6% in 2006 with GVA expanding at an average of 10.5% per year over this period.

---

<sup>5</sup> The emphasis of this report is on the European wholesale financial sector rather than London as in 'The City's Importance to the EU Economy 2005'. We have therefore based our estimates on Eurostat data rather than on data from the UK's Office for National Statistics as was done in the 2005 edition of this report.

**Table 2-1: Estimates of wholesale finance contribution to GDP at 2006 constant prices, € billion**

	1996	2001	2006	Country share of EU wholesale finance, 2006	Wholesale finance as share of country GDP, 2006
Austria	1.6	1.6	1.9	1.0%	0.7%
Belgium	5.2	6.9	8.3	4.3%	2.7%
Cyprus	0.1	0.2	0.3	0.1%	1.9%
Czech Rep.	0.2	0.3	0.3	0.2%	0.3%
Denmark	1.2	1.5	2.1	1.1%	0.9%
Estonia	0.0	0.1	0.2	0.1%	1.3%
Finland	0.6	0.5	0.5	0.3%	0.3%
France	16.2	18.0	21.3	10.9%	1.2%
Germany	26.6	26.0	31.5	16.2%	1.4%
Greece	0.8	1.3	2.1	1.1%	1.1%
Hungary	0.2	0.3	0.4	0.2%	0.4%
Italy	12.4	14.7	15.7	8.0%	1.1%
Ireland	1.8	2.9	4.9	2.5%	2.8%
Latvia	0.0	0.0	0.0	0.0%	0.3%
Lithuania	0.0	0.0	0.0	0.0%	0.1%
Luxembourg	2.8	4.4	5.3	2.7%	16.3%
Malta	0.0	0.0	0.0	0.0%	0.2%
Netherlands	6.5	8.1	10.7	5.5%	2.0%
Poland	0.1	0.2	0.4	0.2%	0.2%
Portugal	0.5	0.7	0.9	0.5%	0.6%
Slovakia	0.0	0.0	0.1	0.0%	0.2%
Slovenia	0.3	0.5	0.8	0.4%	2.6%
Spain	4.6	8.4	12.1	6.2%	1.2%
Sweden	1.5	1.8	2.1	1.1%	0.7%
UK	36.2	44.4	73.3	37.6%	3.9%
<b>EU-25</b>	<b>119.4</b>	<b>142.7</b>	<b>195.1</b>	<b>100.0%</b>	<b>1.7%</b>

Sources: Eurostat, Groningen Growth and Development Centre, and cebr analysis.

The rapid expansion in the UK wholesale finance sector can be attributed to a number of factors including the increasing number of international companies choosing to list on the London Stock Exchange and the strength

of the fund management market. During 2006 there were 91 international companies that chose to list in London, compared with 22 in New York<sup>6</sup>.

In the UK the wholesale financial sector contributed 3.9% of GDP in 2006. This is the highest of all EU Member States with the exception of Luxembourg where the proportion is 16.3%. The EU's second largest market for wholesale finance is in Germany with a contribution of €31.5 billion to the economy in 2006. The German wholesale finance sector has grown by an average of 4.0% per year between 2001 and 2006. It performed poorly, however, between 1999 and 2001 as a result of the dot com crash and its contribution to GDP has still not exceeded the 1999 level of €31.6 billion.

There has been rapid growth in the wholesale finance markets of a number of the nations that have recently acceded to the EU. The contribution of wholesale finance to the GDP of Estonia, Slovakia and Poland has grown by 23.9%, 17.3% and 13.0% per year respectively between 2001 and 2006. These three markets, however, remain in their infancy, with their combined economic output comprising just 0.3% of the EU wholesale finance total.

*EU wholesale finance GVA increased by 7.6% in 2006*

Overall, the wholesale finance industry in the EU performed strongly in 2006, with GVA expanding by 7.6%. The contribution of wholesale finance to EU GDP has risen from 1.6% in 2005 to 1.7% in 2006.

### **2.1.b Number of jobs in wholesale finance**

No pan-European data exists on the number of jobs in the wholesale finance sector. As with the contribution to GDP of wholesale finance; we estimate the figures from aggregated data on the number of jobs in financial intermediation published by Eurostat. This data includes both wholesale and retail finance; we estimate the share of wholesale finance jobs in financial intermediation using three benchmarking techniques:

- i. The first benchmarking technique is identical to that used to estimate wholesale finance economic activity. We assume similar rates of productivity in retail finance across the EU<sup>7</sup> and then benchmark the ratio of the number of finance jobs to all jobs in the economy for each country against the ratio for all other Member States.
- ii. According to Eurostat, financial intermediation accounts for 23% of Luxembourg's GDP. In the second benchmarking technique, we first estimate 80% of all finance jobs in Luxembourg to be in wholesale finance and then take this ratio of wholesale jobs to total jobs in Luxembourg as a benchmark for other countries. We estimate wholesale finance to equal 18% of the whole economy.

---

<sup>6</sup> PricewaterhouseCoopers, *IPO Watch Europe Survey*, 2006.

<sup>7</sup> This is legitimate given that retail finance is largely bank accounts, credit cards and personal loans and corporate loans, the price and profits on which are largely governed by central bank interest rates and inter-bank lending and borrowing (which is wholesale finance). Therefore, the productivity differences in retail finance are limited across countries.

- iii. We take our estimate for wholesale finance jobs in the UK as a benchmark for all other countries. These estimates are reported in cebr's regular publication "Quarterly Business Forecasts – London" most recently published in October 2006.

This benchmarking process produced three estimates for the proportion of all financial intermediation jobs that can be classified as wholesale. By combining these figures with insights gathered from other economic information we arrived at final estimates for the number of jobs in the wholesale finance sector. The additional information we bought into this process included:

- i. the output share of wholesale finance in the country's economy;
- ii. the number of jobs in all finance;
- iii. the ratio of jobs and output between wholesale and retail finance;
- iv. productivity;
- v. data on finance jobs numbers in financial clusters such as Frankfurt, Luxembourg, London, Madrid and Paris.

Table 2-2 details our wholesale finance employment estimates for each Member State of the EU-25. In 2006 there were a total of 1.116 million people employed in the wholesale finance sector in the EU. This is 0.6% of the total workforce. There were 6.092 million people employed in financial intermediation, or 3.0% of the EU workforce.

*Nearly a third of EU wholesale finance jobs are in the UK*

The UK has the greatest number of employees in the wholesale finance sector with 352,900 jobs in 2006, which accounts for 31.6% of the EU total. The second largest employer is Germany with 198,000 jobs; the German wholesale finance sector has lost 9,000 jobs since 2000 although strong productivity growth has enabled the sector's GVA to rise. This pattern has been repeated in a number of established financial centres in the EU such as Belgium, the Netherlands and Italy where the number of jobs has fallen by 10.6%, 3.9% and 3.2% respectively between 2000 and 2006.

Table 2-2: Jobs in wholesale financial services in the EU, thousands

	Jobs in wholesale finance, 2000	Jobs in wholesale finance, 2003	Jobs in wholesale finance, 2006	Annual job growth 2000-2003	Annual job growth 2003-2006
Austria	16.4	15.4	16.0	-2.2%	1.3%
Belgium	44.7	41.9	40.0	-2.2%	-1.6%
Cyprus	2.4	2.5	2.7	1.9%	2.6%
Czech Rep.	9.1	8.7	8.3	-1.4%	-1.5%
Denmark	12.4	12.5	12.6	0.3%	0.2%
Estonia	2.8	2.7	3.2	-1.1%	5.9%
Finland	7.3	7.2	7.3	-0.5%	0.8%
France	108.1	106.1	109.6	-0.6%	1.1%
Germany	207.0	208.0	198.0	0.2%	-1.6%
Greece	16.4	15.7	18.7	-1.4%	6.1%
Hungary	11.0	9.6	10.6	-4.4%	3.2%
Italy	93.9	94.2	90.9	0.1%	-1.2%
Ireland	18.5	19.1	23.6	1.0%	7.3%
Latvia	1.1	1.3	2.0	5.1%	17.5%
Lithuania	1.1	1.3	1.5	0.6%	4.2%
Luxembourg	10.7	11.9	10.8	3.6%	-3.4%
Malta	0.2	0.2	0.2	-4.4%	1.6%
Netherlands	65.2	62.7	62.6	-1.3%	-0.1%
Poland	14.7	13.7	15.7	-2.2%	4.5%
Portugal	12.8	11.5	13.6	-3.6%	5.8%
Slovakia	3.3	3.6	4.4	3.3%	6.5%
Slovenia	8.0	8.2	8.7	0.8%	2.1%
Spain	77.1	75.4	86.3	-0.7%	4.6%
Sweden	15.0	17.1	15.5	4.5%	-3.2%
UK	348.6	326.2	352.9	-2.2%	2.7%
<b>EU-25</b>	<b>1,107.9</b>	<b>1,076.6</b>	<b>1,115.5</b>	<b>-1.0%</b>	<b>1.2%</b>

Sources: Eurostat and cebr analysis.

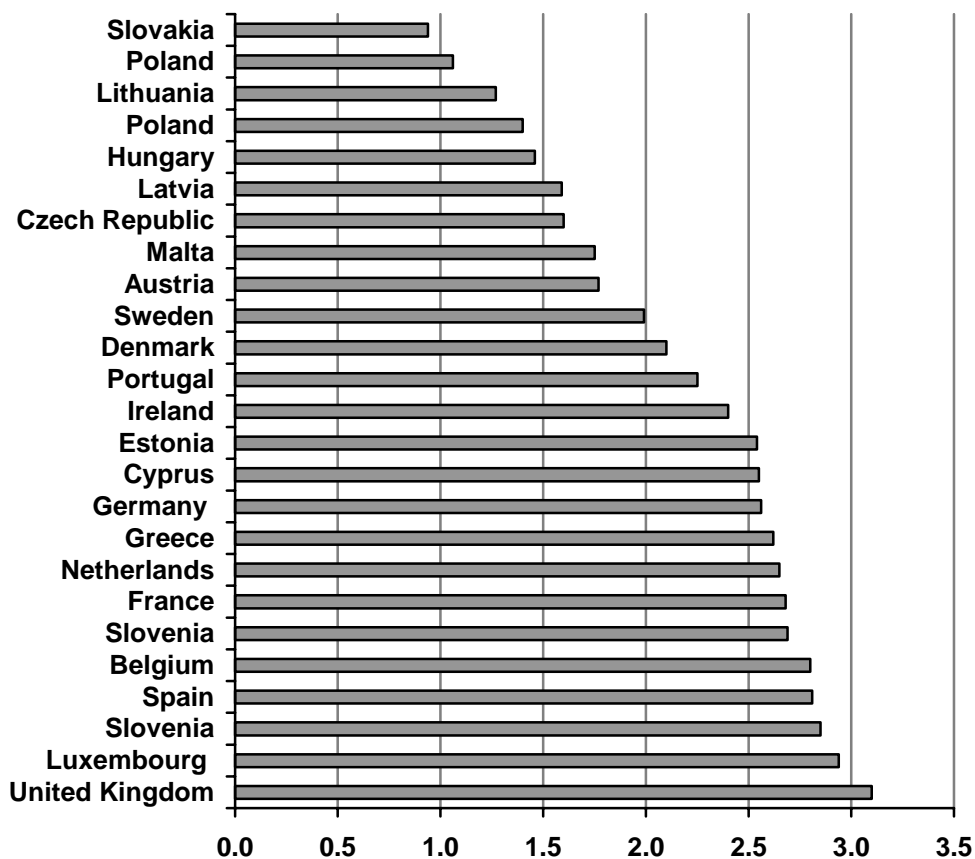
In the EU-25 the total number of jobs in wholesale finance fell by 2.9% between 2000 and 2003 as a consequence of the dot com bust and the world economic slowdown. Since then 38,900 jobs have been added to the sector, an increase of 3.6%. The largest contributions to this increase came from Spain and the UK, which were responsible for 10,900 and 26,700 additional jobs respectively between 2003 and 2006. Using these estimates for GVA and jobs in EU wholesale finance we calculate the productivity in the sector across the EU.

### *Wholesale finance almost three times as productive as economy*

By measuring productivity as the ratio of GVA to the number of jobs we calculate that, across the EU, average output per worker was €56,800 in 2006. For financial intermediation as a whole the equivalent measure was €108,800 per job. Productivity in the wholesale finance sector was €174,900 per job. This means that finance and wholesale finance have a disproportionately large contribution to the economy of the EU.

Figure 2-4 presents the ratio of the productivity of wholesale finance to the productivity of the whole economy. This measures the relative productivity of the wholesale finance sector when compared with the productivity of the economy as a whole for each of the 25 Member States of the EU. In 2006 the UK overtook Luxembourg to have the most productive wholesale finance sector relative to the economy. Due to the strong performance of wholesale finance in recent years, it is now 3.10 times more productive than the economy wide average. Luxembourg and Slovenia remain highly productive relative to their economies although this figure masks output per worker in Luxembourg being almost five times higher than that in Slovenia. Relative productivity in Spanish wholesale finance has risen from 1.92 in 2000 to 2.81 in 2006.

**Figure 2-4: Productivity in wholesale finance: ratio of wholesale finance output per job as a ratio of GDP across all industries in the economy, 2006**



Source: Eurostat and cebr analysis.

## 2.2 The integration of the European wholesale finance sector

Having analysed the performance of the EU wholesale finance sector, in the following section of the report we assess the degree to which it is integrated across the EU.

In March 2000, the Lisbon European Council presented a ten year strategy to build:

*"The most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth, with more and better jobs and greater social cohesion."*

In numerical terms, the two primary long-term goals are real economic growth of 3% per annum and an employment rate of 70%. The array of economic and social reforms proposed to achieve these goals by 2010 is known as the *Lisbon Agenda*. These wide ranging measures include the phasing out of state aid for uncompetitive industries, increased R&D expenditure, greater investment in human capital and a single competitive market for services; in the image of the single market for goods which was enacted in 1992.

The implementation of the *Lisbon Agenda* on the finance industry is founded upon the regulatory changes contained within the FSAP. Chapter 5 sets out this legislation in greater detail. Many of the articles contained in the plan are designed to break down the cross-border barriers to competition in EU wholesale financial services, creating a single integrated market.

### 2.2.a How integrated is the EU's financial sector?

We assess the integration of EU wholesale finance by analysing links between different branches of the sector, and by assessing whether and how these links are changing over time.

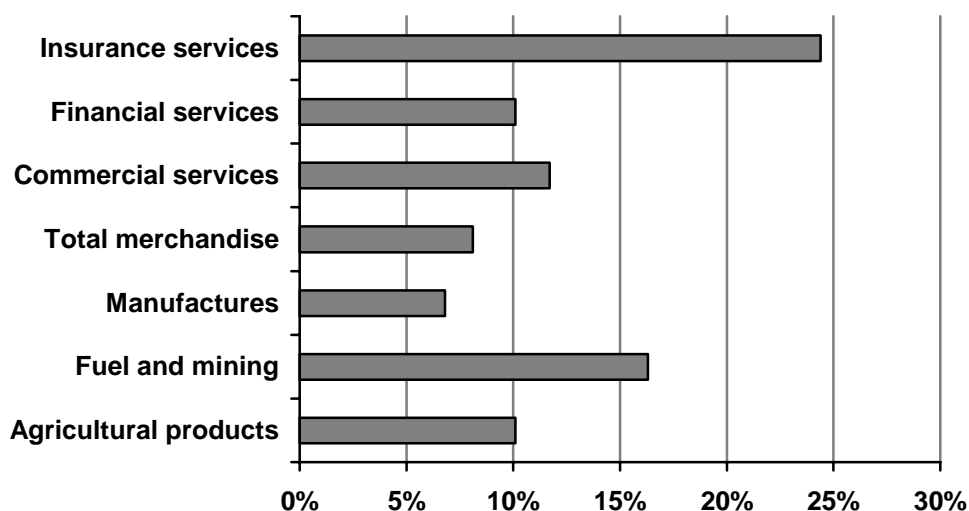
*Intra-EU trade in finance and insurance growing at 14% per year*

The World Trade Organisation figures we analysed in Chapter 1 showed rapid expansion in world trade, with growth in the value of exports increasing by an average of 10% per year between 2000 and 2005. It is easy to attribute the expansion to the rise of China, India and the Asia Pacific region. There has, however, also been a substantial contribution from increased levels of trade between EU Member States.

Figure 2-5 presents the trends in intra-EU trade over this period. The strongest performer was the insurance services sector where the value of trade expanded by an average of 24% per year from 2000 to 2005. This sector benefited from the surge in insurance cover following the World Trade Center attacks in New York as companies sought to reduce their financial exposure to terrorist actions. The value of trade in the fuel and mining sector has risen by 16% per year, driven by the increase in the prices of primary commodities such as oil and base metals since 2002.

Overall the growth in the value of all intra-EU commercial service exports has outperformed the world-wide export growth levels, expanding by an average of 12% per year compared to 10% between 2000 and 2005. Total growth in intra-EU merchandise exports has not performed as strongly, expanding by 8% per year in comparison to 10% average world-wide merchandise export growth.

**Figure 2-5: Average annual growth in intra-EU 25 trade between 2000 and 2005**



Sources: World Trade and Organisation for Economic Co-operation and Development.

As part of the monitoring of progress towards the *Lisbon Agenda*, the European Central Bank publishes statistics on the integration of wholesale finance in the EU. These figures cover a range of areas, including the money, bond, equity and banking markets.

The European Central Bank's analysis is based on two types of measure. Quantity indicators assess the volume of interactions between financial sectors in EU Member States, specifically analysing the proportion of an institution's activity that occurs outside their domestic market. Price indicators test the degree of cross-border competition between EU Member States. Under a perfect single market there would be no dispersion in costs for commoditised goods and services across the EU; all would have access to the lowest cost provider.

### 2.2.b Equity markets

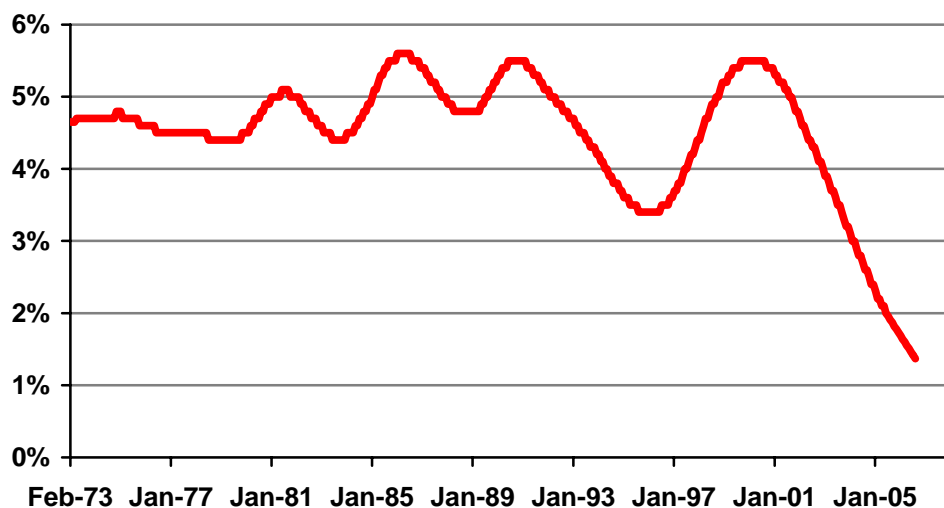
Figure 2-6 presents information on a price indicator in EU equity markets, showing the percentage dispersion of dividend yields on equities listed in different EU Member States. From February 1973 until the launch of European Monetary Union on January 1<sup>st</sup> 2002 the dispersion averaged 4.7%. Since then, it has averaged 2.9%. The recent trends since 1997 show a peak of 5.0% dispersion in 2000. A key force driving this peak was the dot com crash in

1999, which led to higher variability in company profits and so dividend payments.

*Declining variation in equity market returns across EU countries*

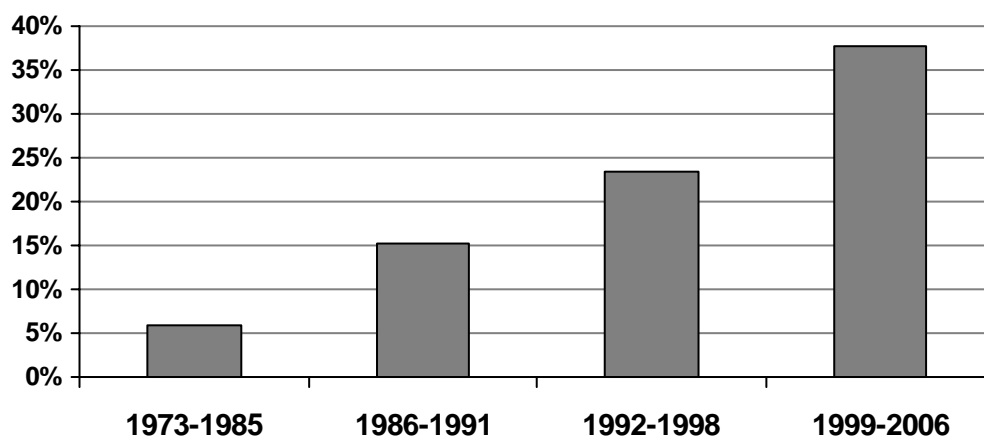
Since 2000 the dispersion of equity returns has continually retreated, and reached a record low of 1.37% in September 2006, the most recent data available.

**Figure 2-6: Dispersion of equity market returns in the EU**



Source: European Central Bank.

**Figure 2-7: Proportion of change in local equity returns explained by euro area-wide events**



Source: European Central Bank.

Figure 2-7 depicts a further measure of geographical integration of equity markets, measuring the response of equity returns in individual Member States to euro-area wide events. Between 1973 and 1985 it was estimated that 5.9% of changes in local equity market returns were caused by common euro-area events. Between 1999 and 2006 this figure had risen to 37.8%. The data suggests that EU equity markets are becoming more integrated, as returns are increasingly driven by events which have an impact across the bloc.

### **2.2.c Banking markets**

A measure of the degree of geographical integration of the banking sector is the proportion of total assets of credit institutions in a country that are held by subsidiaries of credit institutions from other countries. Table 2-3 shows that the total assets of credit institutions held in the EU have risen from €24.7 trillion in 2001 to €32.9 trillion in 2005, an increase of 33%. The value of these assets that are held by subsidiaries of banks based in other EU Member States has increased from €1.9 trillion to €3.2 trillion over the period. This comparative increase of 68% indicates that the intra-EU dispersion of capital by credit institutions is increasing as a proportion of all assets. The reason for this is the increased levels of cross-border activity and competition by banks within the EU.

The pattern of credit institution holdings between countries shows a divide between the states with large domestic markets and established financial centres, and the smaller and emerging nations in the EU. Credit institutions in the former have a tendency to hold the bulk of their assets domestically; whilst the latter have large shares of capital held primarily in subsidiaries within other EU states.

The three nations where the greatest value of credit institution assets held in 2005 were the UK, Germany and France with holdings of €8.3 trillion, €6.8 trillion and €5.1 trillion respectively. Less than 10% of these assets are owned by banks from other EU nations. In the UK, only 3.8% of bank assets are owned by EU credit institutions; although 8.8% of assets are owned by institutions outside the EU, due to the status of London as a world financial centre.

The bulk of EU states only hold a small amount proportion of assets that are owned by credit institutions from non EU nations. Exceptions to this rule include the Czech Republic, Ireland and Poland. This can likely be attributed to historic international ties with non-EU countries such as Russia in the case of the Czech Republic and Poland and the USA in the case of Ireland.

**Table 2-3: Ownership of credit institutions' assets, € billion**

	Assets of subsidiaries of credit institutions from EU countries, 2001	Total assets of credit institutions, 2001	Assets of subsidiaries of credit institutions from EU countries, 2005	Total assets of credit institutions, 2005	Share of EU ownership other than domestic country, 2005	Share of all foreign ownership other than domestic country, 2005
Austria	103	573	134	721	18.6%	19.1%
Belgium	146	776	193	1,055	18.3%	18.6%
Cyprus	4	36	12	60	20.4%	<sup>b</sup>
Czech Rep.	43	78	83	105	79.5%	84.2%
Denmark	58	454	103	722	14.3%	15.8%
Estonia	4	4	11	12	89.4%	89.4%
Finland	1	163	124	235	52.9%	52.9%
France	299	3,770	394	5,090	7.7%	8.7%
Germany	111	6,269	549	6,827	8.0%	9.1%
Greece	28 <sup>a</sup>	203	49	281	17.6%	17.6%
Hungary	22	39	42	75	55.8%	55.8%
Italy	20	1,852	96	2,509	3.8%	4.0%
Ireland	146	422	235	942	24.9%	33.3%
Latvia	2	7	8	16	50.1%	53.2%
Lithuania	2	4	10	13	74.8%	74.8%
Luxembourg	507	721	563	792	71.1%	76.2%
Malta	7	14	9	27	32.4%	<sup>b</sup>
Netherlands	97	1,266	151 <sup>a</sup>	1,698	9.0% <sup>a</sup>	10.2% <sup>a</sup>
Poland	81	133	88	152	57.8%	66.2%
Portugal	68	352	59	360	16.4%	17.2%
Slovakia	15	22 <sup>b</sup>	27	36	75.2%	<sup>b</sup>
Slovenia	3	18	6	30	20.7%	20.7%
Spain	49	1,248	82	2,151	3.8%	4.1%
Sweden	2	452	2	653	0.3%	0.6%
UK	72	5,830	315	8,320	3.8%	12.6%
<b>EU-25</b>	<b>1,880</b>	<b>24,686</b>	<b>3,195</b>	<b>32,882</b>	<b>9.7%</b>	<b>12.9%</b>

Source: European Central Bank.

<sup>a</sup> Figure is for 2004.

<sup>b</sup> Data not provided because number of subsidiaries is less than three.

Over the EU as a whole there is evidence that the level of integration in the banking sector has risen, with the overall proportion of assets held, that are owned by credit institutions from other EU states increasing from 7.6% in 2001 to 9.7% in 2005.

Further evidence of EU banking integration is provided by looking at the consolidation in the sector. Between 2001 and the first half of 2006 there were a total of 566 mergers and acquisitions in the EU financial sector. The number of credit institutions in the EU has fallen by 10.9% since 2001 leaving only 8,700 firms in the EU at the end of 2005. The merger activity has been centred on the larger economies of the UK, Spain, Portugal, France, Germany and Poland; consolidation in Italy has been particularly aggressive with 188 banking mergers and acquisitions since 2001.

The scale of consolidation indicates that competition in the industry is increasing, forcing smaller and less efficient firms to restructure.

*30% of EU banking mergers are cross-border within the EU*

Of these 566 mergers and acquisitions within the EU, 359 or 63%, were domestic, 167 or 30%, were cross-border within the EU and 40 or 7%, were cross-border involving countries outside the EU. The structure of the merger and acquisition activity across the EU is shown in Table 2-4.

Table 2-4: Number of mergers and acquisitions in the EU banking sector between 2001 and 2006<sup>a</sup>

	Domestic	Intra-EU	Other countries	Total
Austria	7	3	1	11
Belgium	9	6	0	15
Cyprus	0	1	0	0
Czech Rep.	2	8	0	10
Denmark	5	6	2	10
Estonia	0	5	0	5
Finland	3	2	0	5
France	27	5	2	34
Germany	54	12	2	68
Greece	7	4	0	11
Hungary	7	6	1	14
Italy	142	38	8	188
Ireland	2	4	0	6
Latvia	0	6	5	11
Lithuania	0	3	1	4
Luxembourg	11	6	1	18
Malta	0	0	0	0
Netherlands	6	4	2	12
Poland	14	14	1	29
Portugal	11	10	3	24
Slovakia	2	8	0	10
Slovenia	2	7	0	9
Spain	22	8	3	33
Sweden	3	1	1	5
UK	23	3	7	33
<b>EU-25</b>	<b>359</b>	<b>167</b>	<b>40</b>	<b>566</b>

Source: European Central Bank, *Banking Structures 2006*.

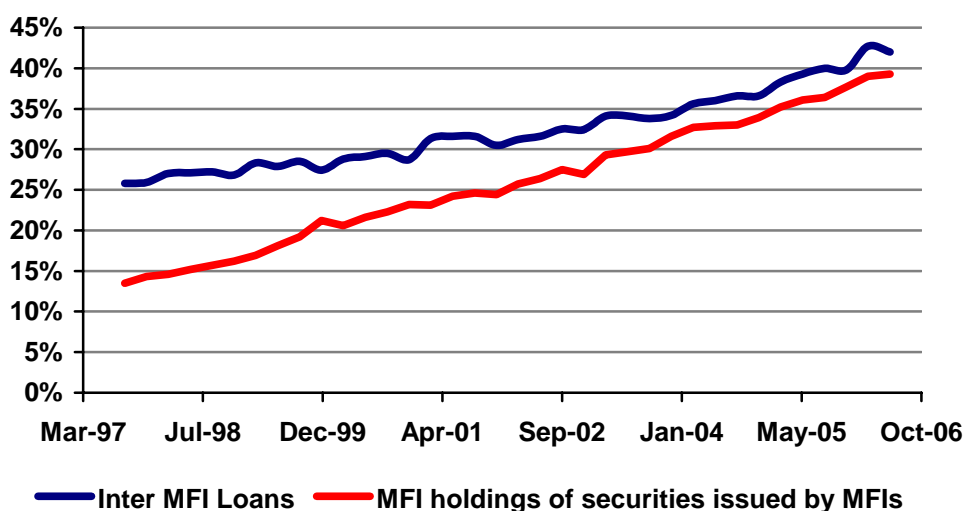
<sup>a</sup> data covers the first half of 2006 only.

Analysing the geography of ownership of credit institutions assets and the number of cross-border mergers and acquisitions only tells one part of the story on the extent to which the EU financial sector is integrated. The second part is the degree to which banks on different sides of borders deal with each other.

Figure 2-8 shows that the proportion of EU inter-bank loans which are cross-border within the EU has risen from 26% in September 1997 to 42% in June 2006. The proportion of securities held from non-domestic EU banks has risen even more markedly over this period. The figure stood at 13.5% in September of 1997 and had increased to 39.3% by June 2006.

*42% of inter-bank EU loans are cross-border*

**Figure 2-8: Cross-border EU inter-monetary financial institutions (MFI) loans and security holdings as a share of all MFI loans and security issues in the EU**



Source: European Central Bank.

The number of cross-border inter-bank transactions has also grown sharply in recent years. In January 1999 the European Central Bank launched TARGET, the *Trans-European Automated Real-Time Gross Settlement Express Transfer System*. This is the interbank payment clearing system that links up all the interbank clearing systems in the euro area and also euro payments made on other systems such as CHAPS in the UK, EURO-RIX in Sweden and Kronos in Denmark. It is the main interbank channel for unsecured trades.

In 2001 the average monthly number of payments that passed through the TARGET system was 4.9 million. This increased to 6.8 million in 2006. Of these payments 1.0 million or 19.5% were *cross-border* payments in 2001. By 2006 the proportion had risen to 23.1% which translates to a monthly average of 1.6 million. In many EU nations the inter-bank payment transfer system is used primarily for the purpose of *cross-border* payments, for example in Denmark, Poland, Sweden and Great Britain. The proportion of *cross-border* inter-bank payments would be significantly higher were it not for the large number of domestic payments made by the RTGSplus Germany system; 51% of all domestic EU payments are based in Germany.

Table 2-5: Number of inter-bank payments (transactions)<sup>a</sup>

Inter-bank clearing system	Cross-border monthly average, 2001	Cross-border monthly average, 2006	Average annual growth in cross-border transactions, 2001-2006	Domestic transactions, 2006	Share of cross-border transactions to all transactions, 2006
Artis Austria	36,326	45,021	4.4%	227,487	16.5%
Ellips Belgium	78,399	75,405	-0.8%	64,884	53.8%
Kronos Denmark <sup>b</sup>	8,308	9,042	1.7%	667	93.1%
EPM European Central Bank	1,292	3,269	20.4%	NA	NA
BOF-RTGS Finland	8,697	13,241	8.8%	12,407	51.6%
TBF France	112,379	203,325	12.6%	175,472	53.7%
RTGSplus Germany <sup>c</sup>	311,471	428,079	6.6%	2,698,502	13.7%
HERMES Greece	18,668	26,830	7.5%	97,630	21.6%
BI-REL Italy	112,897	172,540	8.9%	713,127	19.5%
IRIS Ireland	19,742	39,886	15.1%	59,679	40.1%
LIP-Gross Luxembourg	19,321	38,866	15.0%	12,901	75.1%
TOP Netherlands	42,315	71,058	10.9%	307,505	18.8%
Sorbnet Poland	NA	1,771	NA	656	73.0%
SGPT Portugal	19,278	18,338	-1.0%	70,408	20.7%
SLBE Spain	26,032	83,941	26.4%	699,533	10.7%
EURO-RIX Sweden	5,512	5,714	0.7%	1,193	82.7%
CHAPS Great Britain <sup>d</sup>	137,645	342,092	20.0%	120,774	73.9%
<b>TARGET Total</b>	<b>958,282</b>	<b>1,578,418</b>	<b>10.5%</b>	<b>4,800,424</b>	<b>23.1%</b>

Source: European Central Bank.

<sup>a</sup> All 2006 averages are calculated excluding November and December figures. Data is for clearing systems participating in or connected to TARGET, the European Central Banks main clearing system. Target total includes CHAPS Great Britain.

<sup>b</sup> Clearing system was called DEBES in 1999.

<sup>c</sup> Clearing system was called ELS in 1999.

<sup>d</sup> CHAPS UK in 1999.

### 3 The European Union's wholesale financial markets

In this chapter, we focus on the different wholesale financial markets in the EU in order to identify the geographical distribution of these markets across the bloc.

#### 3.1 The banking market

This section analyses the international banking market by studying data on the scale of the European banking industry and linkages between banks within the EU.

Table 3-1 below presents the main findings from *The Banker's* 2004 and 2005 'Top 300 European Banks'<sup>8</sup>. Although it has a smaller economy than Germany, the UK has the largest share of Europe's tier one capital, ahead of Germany and France. Spain has been increasing its share as a result of the success of its banks and their acquisitions<sup>9</sup>. Spain has a larger share of Europe's tier one capital than Italy, despite the latter's larger economy.

**Table 3-1: The EU's biggest banks by tier one capital and country of incorporation, 2002 -2004**

	Share of top 300, 2002	Share of top 300, 2003	Share of top 300, 2004
UK	19.6%	18.6%	18.0%
Germany	17.6%	16.3%	15.4%
France	14.0%	14.8%	14.7%
Benelux	11.3%	11.6%	11.5%
Spain	8.1%	8.6%	9.4%
Italy	8.4%	8.5%	8.4%
Switzerland	6.7%	6.6%	6.5%
Scandinavia	5.9%	5.8%	6.1%
Austria	1.4%	1.5%	1.6%
Others	7.1%	7.7%	8.5%

Source: The Banker – *Top 300 European Banks 2005*.

European banks compete internationally in terms of scale. Of the world's top ten banks by tier one capital, four are based in Europe. These are, (with rankings in parenthesis): HSBC (2) in the UK, Credit Agricole (6) in France, the Royal Bank of Scotland (7) in the UK and Santander Central Hispano (10) in

---

<sup>8</sup> *The Banker*, 2004 and 2005.

<sup>9</sup> For example Banco Central Hispano Santander bought the UK's Abbey in 2005.

Spain. The remainder of the top ten comprises three banks from the United States of America and three from Japan<sup>10</sup>.

**Table 3-2: Bank assets held in countries other than the home country, € billion current prices**

	2001	2006 <sup>a</sup>	Growth 2001-2006
Austria	111	252	128%
Belgium	345	620	80%
Denmark	70	108	53%
Finland	38	58	52%
France	759	1,701	124%
Germany	1,181	1,967	67%
Greece	NA	48	NA
Ireland	200	520	159%
Italy	206	333	62%
Luxembourg	565	665	18%
Netherlands	384	712	85%
Portugal	57	81	42%
Spain	167	329	97%
Sweden	71	181	153%
Switzerland	802	862	8%
UK	2,453	3,739	52%

Source: Bank for International Settlements.

<sup>a</sup> 2006 data is based upon average levels for the first and second quarters of 2006.

The Bank for International Settlements data presented in Table 3-2 shows rapid growth in the value of European bank assets that are held non-domestically. The total value of which, for the 16 major European nations, rose from €7.4 trillion in 2001 to €12.1 trillion in 2006. The European nation with the largest non-domestic bank holdings is the UK, with €3.7 trillion held off-shore in 2006. This represents 31% of all EU non-domestic bank assets total.

### 3.2 The equity market

*Domestic market capitalisation of EU exchanges is €10.8 trillion*

The domestic market capitalisation of the equities listed on EU exchanges that are registered with the World Federation of Exchanges stood at €10.8 trillion in 2006. This represents 24.2% of domestic market capitalisation of all registered stock exchanges.

<sup>10</sup> The Banker, *Top 1000 World Banks*, 2006.

The London Stock Exchange is Europe's largest with 28.1% of total EU domestic market capitalisation. It is closely followed by the four Euronext exchanges (Brussels, Amsterdam, Lisbon and Paris) which account for a further 27.5%. The market capitalisation of the Euronext exchanges has grown by 82.0% since 2002; so despite London's expansion of 54.3% over the period it is set to lose top position in terms of market capitalisation if these trends continue. Other major European exchanges include *Deutsche Börse*, with 12.2% of the total EU market capitalisation. The BME Spanish Exchanges and *Borsa Italiana* account for 9.8% and 7.6% of market capitalisation respectively.

**Table 3-3: Domestic stock market capitalisation (equities)<sup>a</sup>, € billion**

	End of 1996	End of 2006	Annual percentage change, 1996-2006	Domestic market capitalisation as a ratio of GDP, 2006
Athens Exchange	18.6	166.8	25%	86%
BME Spanish Exchanges	189.8	1,059.5	19%	109%
Borsa Italiana	202.1	822.1	15%	56%
Budapest Stock Exchange	-	23.0	-	38%
Copenhagen Stock Exchange	56.0	182.8 <sup>c</sup>	13%	83%
Deutsche Börse	523.7	1,311.5	10%	57%
Euronext <sup>b</sup>	870.8	2,969.8	13%	107%
Irish Stock Exchange	27.4	130.8	17%	75%
Ljubljana Stock Exchange	0.7	12.2	33%	41%
London Stock Exchange	1,293.6	3,038.8	9%	160%
Luxembourg Stock Exchange	25.5	63.7	10%	-
Malta Stock Exchange	0.3	3.6	27%	75%
OMX Helsinki Stock Exchange	49.3	263.4 <sup>c</sup>	18%	157%
OMX Stockholm Stock Exchange	189.3	453.3 <sup>c</sup>	9%	149%
Warsaw Stock Exchange	6.6	119.2	34%	45%
Wiener Börse	26.5	154.4	19%	60%
<b>Total of these stock exchanges</b>	<b>3,480.2</b>	<b>10,785.3</b>	<b>12%</b>	<b>95%</b>

Source: World Federation of Exchanges.

<sup>a</sup> Domestic stock market capitalisation is the market capitalisation of listed companies incorporated in the same country as the stock exchange.

<sup>b</sup> Euronext comprises Amsterdam SE, Brussels SE, Lisbon SE and Paris SE which joined in 2000.

<sup>c</sup> OMX exchanges in Copenhagen, Helsinki and Stockholm merged in 2004 to create OMX Nordic exchange. 2006 figures are estimates based on 2004 shares of market capitalization.

*The London Stock Exchange handles 39% of EU trading*

In terms of trading volumes, London is by far the largest European exchange with the annual average value of stocks traded at €9.5 trillion; more than twice that of the Euronext exchanges and over 39.1% of the EU total. The value of trading on EU exchanges that are members of the World Federation of Exchanges are presented in Table 3-4.

**Table 3-4: Share trading in equities, 1995 and 2005, € billion**

	Total share trading, 1996	Total share trading, 2001	Total share trading, 2006	Foreign company share trading as a ratio of all share trading, 2005
Athens Exchange	10.5	33.9	134.7	1.2%
BME Spanish Exchanges	NA	447.9	2,423.8	1.2%
Borsa Italiana	130.2	567.9	1,993.0	5.9%
Budapest Stock Exchange	NA	4.3	38.7	0.0%
Copenhagen Stock Exchange	46.3	63.4	185.1 <sup>b</sup>	2.3 <sup>c</sup> %
Deutsche Börse	1,030.6	1,275.1	3,423.2	8.7%
Euronext <sup>a</sup>	642.2	1,874.5	4,751.3	4.4%
Irish Stock Exchange	15.0	20.4	102.1	4.8%
Ljubljana Stock Exchange	0.6	1.1	2.6	0.0%
London Stock Exchange	1,794.4	4,049.2	9,469.1	43.9%
Luxembourg Stock Exchange	1.0	0.6	0.3	5.5%
Malta Stock Exchange	0.0	0.0	0.3	0.0%
OMX Helsinki Stock Exchange	27.9	162.1	473.3 <sup>b</sup>	1.9 <sup>c</sup> %
OMX Stockholm Stock Exchange	173.6	344.3	1,005.6 <sup>b</sup>	10.9 <sup>c</sup> %
Warsaw Stock Exchange	7.0	8.8	70.0	1.6%
Wiener Börse	13.6	6.9	102.7	2.1%
<b>Total of these stock exchanges</b>	<b>3,892.9</b>	<b>8,860.4</b>	<b>24,175.8</b>	<b>20.1%</b>

Source: World Federation of Exchanges.

<sup>a</sup> Euronext exchanges include Amsterdam, Brussels, Lisbon and Paris Stock Exchanges.

<sup>b</sup> The OMX Nordic exchanges merged in one in 2006. The individual figures are estimated by applying the 2005 shares to the total OMX trading figure for 2006.

<sup>c</sup> The foreign share for the OMX exchanges in Copenhagen, Stockholm and Helsinki is estimated by applying the 2005 figure for the OMX to the member exchanges.

Total trading levels on these exchanges has risen six fold since 1996. Many of the exchanges were negatively affected by the dot com crash, but there has been rapid growth in trading volumes since.

London is the favourite place for firms to raise funds. Of the 212 initial public offerings in the fourth quarter of 2006, 42% took place in London, 19% on the Euronext exchanges and 14% on *Deutsche Börse*<sup>11</sup>. Of the 31 initial listings of non-European companies on European exchanges in this period, all but one chose London.

### 3.3 The bond market

*EU holds 32% of bonds by value*

The EU holds 32%<sup>12</sup> of the global bond market in 2006 as measured by the value of outstanding bonds held, with its share increasing from 26% in 2001. If we restrict ourselves to international securities, however, it is the world leader, holding 57% of bonds by value.

*EU leads international bond market with 57% of bonds by value*

Table 3-5 presents data on the value of international securities held in the EU; in 2006 this stood at €7.5 trillion. This is a seven fold increase from €1.0 trillion in 2001. The EU has rapidly come to dominate international securities trading capturing 57% of the world market in 2006, up from 44% in 2001. The most significant centres for international bond trading are located in the UK, Germany and the Netherlands; they hold 23.0%, 18.8% and 12.3% of the EU market respectively. International security trading in many EU states has grown from almost nothing in 1996 to become globally significant by 2006. For example the value of international securities held in Spain increased from €20 billion in 1996 to €580 billion in 2006. The equivalent figure for France shows an increase from €150 billion to €810 billion.

EU Members tend to hold a high ratio of international to domestic securities. In the USA 13% of all securities are international; in Japan, which is the world's second largest holder of bonds by value, just 2% are international. The figure for the UK is 66% and for Germany 46%. The average for the EU is 31%.

---

<sup>11</sup> PricewaterhouseCoopers, *IPO Watch Europe Survey*, 2006.

<sup>12</sup> Bank of International Settlements – statistics on securities and syndicated loans.

Table 3-5: EU International debt securities<sup>a</sup>, € billion

	International debt securities, 1996	International debt securities, 2006	Share of EU international securities, 2006	Share of international securities to all country/region debt securities, 2006
Austria	50.9	203.9	2.7%	52%
Belgium	18.5	107.9	1.4%	23%
Cyprus	0.4	7.0	0.1%	NA
Czech Rep.	0.6	5.3	0.1%	7%
Denmark	25.3	68.0	0.9%	18%
Estonia	0.0	1.4	0.0%	NA
Finland	42.0	84.1	1.1%	48%
France	149.9	811.0	10.8%	33%
Germany	101.1	1,412.9	18.8%	46%
Greece	16.5	100.7	1.3%	34%
Hungary	11.4	18.6	0.2%	32%
Ireland	19.6	461.5	6.1%	84%
Italy	50.4	530.5	7.1%	22%
Latvia	0.0	0.9	0.0%	NA
Lithuania	0.1	2.7	0.0%	NA
Luxembourg	28.6	249.3	3.3%	NA
Malta	0.2	0.2	0.0%	NA
Netherlands	183.4	927.8	12.3%	62%
Poland	5.0	27.6	0.4%	24%
Portugal	9.3	54.9	0.7%	30%
Slovakia	0.3	3.1	0.0%	26%
Slovenia	0.3	1.5	0.0%	NA
Spain	20.5	577.6	7.7%	41%
Sweden	80.8	133.7	1.8%	35%
UK	228.0	1,726.8	23.0%	66%
<b>Total EU</b>	<b>1,043.1</b>	<b>7,518.9</b>	<b>100.0%</b>	<b>31%</b>

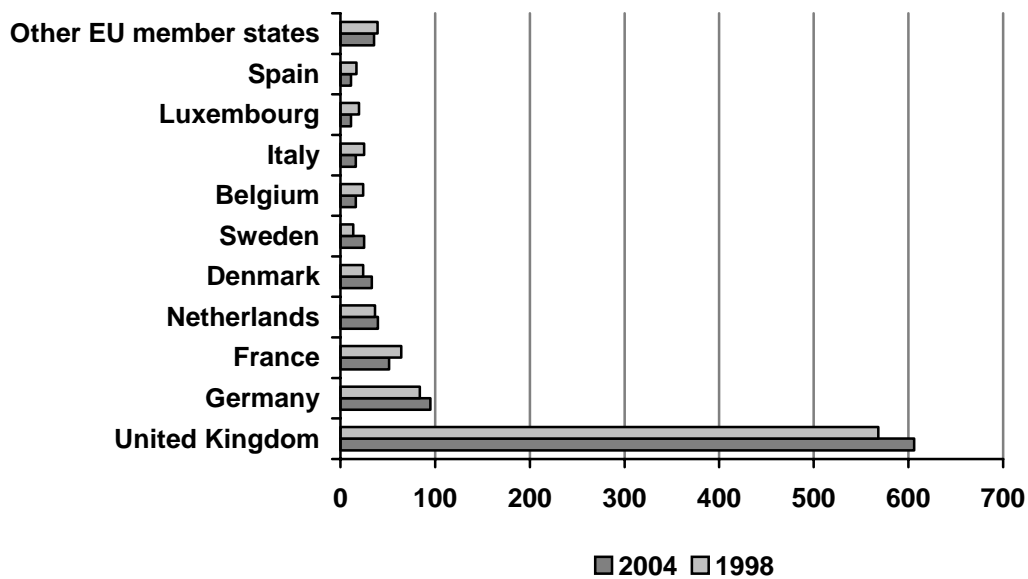
Source: Bank for International Settlements.

<sup>a</sup> Data is annual average amount outstanding by value, 2006 data is based on first two quarters only.

### 3.4 The foreign exchange market

The world foreign exchange market has expanded rapidly, with annual daily turnover increasing from €1,430 billion in 2001 to €2,320 billion in 2006. The UK is the world leader in the foreign exchange trade. In 2006 it controlled 32.4% of the world daily average turnover<sup>13</sup>. The US holds 18.2% of the market, whilst Japan has the third highest daily turnover with 7.6% of the market. The total European share of the market amounts to 60%.

**Figure 3-1: Daily average of foreign exchange turnover net of local inter-dealing double counting, April 2004, € billion**



Source: Bank for International Settlements.

Germany has the second most significant foreign exchange market in the EU, with 10.1% of EU turnover in 2004. It is dwarfed, however, by the UK, which accounted for 65.4% of EU foreign exchange turnover in 2004. Sweden, Denmark and the Netherlands have seen small increases in the quantity of foreign exchange turnover between 1998 and 2004; France has seen a small decline.

### 3.5 The derivatives market

Derivatives fall into two categories: over the counter (OTC) derivatives which are traded directly between two parties; and exchange traded derivatives which are traded through a financial intermediary. In this section we solely concentrate on the former, because OTC derivatives constitute the vast majority of trades and there lacks consistent data on exchange traded derivatives.

<sup>13</sup> International Financial Services, London (IFSL), *Foreign Exchange Bulletin*, October 2006.

### *London places the EU top of the world's derivatives market*

The EU dominates the world over-the-counter derivatives market enjoying 68% of the interest rate derivative market, and 53% of the foreign exchange derivative market in 2004. These two sectors accounted for nearly 90% of global derivatives trades in 2004. London is the world leader in the foreign exchange and interest rate derivatives markets accounting for 35% and 42% of global trades respectively.

Daily average turnover in the EU's interest rate derivatives market rose to €733.1 million in 2004 from €564.9 million in 2001. The UK has consolidated its position as the largest over-the-counter derivatives centre in the EU and also worldwide. The UK traded 62% of EU interest rate derivatives and between 2001 and 2004 accounted for 80% of the growth in EU daily turnover in these types of derivatives. France was another significant contributor to the European growth in this market, accounting for 20% of the increase. On the other hand Germany saw its turnover of such derivatives decline 54% during the same period.

Daily average EU turnover in foreign exchange derivatives rose to €747.4 million in 2004 from €687.0 million in 2001. According to the Bank for International Settlements, most of the EU's foreign exchange derivatives turnover is from London, with two-thirds of Europe's daily turnover originating from the UK. The importance of the London financial cluster in the foreign exchange derivatives market, as with the interest rate derivatives market, increased between 2001 and 2004: the UK contributed to 71% of the growth in EU foreign exchange turnover between 2001 and 2004. Germany, the Netherlands, Denmark and France accounted for a further 20% of the growth.

Whilst no detailed figures have been assembled since 2004, aggregate data points to continued growth in the market. The total value of OTC foreign exchange derivatives outstanding has risen from \$177 trillion in June 2004 to €296 trillion in June 2006<sup>14</sup>. A similar increase has been observed in the interest rate derivatives market, with the total amount outstanding rising from €133 trillion in June 2004 to €210 trillion in June 2006.

Another section of the derivatives market that is becoming increasingly important is the trading of credit derivatives. The hedging of credit can be traced back to the market for US backed mortgage securities in the early 1990s. The market arrived in Europe in the late 1990s and once again London has taken the lead with its annual trading volume estimated to be \$7 trillion at the end of 2006, which represents 40% of the world total<sup>15</sup>.

---

<sup>14</sup> Bank of International Settlements, *Semi-Annual OTC Derivatives Statistics*, 2006.

<sup>15</sup> *Sustaining New York's and the US' Global Financial Services Leadership*, McKinsey Global Institute for New York Mayor Bloomberg and Senator Schumer, January 2007.

**Table 3-6: Over-the-counter foreign exchange and interest rate derivatives daily average turnover <sup>a</sup>, 2004**

	Daily average turnover in foreign exchange derivatives 2004, € million	Share of EU foreign exchange derivatives, 2004	Share of growth in EU foreign exchange derivatives between 2001 and 2004	Daily average turnover in interest rate derivatives, 2004, € million	Share of EU interest rate derivatives, 2004	Share of growth in EU interest rate derivatives between 2001 and 2004
Austria	7.3	1.0%	1.6%	10.9	1.5%	2.3%
Belgium	11.6	1.5%	2.1%	24.6	3.4%	4.0%
Czech Rep.	1.2	0.2%	0.1%	0.5	0.1%	0.1%
Denmark	26.5	3.5%	4.2%	8.7	1.2%	1.2%
Finland	0.9	0.1%	0.0%	0.2	0.0%	-0.1%
France	43.1	5.8%	4.0%	121.8	16.6%	21.2%
Germany	68.1	9.1%	6.1%	34.4	4.7%	-12.6%
Greece	2.6	0.4%	0.1%	0.1	0.1%	0.0%
Hungary	1.7	0.2%	0.6%	0.2	0.1%	0.0%
Ireland	2.2	0.3%	-0.6%	10.0	1.4%	1.6%
Italy	11.9	1.6%	0.8%	30.5	4.2%	3.5%
Luxembourg	9.2	1.2%	0.8%	5.9	2.9%	0.7%
Netherlands	34.1	1.2%	5.4%	15.2	2.1%	-1.3%
Poland	3.7	0.5%	0.4%	0.8	0.1%	0.1%
Portugal	0.7	0.1%	0.0%	0.6	0.1%	0.1%
Slovakia	1.1	0.2%	0.3%	NA	NA	NA
Slovenia	0.0	0.0%	0.0%	NA	NA	NA
Spain	8.2	1.1%	1.5%	9.6	1.3%	-2.1%
Sweden	20.0	2.7%	1.8%	6.0	0.8%	1.0%
UK	493.3	66.0%	70.6%	453.2	61.8%	80.1%
<b>Total EU</b>	<b>747.4</b>	<b>100%</b>	<b>100%</b>	<b>733.1</b>	<b>100%</b>	<b>100%</b>

Source: Bank for International Settlements.

<sup>a</sup> Data is for amounts outstanding as at June of each year.

### 3.6 The funds under management market

Funds under management can be sub-divided into four categories: regulated holdings of pension funds; regulated investment funds; regulated insurance funds; and unregulated holdings of hedge funds. Global regulated funds under management have grown rapidly since the dot com crash, rising from \$36 trillion in 2002 to \$55 trillion in 2005. Of this total, 37% is held in pension funds, 32% in investment funds and 30% in insurance funds.

In the EU, total regulated assets under management stood at €13.1 trillion in 2005. The UK leads Europe in terms of pension fund assets with 60% of private EU funds in 2005, although this statistic is higher than it would be if not for the fact that the bulk of pension funds in Germany, France and Greece are state owned. The USA is the world leader in pension funds, holding 45% of world assets in 2005. 20% of world pension assets are held in Japan and 20% in the EU.

The UK is also the largest holder of insurance assets in the EU, with 32% of the total. Other significant EU managers of insurance funds are France and Germany, with 21% and 20% of EU assets respectively in 2005.

Luxembourg leads the EU investment fund market in terms of assets under management. In 2005 it held 28% of EU funds. The next most significant markets were Germany and France, each with 19% of assets. The UK held 8% of EU investment fund assets in 2005.

**Table 3-7: Assets under fund management and investments of insurance corporations, € billions**

	Total assets under management by pension funds, 2001	Total assets under management by pension funds, 2005	Total investments of insurance corporations, 2001	Total investments of insurance corporations, 2005	Total assets under management by investment funds, 2001	Total assets under management by investment funds, 2005
Austria	8	12	57	77	98	153
Belgium	14	12 <sup>a</sup>	116	123 <sup>a</sup>	87	110
Cyprus	NA	NA	2	NA	NA	NA
Czech Rep.	2	4	5	9	3	5
Denmark	42	55	97	143	38	107
Estonia	0	0.3	0.2	0.5	0.1	0.6
Finland	NA	NA	32	43	12	33
France <sup>c</sup>	NA	NA	837	1,206	649	943
Germany	NA	NA	943	1,156	764	975
Greece <sup>c</sup>	0	0	12	12	17	22
Hungary	3	8	3	6	3	8
Italy	10	16	307	482	395	350
Ireland	51	78	56	118	181	394
Latvia	0	0.1	0.2	0.3	0	0.1
Lithuania	0	0.1	0.2	0.6	0	0.1
Luxembourg	NA	NA	29	50	854	1,426
Malta	0	0	0.5	1	0.5	4
Netherlands	451	621	297	345	112	106
Poland	6	22	13	23	3	16
Portugal	15	19	27	44	26	37
Slovakia	NA	0.7	1	3	0	3
Slovenia	0.2	0.7	1.3	2.7	2.5	2.2
Spain	45	76	149	220	158	240
Sweden	0.1	0.1	0.2	0.2	87.3	145
UK	1,180	1,349	1,740	1,884	362	410 <sup>a</sup>
<b>EU-25</b>	<b>1,826</b>	<b>2,262</b>	<b>4,721</b>	<b>5,822</b>	<b>3,974</b>	<b>5,080</b>

Source: European Central Bank, *EU Banking Structures*, October 2005.

<sup>a</sup> Figure is for 2004.

<sup>b</sup> Figure is for 2002.

<sup>c</sup> All French and Greek pension funds are state-owned (reported as 0).

The final sector of fund management is that of hedge funds. The world-wide value of assets held in hedge funds has risen from \$15 billion in 1985 to \$1.1

trillion in 2005<sup>16</sup>. The attractiveness of these funds is down to a number of factors, including the risk and return profile that they offer, and the lack of regulation of the industry, which allows managers to employ investment strategies that are not available to regulated fund managers, such as unrestricted short selling in the US.

In 2004 the USA held 54% of global hedge fund assets, 28% were held by Europe and 10% in Asia. The USA's position, however, is challenged by the rapid growth in the share of world assets held elsewhere. In 2003, Europe only had 24% of the market and Asia 5%.

London is the dominant force in European hedge fund management, holding over 75% of European hedge fund assets. If funds and investments from the US that are managed in Europe are included, this figure would rise to 90%<sup>17</sup>. London's strong position in hedge funds is due to its large pool of skilled labour, the proximity of clients and markets, a strong asset management industry, a favourable regulatory environment and a strong economic and financial linkage with the USA. Importantly banks and hedge funds from the USA are increasingly attempting to access the fast growth markets of Africa, Middle East, Russia and Eastern Europe, and they do this through London. Barring the inherent risks around this industry materialising, this trend should continue going forward, with the current financial centres remaining the first choice for locating hedge funds.

### **3.7 The insurance market**

The total value of the world insurance premiums written stood at €2.7 trillion in 2005. The majority of these are life insurance contracts, which account for 58% of the market<sup>18</sup>. The USA holds 33% of the world insurance market; Japan is the second most significant nation in terms of insurance premiums written, with 14%. The UK is the largest insurer in Europe and the third largest in the world; holding 26% of the EU market and 9% of the world market. France, Germany and Italy hold 19%, 17% and 12% of total EU contracts respectively.

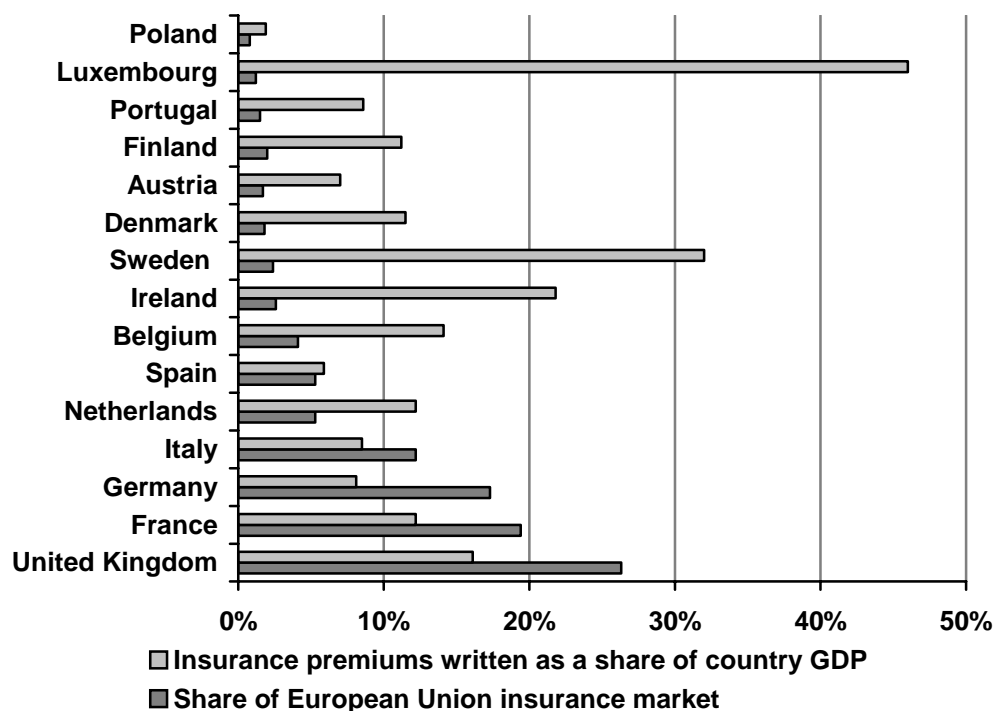
---

<sup>16</sup> International Financial Services, London (IFSL), *International Financial Markets in the UK*, November 2006.

<sup>17</sup> *ibid.*

<sup>18</sup> Swiss RE, *Sigma Number 5*, 2006.

Figure 3-2: Insurance premiums written relative to total EU premiums written and GDP, 2005



Source: Swiss Re, Sigma No. 5 2006 and Eurostat.

Some of the smaller EU nations have larger insurance sectors in relation to their GDP. Luxembourg, Sweden and Ireland are all ahead of the UK, France and Germany by this measure, reflecting significant local clusters. The status of London as a leading centre for internationally traded insurance and re-insurance means it has a ratio of insurance premiums written to GDP of 16.1%, the highest amongst the large EU nations.

### 3.8 The investment banking market

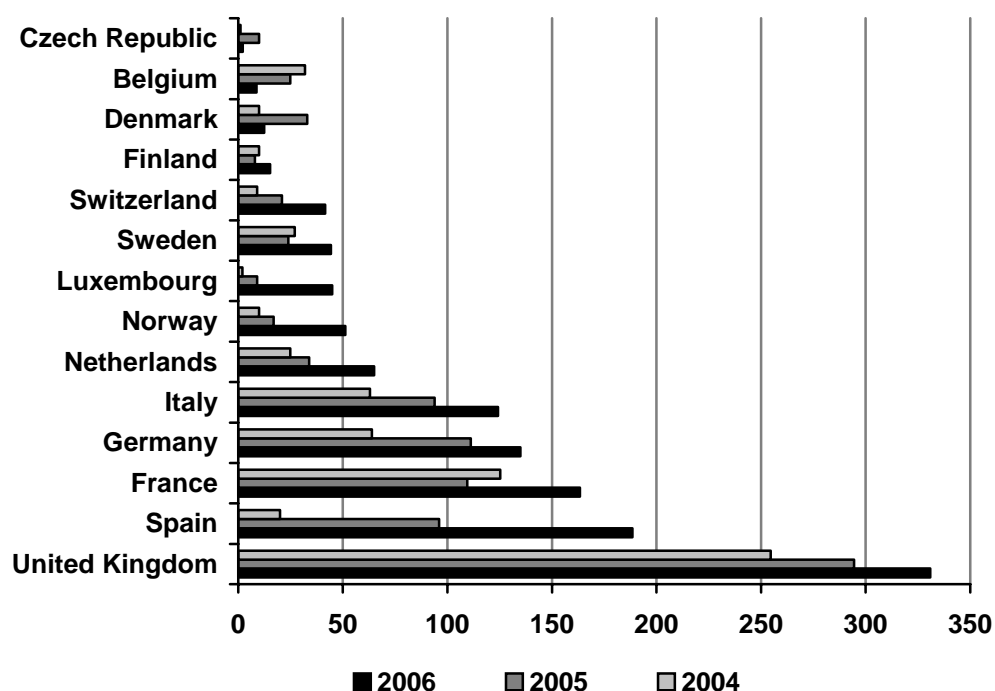
The investment banking market primarily consists of equity, fixed income (bonds) and mergers and acquisitions activity. This section focuses on the mergers and acquisitions markets, having presented data on the former two areas previously in the chapter.

The value of completed merger and acquisition deals in Europe in 2006 totalled €0.80 trillion, up from €0.73 trillion in 2005<sup>19</sup>. The UK was the most active of EU nations, accounting for 32% of completed deals in Europe in 2006 by value. It was followed by France, with 13% of activity and Germany with 12%. The USA remains the largest country in terms of merger activity. Completed deals in 2006 totalled €1.05 trillion; this is 46% of the world market, up from 40% in 2005.

<sup>19</sup> Thomson Financial, *Mergers and Acquisitions Review*, Q4 2005.

The UK's disproportionate share of European merger and acquisition deals reflects its openness and its contribution to meeting the Lisbon Agenda. Clearly if the London cluster did not exist, companies would carry out their deals in other countries, but because of the UK's openness, companies carry out such deals in London.

**Figure 3-3: Announced European target nation for merger and acquisition deals, US\$ billion**



Source: Thomson Financial.

Figure 3-3 details the location of European merger and acquisition activity by target nation. The UK consistently hosts the greatest level of activity, this is again due to the developed investment banking sector in the UK and the openness of its markets. The value of merger and acquisition activity involving companies based in Spain has surged from \$20 billion in 2004 to \$188 billion in 2006. The reasons for this trend are the increasing levels of competition in Spanish markets which is leading to consolidation and restructuring in sectors such as banking and construction. This pattern is being repeated in many other European nations, evidenced by the value of merger and acquisition activity increasing since 2004.

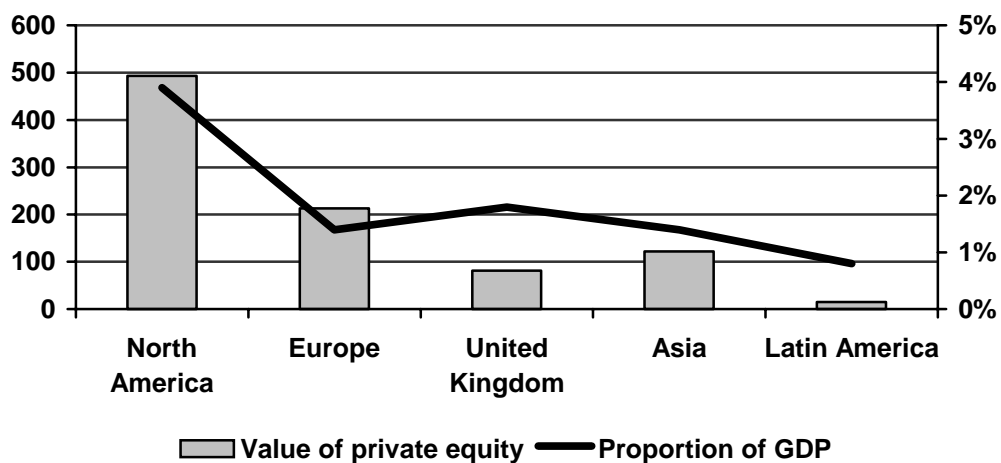
### 3.9 The private equity market

Private equity provides equity capital to firms that are not listed on the stock exchange. The two broad categories of private equity are venture capital investments and buy-outs of listed firms. The past few years have witnessed major expansion in the size and activity of private equity funds. The market has benefited recently from favourable credit conditions and weak yields on alternative investments, although both of these factors have been reversed

somewhat in 2006. In 2005, \$240 billion was raised on private equity funds worldwide, a figure surpassed only in 2000, at the height of the dot com boom.

Figure 3-4 presents data on the cumulative amount of private equity capital raised between 1998 and 2004 and the proportion of private equity to GDP. The USA is the world leader in private equity, although Europe and Asia both have increasing shares. Additionally private equity funds are lower in these regions as a proportion of GDP, indicating greater potential for expansion. The UK leads the European private equity market, accounting for 38% of EU funds raised between 1998 and 2004.

**Figure 3-4: Cumulative size of international private equity markets, 1998-2004, US\$ billion**



Source: The South African Venture Capital Association 2005.

## 4 Clustering to compete

In this chapter we analyse the importance of the EU's financial services clusters. We study eight regions of the EU which contain large financial intermediation sectors, drawing comparisons between these regions, the EU and the countries in which they are located. The aim of the chapter is to assess the benefits of clustering in the wholesale finance industry, and in doing so uncover the reasons why they are formed.

Professor Michael Porter of Harvard Business School defines a cluster as:

*"[a] geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities".*<sup>20</sup>

*'Cluster' activities are typically high value and highly specialised*

There is extensive literature discussing the economic benefits of clusters<sup>21</sup>. Firms derive efficiency benefits from clusters on both the demand and supply sides. Close customer proximity and information externalities help boost demand – this is particularly important in wholesale finance. On the supply side proximity reduces transaction costs, knowledge spill-overs help in the development of markets and specialist local labour supply and infrastructure boost efficiency.

### 4.1 Financial clusters in the EU

In the preceding year's report on the importance of wholesale financial services to the EU economy, we analysed the financial clusters of London, *Ile de France*, Frankfurt and Madrid using regional and municipal data. In this report we extend the analysis to include additional centres of financial activity. These include Brussels, Lombardy – where the centre of Milan is situated, Stockholm and North Holland – where Amsterdam is situated.

In the previous year's report, the data used to characterise the financial clusters were taken from scattered sources such as national statistical offices, regional economic development offices and chambers of commerce. This year the basis for the analysis of London is the data on financial intermediation provided by the *Annual Business Inquiry* and the Office of National statistics, and our forecast model for City Jobs<sup>22</sup>. The basis for the

---

<sup>20</sup> Porter M.E., (1990), *The Competitive Advantage of Nations*, explains the important phenomenon of "clustering," in which related groups of successful firms and industries emerge in one nation to gain leading positions in the world market.

<sup>21</sup> See for example, Baptista, R. and Swann, P., (1998), *Do Firms in Clusters Innovate More?*; Harrison, B., Kelley, M.R., and Gant, J., (1996), *Innovative Firm Behaviour and Local Milieu: Exploring the Intersection of Agglomeration, Firm Effects, and Technological Change*; Porter, M.E., (1998), *On Competition*; Goldstein, G.S., and Gronberg, T.J., (1984), *Economies of Scope and Economies of Agglomeration*; Investment Fund Association, Storper, M., (1996), *Institutions of the Knowledge-Based Economy*.

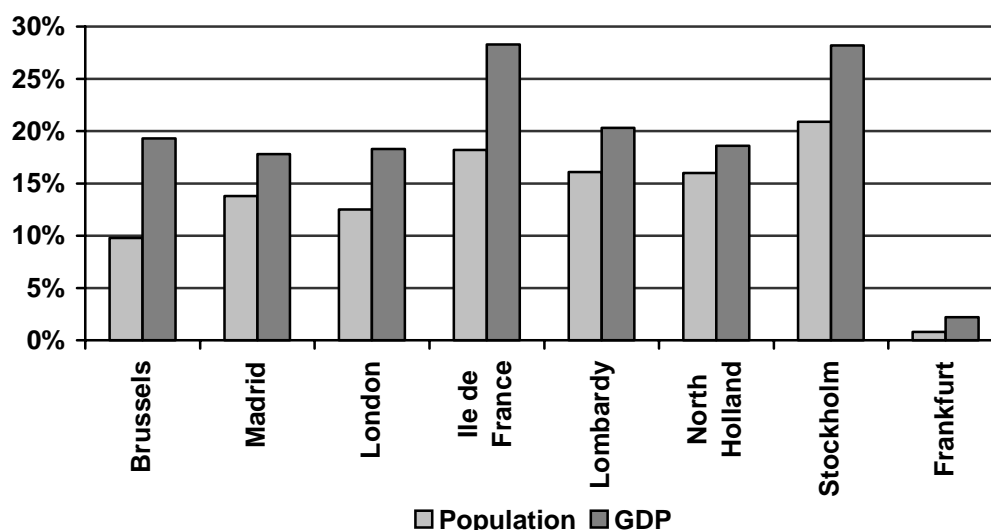
<sup>22</sup> Cebr's city jobs estimates are published in a bi-annual report *London and the City Prospects*, which focuses on financial jobs in the City, Tower Hamlets and Westminster. The estimates

analysis of the other clusters are the figures assembled by Eurostat<sup>23</sup> on the employment and economic contribution of the financial intermediation industry. The advantage of this change in the frame of analysis is that we have greater consistency<sup>24</sup> throughout the data and we are able to broaden the area of study. There is, however, a cost of some loss of comparability with the analysis from the previous year.

*Europe's financial sector is highly clustered in financial centres*

In order to estimate the proportion of financial intermediation jobs and GVA that is attributable to wholesale finance we use a benchmarking procedure similar to that employed in Chapter 2. The basis for this is the set of estimates produced on the share of wholesale financial intermediation in each EU nation.

**Figure 4-1: Share of country's population and GDP, 2006**



Sources: Eurostat, International Monetary Fund and cebr analysis.

Figure 4-1 shows the percentage of national population and economic output within each region. All cluster regions contribute disproportionate amounts to the GDP of their country. Brussels for example contains only 9.8% of the Belgian population, but is responsible for 19.3% of economic activity. Similarly the *Ile de France* region is home to 28.3% of France's economic

---

included in *The Importance of Wholesale Financial Services to the EU Economy 2007* cover the entirety of Greater London.

<sup>23</sup> The exception to this is Frankfurt. Eurostat does not assemble data on the economic output of financial intermediation in Germany on a regional basis. Frankfurt has been retained in the analysis for the purpose of comparison with the previous years report. The figures for Frankfurt are obtained from Frankfurt Economic Development GmbH, and cover a far smaller area and population than those used for other clusters.

<sup>24</sup> The Eurostat figures for London are based on those compiled by the Office of National Statistics and the Annual Business Inquiry, as such data for London and the other clusters is consistent.

activity yet contains only 18.2% of the nation's population. Frankfurt is the smallest region under analysis.

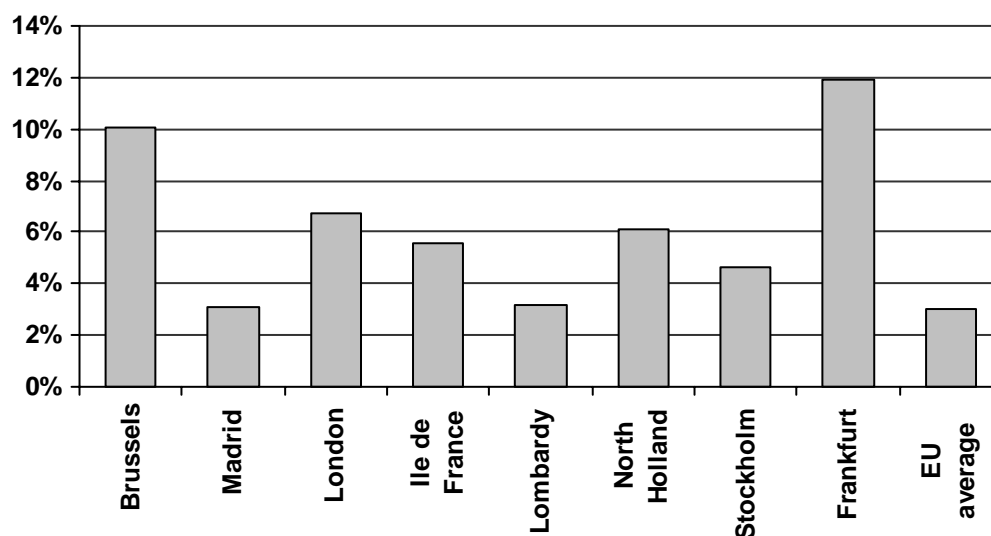
## 4.2 Employment

### *High proportion in clusters employed in financial intermediation*

All regions have a greater percentage of the workforce in financial intermediation than the EU average of 3.0%. There are 73,000 financial intermediation jobs in Frankfurt and 68,000 in Brussels which translates to 11.9% and 10.1% of their workforces respectively. With 315,000, London is the region with the greatest number of financial intermediation jobs, followed by *Ile de France* with 302,000. These workers make up 6.7% of the total workforce in London and 5.6% in *Ile de France*.

We estimate that the majority of finance jobs in London and Frankfurt are in wholesale finance. London is home to the Bank of England, the London Stock Exchange, and thriving markets in international bonds, foreign exchange, derivatives and fund management. Frankfurt is the home of the European Central Bank, the *Deutsche Börse* stock exchange and is the leading EU centre for bond trading.

**Figure 4-2: Financial intermediation jobs as a share of total regional jobs, 2006**

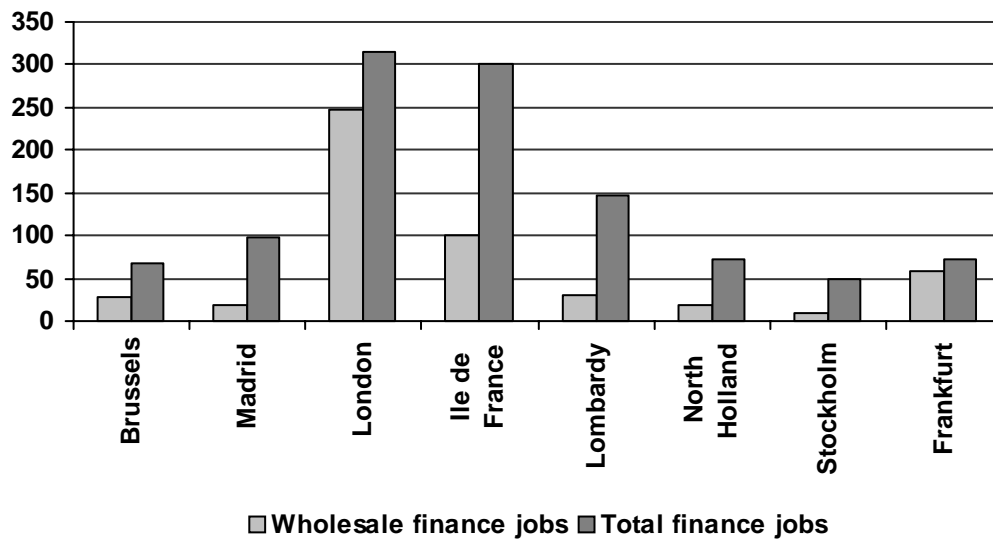


Sources: Eurostat, Frankfurt Economic Development GmbH.

As presented in Figure 4-3, we estimate that in 2006 there were 57,700 wholesale finance jobs in Frankfurt and 247,700 in London. London is by far Europe's largest cluster of wholesale finance jobs; the next largest is the *Ile de France* area where there are 100,000 jobs in wholesale finance. Brussels, Madrid and Lombardy are also home to substantial wholesale finance clusters with 27,200, 18,700 and 30,000 jobs respectively.

*London, Frankfurt, Ile de France: 36% of EU wholesale finance jobs*

Figure 4-3: Wholesale financial intermediation jobs, 2006, thousands



Sources: Eurostat, Annual Business Inquiry, Frankfurt Economic Development GmbH, Instituto Nacional de Estadística, INSEE, and cebr analysis.

These eight wholesale finance clusters employ 46% of all EU workers in wholesale finance. The largest three – London, Frankfurt and *Ile de France* – account for 36% of the EU total. London employs 22% of all EU wholesale finance workers.

We next estimate the number of jobs within each financial market in each of our wholesale finance clusters, as presented in Table 4-1. There is no official data to this detailed level of sector and regional disaggregation. Using data from the UK's *Annual Business Inquiry* and our own estimates for jobs in the City of London we produce estimates for the breakdown of wholesale finance jobs in London. We build our estimates for the other clusters by comparing data on the size of individual component markets of wholesale finance, which are presented in Chapter 3. In addition we compare the estimates for jobs in each region against other economic data in the most comprehensive internationally comparable series for industry comparisons<sup>25</sup>.

<sup>25</sup> HM Treasury, *The UK Financial Services Sector: Rising to the Challenges and Opportunities of Globalisation*, March 2005.

**Table 4-1: Estimates of job numbers in each financial market, 2005**

	Brussels	Madrid	London	Ile de France	Lombardy	Holland	Stockholm	Frankfurt
Investment banking	7,200	3,600	67,800	28,100	3,400	4,800	1,000	14,100
Equities	3,300	3,000	43,000	13,200	3,400	3,100	2,000	7,700
Bonds	6,400	5,900	19,900	25,800	7,000	3,700	2,200	24,400
Foreign Exchange	200	300	6,200	500	200	400	300	500
Derivatives	700	400	13,300	2,900	900	400	200	700
Fund management	3,400	1,500	51,300	12,500	2,900	2,700	800	5,900
Insurance	5,000	2,500	44,700	13,500	9,200	2,200	1,700	1,900
Central banking	1,000	1,500	1,500	3,500	3,000	1,500	1,500	2,500
<b>Total</b>	<b>27,200</b>	<b>18,700</b>	<b>247,700</b>	<b>100,000</b>	<b>30,000</b>	<b>18,800</b>	<b>9,700</b>	<b>57,700</b>

Sources: Eurostat, Annual Business Inquiry, Frankfurt Economic Development GmbH, Instituto Nacional de Estadística, INSEE, Bank for International Settlements, and cebr analysis.

Investment banking employs the greatest number of wholesale finance workers in these clusters. It accounts for 130,000 workers or 26% of the total. Over half of these investment bankers work in London. London also has most employees in the market for equities, foreign exchange, derivatives, fund management and insurance; with over half of all cluster employees in these industries working in London. Ile-de-France and Frankfurt have the greatest number of employees in the bond markets, with 27% and 26% of the clusters workforce respectively.

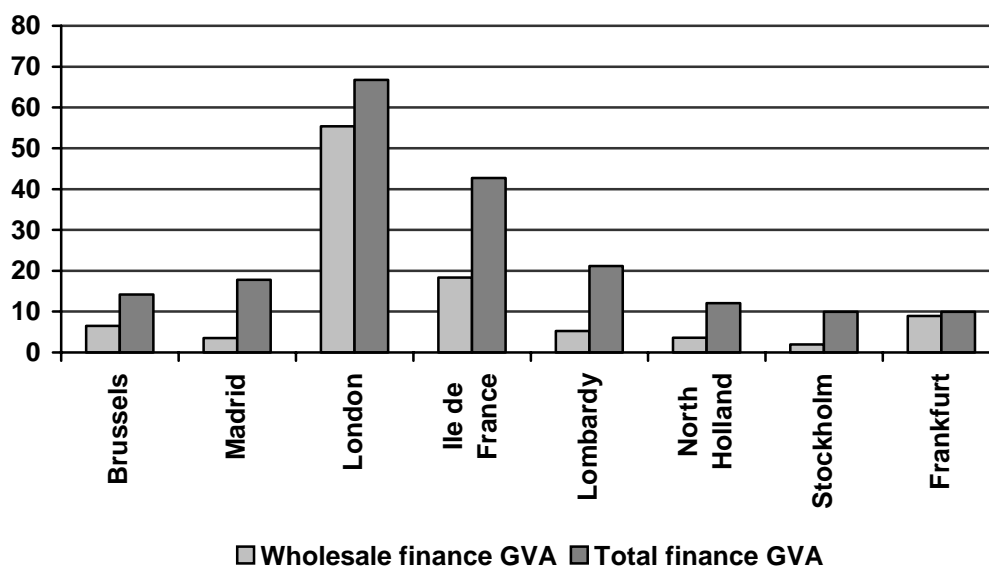
### 4.3 Economic activity

We also estimate the contribution of the wholesale financial sector to GDP in each of these clusters. This allows the importance of wholesale finance to the cluster and to the national economy to be assessed. Furthermore, by calculating the economic output per job we are able to compare the productivity of wholesale finance in these clusters to that of the nation as a whole. As with the estimation of wholesale finance employment we use a benchmarking procedure to estimate the proportion of financial intermediation economic output that is classified as wholesale finance.

*London responsible for 28% of EU wholesale finance GVA*

Wholesale finance contributes 1.7% of the EU's GDP; 53% of EU wholesale finance GVA is derived from these eight clusters. The single largest wholesale cluster, London, contributes €55.4 billion to GDP, which is equivalent to 18.7% of the London economy and 28% of EU wholesale finance GVA. At €18.3 billion, wholesale finance accounts for some 4.1% of the economy of the *Ile de France* region.

Figure 4-4: Wholesale finance economic activity in 2006, € billion



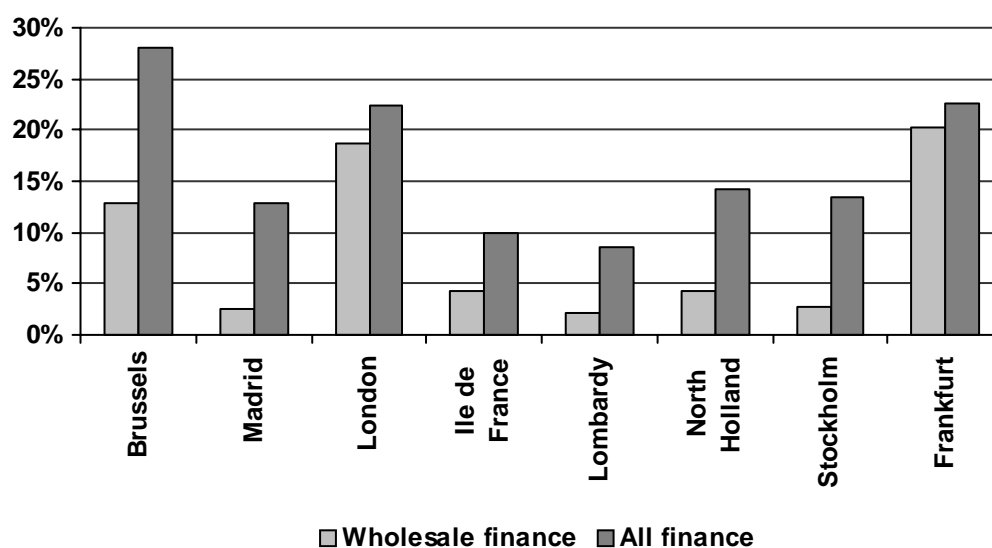
Sources: Eurostat, Annual Business Inquiry, Frankfurt Economic Development GmbH, Instituto Nacional de Estadística, INSEE, and cebr analysis.

*Financial intermediation in Brussels is 28% of regional economy*

The Brussels and Frankfurt regions also make a significant contribution to economic output from wholesale finance; with it accounting for 12.2% and 19.3% of regional economic output respectively. Financial intermediation as a whole is particularly important to the Brussels region; it is responsible for 28.0% of regional economic output. The area benefits from its role as the capital of the EU and as such has attracted many international operations; for example the Bank of New York has its world-wide centre for processing security transactions located in Brussels – which employs over 800 staff.

In some countries, wholesale finance is more evenly distributed across the country. For example, we estimate Madrid to account for only 30% of Spanish wholesale finance, with much economic activity located in Barcelona and the Basque cities of Bilbao and Santander. Similarly Lombardy and North Holland are both estimated to command 34% of their nation's wholesale finance activity, with large competing centres in Rome and Rotterdam. London controls 76% of the UK wholesale finance market, with other clusters in Edinburgh and Leeds. We estimate these centres to account for 8.2% and 3.9% of UK wholesale finance GVA respectively.

Figure 4-5: Wholesale finance contribution to gross region product, 2005



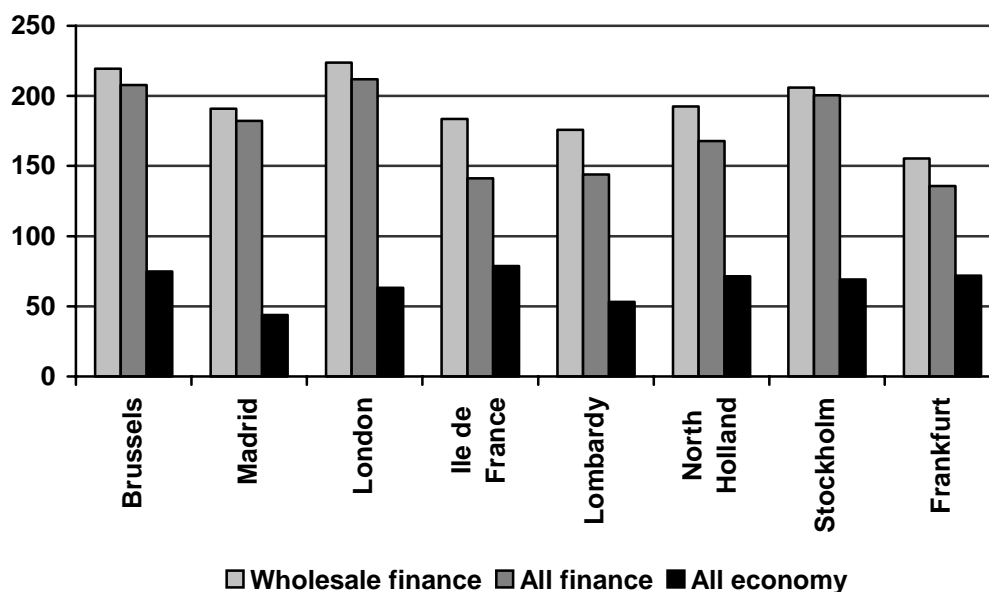
Sources: Eurostat, Annual Business Inquiry, Frankfurt Economic Development GmbH, Instituto Nacional de Estadística, INSEE, and cebr analysis.

#### 4.4 Productivity

We now calculate a measure of productivity in each of the eight wholesale finance clusters by analysing the level of economic output per worker.

All clusters exhibit higher levels of productivity in wholesale finance than in the economy as a whole. Figure 4-6 presents the results of our analysis; pointing to the highest levels of productivity in London with output per worker in wholesale finance €223,700 in 2006, compared to the economy wide average of €63,200. London is the most productive cluster because of the economies of scale it has gained from leading numerous European and world financial markets, and due to the skill base of the labour force. Brussels and Stockholm also have highly productive wholesale finance sectors; despite not having the advantages of scale and historical ties that London enjoys, they are assisted by the high levels of productivity in the Belgian and Swedish economies as a whole.

Figure 4-6: Output per worker, 2006, € thousands



Sources: Eurostat, Annual Business Inquiry, Frankfurt Economic Development GmbH, Instituto Nacional de Estadística, INSEE, and cebr analysis.

In Table 4-2 we present the location quotients for each of our clusters. Location quotients compare the proportion of jobs in wholesale finance in each cluster and the proportion in the country as a whole. A location quotient greater than one indicates the job density is greater than the national average; a quotient of two indicates a density double the national average, and so forth.

All of the clusters we have focussed upon have greater wholesale finance employment density than the national average. The regions of Madrid, Lombardy and North Holland only have slightly higher levels, due to the other centres of finance located in their countries. Brussels, London and *Ile-de-France* all dominate their nation's wholesale finance sectors, as demonstrated by location quotients which indicate wholesale finance employment density that is four times the national average. Frankfurt towers above the other clusters, with a quotient of 17.56; however this is partially attributable to the smaller area and workforce in the Frankfurt region than those of the other clusters.

**Table 4-2: Location quotients for the clusters, based on country comparisons, 2006**

	Relative proportion of wholesale job share in region, to that of country, 2006
Brussels	4.24
Madrid	1.35
London	4.23
Ile-de-France	4.14
Lombardy	1.62
North Holland	2.10
Stockholm	2.59
Frankfurt	17.56

Sources: Bank of International Settlements, Eurostat, and cebr analysis.

We have also calculated location quotients for each cluster, comparing their share of employment in wholesale finance to the share within the EU as a whole. Frankfurt again has a high density of wholesale finance employment relative to the EU average. The quotients for Brussels and London are considerably higher when compared to the EU average rather than the national average. London's quotient has risen from 4.23 to 9.48 and Brussels from 4.24 to 7.23. These point to the significance of wholesale finance to the economies of the UK and Belgium.

**Table 4-3: Location quotients for the clusters, based on comparisons with wholesale finance in the EU, 2006**

	Relative proportion of wholesale job share in region, to that of EU, 2006
Brussels	7.23
Madrid	1.06
London	9.48
<i>Ile de France</i>	3.31
Lombardy	1.15
North Holland	2.86
Stockholm	1.63
Frankfurt	16.86

Sources: Bank of International Settlements, Eurostat, and cebr analysis.

## 5 The Financial Services Action Plan

The purpose of this chapter is to add to the limited stock of quantitative assessments of the impact of the Financial Services Action Plan (FSAP). We attempt to use econometric and quantitative analysis to offer insights into the size of impact of the FSAP on the wholesale finance industry. We assemble the estimates that are already in the public domain and present them in the context of financial markets.

In this chapter we:

- present the main directives of the FSAP;
- discuss the economic theory behind the FSAP;
- present the European Commission's study in 2002 on the impact of integration on the cost of capital;
- discuss the econometric analysis of the impact of the FSAP on wholesale finance;
- discuss the existing data on quantifying the costs of the FSAP.

### 5.1 What makes up the Financial Services Action Plan?

The FSAP is the European Commission's framework to create a single, integrated financial services market across the EU. The aim of the legislation is to remove all barriers to a single EU market in financial services, and provide a stable regulatory framework under which these markets can integrate.

In the European Commission's view, a single market would *"act as a catalyst for economic growth across all sectors of the economy, boost productivity and provide lower cost and better quality financial products for consumers and enterprises, in particular small and medium sized enterprises."*<sup>26</sup>

Within this broad economic target there are three specific objectives of the FSAP:

1. creating a single wholesale market – to enable companies to raise finance from across the EU on competitive terms and allow investors and intermediaries to access all markets from a single point of entry.
2. creating an open and secure retail market – to provide consumers with information and safeguards they require to participate in a single market and remove national barriers to entry.
3. generating prudential rules and a framework for supervision – to ensure the morality and legality of trading practices.

---

<sup>26</sup> Conclusion of an ECOFIN meeting of EU economics and finance ministers, April 2002.

The FSAP was published by the European Commission in May 1999 and was endorsed by the Lisbon Council in March 2000. Most of the legislative proposals on the FSAP package were implemented before July 2004, although a number of critical directives are only being implemented this year and in 2008.

A full list of these directives is included in the Appendix. The principal measures of the FSAP are:

- **The Capital Requirements Directive; January 2007** – The primary aim of this measure is to reduce the risk of bank failures by ensuring they follow the internationally recognised “Basel II” banking standards. The legislation will govern the minimum in reserves that a bank or investment firm must hold, which is based on the level of risk the institution’s investments entail.
- **The Markets in Financial Instruments Directive (MiFID); November 2007** – This is the cornerstone of the scheme of regulatory frameworks that make up the FSAP. The measure is aimed at reducing the transaction costs of trading securities. This will be done by allowing trading to take place outside regulated exchanges and between Member States by awarding investment firms permits or passports to trade.
- **The Market Abuse Directive; October 2004** – This directive deals with the prevention of insider trading and sets out measures to combat market manipulation.
- **The Insurance Mediation Directive; January 2005** – This broad ranging directive uses a passport system to create a single European market for consumer insurance. The measure applies not just to retail insurers and primary intermediaries, but also to secondary intermediaries, such as retail outlets offering insurance for their products.
- **The International Accounting Standards Directive; January 2005** – Following several high scale accounting scandals there has been much support behind the move towards universal standards of financial reporting. This directive applies not just to the finance sector, but to all listed companies.
- **The Prospectus Directive; July 2005** – The purpose of this directive is to harmonise requirements for the drawing up, approval and distribution of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market in the EU.
- **The Transparency Directive; January 2007** – This directive establishes requirements in relation to the disclosure of periodic and ongoing information about issuers whose securities are already admitted to trading on a regulated market in the EU. It also sets out the rules governing the issue of annual and semi-annual financial reports for securities issuers.

## 5.2 The theory behind the Financial Services Action Plan

The FSAP is part of the EU's Lisbon Agenda which aims to create a single, integrated economy across all of the EU's Member States. Within this aim, the FSAP's objective is to create a single market for financial services within the EU – both for wholesale and for retail finance.

The financial services sector plays a crucial role within the economy. It is the infrastructure that links people, companies and governments that save money to people, companies and governments that invest money. It allows wealth, or capital, to flow between areas where it is generated to areas where it will be generated in the future. Without a financial services sector, wealth will still be transferred to investment areas, but the extent of its transfer will be severely limited, both geographically and across sectors.

At a more detailed level, the finance sector:

- i. mobilises savings;
- ii. allocates an economy's resources;
- iii. facilitates the exchange of goods and services;
- iv. facilitates the trading, hedging, diversifying and pooling of risk;
- v. monitors managers and exercises corporate control<sup>27</sup>.

The first and fourth of these functions increase savings and investment, whilst the second, third and fifth maximise the returns on savings and investments.

The basic theory behind the FSAP is to create one single financial services sector which maximises the pool of capital available to potential investors in the economy. In order to do this the sector must be fully able to transfer capital from savers in one part of the EU to investors in any other part of the EU. The advantage is that across the 27 country bloc capital will be able to flow unhindered towards the investment that offers the greatest economic benefit or return. Such an efficient allocation of capital resources would maximise the long-term wealth generating ability of the EU's stock of capital<sup>28</sup>.

A major directive within the FSAP is MiFID – the Markets in Financial Instruments Directive. MiFID sets out provisions to govern the conduct of investment firms – such as investment banks, stockbrokers, fund managers and derivatives firms – and of regulated markets. This directive, which will become applicable in November 2007, ensures that the authorisation given by Member States to investment firms specifies what services and activities they

---

<sup>27</sup> Levine, R., (June 1997), *The Journal of Economic Literature* – Financial Development and Economic Growth: Views and Agenda – pp.688-726.

<sup>28</sup> See for example: Barro, R.J., (1991), *Quarterly Journal of Economics* 106 (2) – Economic Growth in a Cross Section of Countries, pp.407-443. Beck, T., Levine, R. and Loayza, N., (2002), *Journal of Financial Economics*, 58(1-2) – Finance and the Sources of Growth, pp.261-300.

are authorised to provide. Importantly the directive states that the services and activities authorised by the Member States can be applied throughout the EU.

*MiFID is the platform to sell wholesale finance abroad*

In effect what this directive does is allow wholesale services to be sold in other Member States, whilst also attempting to tackle the market failure caused by lack of information on the customer side of the transaction. The benefit of this directive is to increase the number of potential investors across the EU that have access to the EU banking system's pool of funds. This will allow more investors to borrow capital at a cost which makes an increased number of investment projects across the EU feasible.

In terms of the real economy, the aim of MiFID – as with the wider FSAP – is to ensure business investment growth is not stifled through inefficient or limited capital markets, hence enabling the EU to reach its long term growth potential.

*CRD allows banks to maximise incomes whilst minimising risk*

A second important directive is the Capital Requirements Directive. This is the vehicle in the EU for implementing the capital requirements set out by the Basel II framework – an international framework which also includes Canada, US and Japan. These set the capital adequacy requirements applying to investment firms and credit institutions, the rules for their calculation and the rules for their supervision. The aim of the framework is to ensure that banks do not take on too much risk by over-leveraging their positions. The framework also ensures that capital adequacy ratios are sensitive to the level of risk taken on by the bank. As a result, the framework attempts to balance the minimisation of risk with the maximisation of bank revenues.

The fundamental economic benefit of Basel II is that whilst ensuring that banks remain efficient locations to store the economy's wealth, their credibility with savers is safeguarded so that savers trust their savings with banks and the pool of funds available to potential investors is maximised.

One of the FSAP's directives which largely affects the retail sector is the Consumer Credit Directive. This is designed to create a single EU market for consumer credit for values up to €50,000. In effect, this means that a person in Cyprus will be able to take out a loan in Sweden. This will allow lending societies in countries other than Cyprus to also compete to lend money to the borrower. When introduced, this directive will increase the degree of competition between lending societies. Societies from all over the EU would be able to sell the loan to the Cypriot borrower. This competition is likely to lead to better service for the borrower and also to cheaper interest rates. For banks to be able to afford to give lower interest rates on loans, they need to increase their profits. In order to do this, lending societies need to ensure that they get a good return on their other investments. With the right regulation in place to prevent over-charging in areas where there is little impact from greater competition (for example if the legacy costs of switching banks is too high), this should result in lending societies investing in areas of the economy

that have a higher rate of return, or that are likely to generate a larger degree of capital, or wealth.

Clearly, implementing the FSAP comes at a cost to the financial sector. For example, the compliance costs to ensure that the services provided by investment firms reach the high standards set by MiFID can be high. By enforcing banks to keep a certain degree of capital in their reserves, which, although being sensitive to risk, may in some cases be higher than the level banks deem appropriate, the Capital Requirements Directive will mean foregone bank revenues.

### 5.3 Quantifying the benefits of integrated EU financial markets

In Chapter 2 we showed that financial markets across the EU are integrating. This trend has been aided by increased trade in goods and services, electronic trading, deregulation and monetary union in the eurozone.

One of the most important macroeconomic impacts of the financial markets is their ability to distribute capital from savers to investors. The extent to which the financial markets can facilitate this process depends on the cost of this distribution to the financial sector. This cost is mirrored in the cost faced by investors to acquire capital.

As discussed earlier in this chapter there are benefits from having a single integrated financial market across the bloc. A report by the European Commission in 2002 analysed how an integrated market limited firms' cost of acquiring capital through the reduction in financial market trading costs for equity financing, and a reduction of credit spreads, issuance costs and trading costs for bond financing<sup>29</sup>. The report then quantified the expected macroeconomic impacts of the cheaper cost of capital caused by the integration of EU financial markets<sup>30</sup>.

The report demonstrated that fully integrated EU equity markets reduce the cost of capital. It also estimates that there is a statistically significant negative correlation between equity transaction costs (as measured by price spreads) and stock market turnover. Higher transaction costs increase the cost of equity capital as investors require higher rates of return in order to make a trade<sup>31</sup>. The impact of fully integrated EU equity markets is estimated to reduce the cost of equity capital by a weighted average of 38 basis points across the EU. The UK would stand to benefit less, with a 26 basis point reduction in the cost of equity capital. This is because transaction costs on the London Stock Exchange are already below the EU average.

---

<sup>29</sup> London Economics, *Quantification of the Macroeconomic Impact of Integration of EU Financial Markets - Final Report to the European Commission-Directorate-General for the Internal Market*, November 2002.

<sup>30</sup> One issue which arises is the extent to which decisions which affect the wholesale finance sector are taken by the Eurozone and by London, given that, as this report demonstrates, London accounts for the largest share of EU wholesale finance.

<sup>31</sup> Domowitz, I. and Steil, B., (2002), *Innovation in Equity Trading Systems: The Impact on Transactions Costs and Cost of Capital* in (Nelson, R., Victor, D. and Steil, B. (eds.)) - *Technological Innovation and Economic Performance*, Princeton University Press.

In the bond market, the report was unable to find a significant statistical relationship between transaction costs in bond markets and the integration of the EU financial intermediation sector. There is, however, evidence showing how the growth in the volume of euro-denominated corporate bonds has led to a significant decrease in credit spreads or transaction costs and so to the cost of capital. A recent study<sup>32</sup> found that average gross fees for corporate bond issuance (as a percentage of the amount raised) have fallen from 1.55% in 1994 to 0.43% in 2001 for euro denominated issues.

The European Commission report then fed the resulting reduction in the cost of capital into a model of the global economy. The central projection was based on an EU average reduction of 50 basis points in the cost of equity capital, 40 basis points in the cost of bond finance and 20 basis point reduction in the cost of bank financing.

The impact of this cost reduction was forecast to be a one-off 1.1% increase in long-run real EU GDP. In 2006 prices, this equates to an increase in the GVA of the sector of €125 billion. Investment in the EU economy was expected to rise by almost 6.0% and wider household consumption by 0.8%. Employment in the EU would have increased by 0.5%.

The 2002 European Commission report only considered the impact of the FSAP in lowering transaction costs on firms' cost of capital. The possible macroeconomic benefits of improving the allocation of resources, improved corporate control, and reduction of information asymmetries that were likely to result from the FSAP, were not quantified.

In the next section we attempt to quantify the overall impact of the FSAP on the economic output of the finance sector. We net out the costs and the benefits of the plan.

#### **5.4 The economic impact of the Financial Services Action Plan**

Having implemented most of the directives that make up the FSAP, the European Commission is currently evaluating its economic and legal impact. In this section, we aim to contribute to the discussion about how to best undertake this evaluation.

The FSAP has been gradually phased in since 1999 using the Lamfalussy Procedure, with the last directive likely to be transposed in 2008. Most of the directives came into effect in 2003 and 2004.

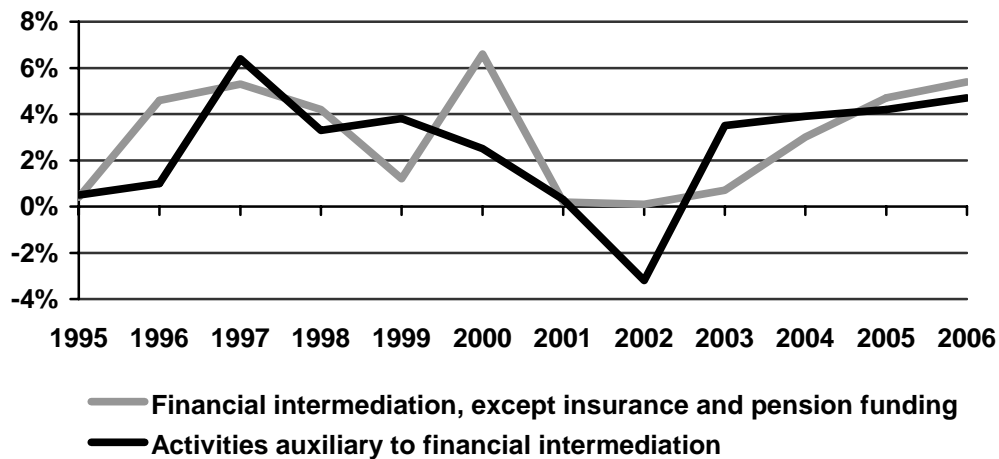
This implementation of the bulk of the directives contained within the FSAP coincided with a change in the prospects for the European wholesale finance sector. Growth in the sector reached a low in 2002 in the aftermath of the dot com crash and as the global economy slowed after the 11 September attacks in the USA. After 2002, however, sectoral growth

---

<sup>32</sup> Santos J. and Tsatsaronis, K., (2002), *The Cost of Barriers to Entry: Evidence from the Market for Corporate Euro Bond Underwriting*.

increased every year with wholesale finance growing at its fastest pace in 2006. Figure 5-1 shows the real growth in finance and in services auxiliary to finance, such as stock-broking, fund management, and foreign exchange trading in the EU-15. These sectors both include retail and wholesale finance, but their growth trend largely reflects the growth pattern in these sub-sectors.

**Figure 5-1: Annual real growth in wholesale finance GVA**



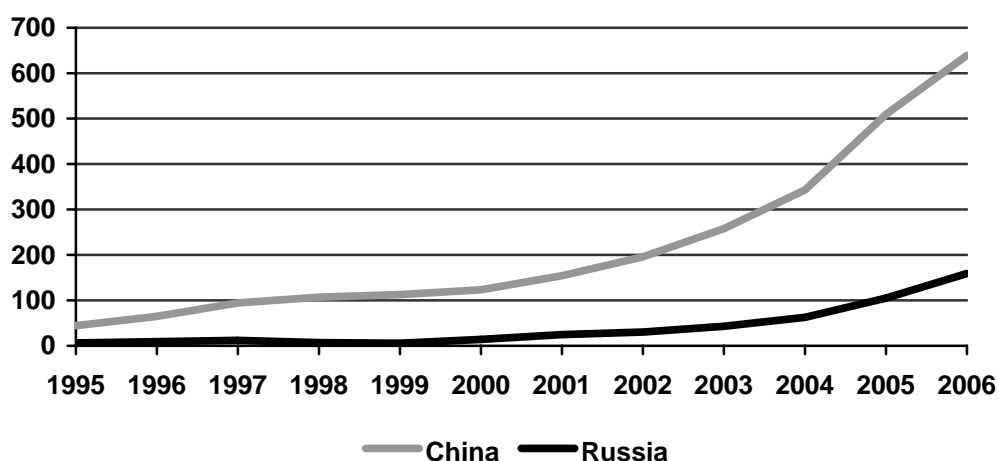
Sources: Groningen Growth and Development Centre, and cebr.

A number of factors are likely to have contributed to such a long period of sustained growth in these sectors. These include:

- the expansion of sectors of the EU economy;
- increased levels of intra-EU trade;
- the emergence of new economic partners, such as China and India, and their foreign reserves;
- the rapid growth in the price of commodities and the foreign reserves of commodity-based economies, such as Russia and Gulf States;
- the birth of new financial services markets such as private equity, hedge funds and credit derivatives – these all essentially reflect the change in attitude to risk since the end of the dot com boom;
- the impact of the Sarbanes-Oxley Act in the United States;
- the growth of internationally-mobile finance;
- monetary union in the eurozone.

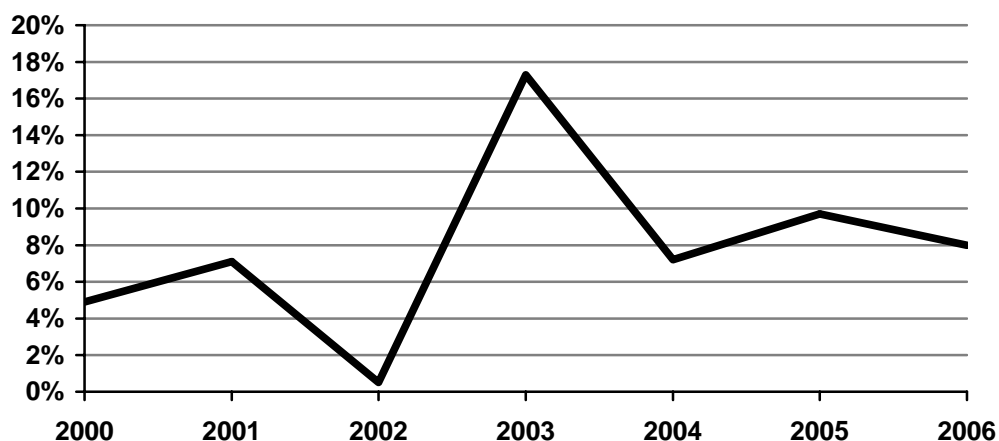
The next two graphs present recent trends for two of these factors. These show the acceleration in the growth of international liquidity and the arrival of new financial markets in Europe.

Figure 5-2: Foreign reserves, SDR billion



Sources: International Financial Statistics, International Monetary Fund.

Figure 5-3: Growth in the value of non-US hedge funds



Sources: Greenwich Van Hedge Fund Index.

In addition to these drivers, the FSAP is also likely to have had an impact upon the financial sector since its implementation. The main task of the European Commission's evaluation analysis of the FSAP is to identify the size and direction of that impact. In order to do this, the evaluation must disentangle its effect on the sector from all the other drivers that we have identified. Once the impact on wholesale finance and the entire financial sector is isolated, the impact on the wider economy can be studied.

Since the FSAP's implementation coincides with the sharp acceleration of most of the drivers of EU finance, econometric analysis is required so that the relationship between the various drivers and the economic output of finance can be accounted for.

We have constructed a model which takes into account all the various factors driving the wholesale finance sector, as presented above. We find that the main driver of growth is the sharp increase in international liquidity over the past four years, evidenced by the sharp rise in the stock markets and the reserves held by countries like China and India. The growth in turnover in

the world's equity markets, economic growth in the EU economy and increased trade flows are also found to contribute to the economic output of EU finance.

In our analysis we find some evidence that the FSAP is likely to have had a positive impact on the financial sector. Our modelling suggests that the FSAP may have initially contributed to a one-off net increase in the economic output of services auxiliary to finance (a very crude measure of wholesale finance) of around 1.4% and an increase in financial intermediation of 2.0%.

We cannot, however, be confident about the accuracy of these results. This is because since the FSAP has largely been phased in over the past three years – with important directives yet to be implemented – there is not sufficient data for any econometric analysis to accurately pinpoint the impact of the FSAP on the output of the sector whilst also accurately accounting for exponential growth in international liquidity.

Our findings are sensitive to the way in which we model the impact of the FSAP. For example, the impact of the FSAP upon financial intermediation ranges between -1.6% and +4.9% with other less convincing ways of inserting the plan into the model. When we model the drivers of finance and the FSAP on services auxiliary to finance (which includes stock broking and fund management) this variation increases from between -3.7% to +12.0%. This variation in the likely impact of the FSAP occurs because there are only two years of data available since most of the directives were introduced, with a few important directives yet to be introduced.

Therefore in order to be confident about what the impact of the FSAP has been on wholesale finance, finance in general, and eventually on the wider economy, more time must elapse. This is necessary so that any econometric analysis can distinguish between the differing impacts of the drivers of EU finance from the impact of the FSAP and, as a result, also suggest how to best account for the FSAP in a macroeconomic model.

According to the '*Resume of Contributions to the Workshop on Methodology of the Evaluation of the Economic Impact of FSAP of 25<sup>th</sup> October*', published by the European Commission on 23<sup>rd</sup> January 2007, 'the major challenge identified by experts was the question how to distinguish the effects of the FSAP from other market effects'. It states that 'most experts were of the view that it was too early to evaluate the economic impact of the FSAP'. Nevertheless at this stage, the econometric analysis does give us an initial indication of the probable size and direction of the FSAP's impact.

When enough time has elapsed after the FSAP's introduction, there are a number of issues that the analysis must take into account. These are<sup>33</sup>:

---

<sup>33</sup> These are broadly consistent with the recommendations published in the Resume of Contributions to the Workshop on 25 October 2006 on the Methodology of the Evaluation of the Economic Impact of the Financial Services Action Plan, published on the 23 January 2007 by the European Commission.

- **How to best account for the wholesale finance sector:** The variable which best represents the wholesale finance sector is the GVA of the sector in the EU. GVA is the sum of all the profits made by firms in the sector together with all the salaries and bonuses paid to employees in the sector. As such, GVA is the economic wealth generated by the sector in one year. No official statistics are available on the GVA of the wholesale financial sector in any country. Only the value added of the whole financial sector is available, which includes both retail and wholesale finance. Official sector classifications split up financial intermediation by sub-sector (such as insurance) rather than by the type of client of the financial service (retail rather than wholesale). Accurately separating the year-on-year growth in the GVA of wholesale and retail finance must be the starting point for this analysis.
- **Which are the best independent variables to be included in the equation:** there are a number of drivers affecting the wholesale finance sector. Yet a number of these variables may be correlated with one another, potentially preventing the statistical process from accurately identifying their individual impact on the sector.
- **How should the independent variables relate to EU wholesale finance:** how to specify the model equation.
- **How to account for the impact of the FSAP:** because the FSAP was introduced gradually over a number of years and because the rules are likely to impact financial institutions at differing rates – with some directives having a full impact immediately and others causing slow change – how the FSAP is accounted for in an econometric model is important. Interviewing players within the sector should help arrive at the best way of taking into account the directives of the FSAP.
- **Ensuring econometric robustness:** a model will need to be built which does not allow statistical problems to arise – problems which will distort the results of such an analysis.

More generally, some experts cited in the European Commission's *Resume of Contributions to the Workshop on Methodology* also call for the use of the highest quality evidence; for the need to repeat the exercise at a later stage; and to also use an adequate measure of the level of integration as an explanatory variable.

In advance of econometric analysis being able to robustly estimate the impact of the FSAP, in the last section of this chapter we analyse existing data on the costs of the FSAP.

## 5.5 The compliance costs of the Financial Services Action Plan

Given the current inability to be confident in econometric analysis, in this section we seek to analyse the compliance costs of the FSAP imposed upon the wholesale finance industry.

There is a limited stock of data available on the costs of implementing the FSAP, given that *ex ante* Regulatory Impact Assessments of the earlier directives were not carried out by the European Commission. The data available only covered *inter alia* the proposals on the review of MiFID as well as the directives on the prospectus, market abuse and transparency directives. Also due to the short period of time since the implementation of the legislation, considerable uncertainty remains around both the full implications of compliance and associated costs.

A recent report by Open Europe assembled a series of estimates for the compliance costs for firms in the UK as a result of key FSAP measures<sup>34</sup>. As far as we are aware, this is the first and only such study. Clearly, we need to treat it with some caution – not only because the research is seminal but also because the commissioning organisation takes what might be perceived as a partisan perspective on the EU. Nevertheless it remains our current best source of data.

These costs are only provided on a UK rather than EU basis. As a result we limit this analysis to the UK. The estimates in this report were assembled from a number of sources, including UK Government Regulatory Impact Reports, surveys of industry bodies, and affected companies and estimates from commissioned reports. The estimates are only a first step in the assessment of overall costs, providing a broad indication of the likely impact on firms.

Since these figures are taken from a wide range of sources they lack consistency across directives. Furthermore the application of the figures to the UK introduces additional inaccuracy, with a number of pan-European estimates simply scaled down to the UK market. Nevertheless the estimates provide a useful starting point to the debate on the compliance costs of the FSAP.

As our aim is to attempt to understand the size and dimension of the impact of the FSAP on wholesale finance, in this report we place these costs into context by comparing them to the economic output of the financial sector. We focus on the cost of the regulations which affect the wholesale finance industry rather than all finance or the wider economy.

As a result we apportion the costs of each directive presented by Open Europe on the basis of which sectors industries they mostly affect. For some directives we assign the full cost to the wholesale finance industry. These are the:

- Institutions for Occupational Retirement Provisions Directive;
- Market Abuse Directive;
- Markets in Financial Instruments Directive;
- The Prospectus Directive;

---

<sup>34</sup> Open Europe and Keith Boyfield and Associates, *Selling the City Short? – A Review of the Financial Services Action Plan*.

- The Re-insurance Directive;
- The Money Laundering Directives;
- The Transparency Directive;
- The Undertaking for the Collective Investments of Transferable Securities Directive.

For other directives, we partially assign the full Open Europe compliance costs to wholesale finance, because they have a broader impact. For those directives which apply to all publicly listed firms, we calculate the share due to the wholesale finance sector based on the sector's contribution to the UK economy. These directives are:

- The Accounts Modernisation Directive;
- The Fair Value Accounting Directive;
- The International Accounting Standards.

For a third set of directives – those which affect both retail and wholesale finance – we partially apportion the costs to wholesale finance on the basis of its contribution to financial intermediation GVA. These directives are:

- The Capital Requirements Directive;
- The Supplementary Pensions Directive;
- The Payments Services Directive;
- The Savings Tax Directive.

We do not attribute the costs of all other directives of the FSAP because they apply wholly to retail finance rather than wholesale finance.

Having accounted for both the ongoing and initial costs attributable to wholesale finance, we calculate the net present value of these costs over ten years. We do this because the benefits of the FSAP are likely to accrue gradually over time. We then compare the discounted costs to the economic output of wholesale finance in the UK over the same period. In both cases we use a discount rate of 5%. This is our estimate for the long-run average cost of UK capital.

Based on Open Europe's research and our subsequent analysis we calculate the total compliance costs of the FSAP borne by the UK wholesale finance sector to be between £14.3 billion and £16.8 billion over the next ten years at 2006 prices. This equates to between 2.8% and 3.3% of the wholesale finance industry's contribution to GDP over this period. Comparing this to our initial econometric finding of a positive net impact (which includes both the cost

and benefit) of around 2.0%<sup>35</sup>, this crudely suggests that the gross benefits of the FSAP are likely to be in the order of 5.0%. Once again, we cannot be confident about these estimates because of the limitations of econometric analysis at this stage.

Turning to the economy wide impact of the FSAP, we calculate the total cost of the legislation in the UK to be between £22.1 billion and £34.7 billion over the next ten years. This amounts to between 0.19% and 0.29% of GDP<sup>36</sup>.

An initial and crude comparison of this figure to the European Commission's estimation of an increase in GDP of 1.0% – caused by a reduction in the costs of capital – suggests that the FSAP so far appears to have had a net positive impact upon the financial sector and upon the wider economy.

---

<sup>35</sup> Outcome of cebr analysis described earlier in this chapter (Section 5.4).

<sup>36</sup> Outcome of cebr analysis in this section (Section 5.5).

## 6 Conclusions

Since the end of the dot com crash, the world economy has expanded rapidly. There have been three key drivers behind this growth. The first is booming of many of the world's emerging economies, such as China, India and Russia. The second is the revival of the EU and Japan, which have spent almost a decade performing far below its potential and of the USA which was able to quickly recover from the recession that coincided with the attacks on the world trade centre in 2001. The third driver of the world economy is the rapid growth in world trade, which expanded by 10% per year between 2000 and 2005.

The fast growth of the world economy has resulted in an even more rapid expansion of the world's wholesale financial sector. With liquidity much more ready to move around the globe in search for higher returns than in the 1990's, and with much more liquidity to go around – because of the growth in emerging markets and commodity producing countries – the world's financial sectors have seen rapid growth. The EU has benefited strongly from this growth, with its wholesale financial sector expanding more rapidly over the past five years than the USA's. The rapid growth of new markets such as private equity, hedge funds and credit derivatives has helped the EU sector grow at a faster pace.

In turn, these and other rapid growing sectors in the EU, such as international bonds and international equities, have become more productive. This is partly because of the way in which wholesale finance has increasingly clustered in a few geographical locations across the EU. Aided by geographical clustering, the wholesale finance sector in the EU is playing an ever more important role in the economy. Between 2001 and 2006 the contribution of wholesale finance has grown at three times the annual average rate of the EU economy as a whole. In addition the sector contributes more subtly to the economy, by enabling capital to flow from savers to potential investors in the real economy.

The European Commission plans to extend the EU wholesale financial sector's ability to move capital around the bloc in a manner which maximises investment in the real economy, by both EU and non-EU companies. It aims to create a single market in the provision of financial services across the EU. Its vehicle for achieving this is the FSAP, which should be fully implemented by 2008.

The European Commission is currently evaluating the economic impact of the FSAP. Econometric analysis should be used to study the impact of the FSAP on wholesale finance and the wider economy, because the impact of the FSAP needs to be disentangled from the effect of all the drivers of wholesale finance. More time, however, must elapse since the FSAP's implementation for the different effects to be identified.

We have carried out an econometric analysis to attempt to obtain an initial view of the size and dimension of the impact. We find that the FSAP is likely to have so far had a net positive impact of +2% on the GVA of the EU finance

sector, although we cannot be confident in this result's robustness. This impact takes into account both the costs and benefits of the FSAP. Using industry and government views on the likely cost of compliance with the FSAP, we estimate that the costs equate to around 3% of sector output in the UK. Putting these two findings together, this suggests that the benefits of the FSAP are in the order of +5% of the EU's financial sector GVA. Whilst this remains an initial, tentative assessment, it helps to start quantify the size and direction of the FSAP's impact.

## 7 Annex

**Table 7-1: List of the FSAP Directives<sup>37</sup>**

The main features of the FSAP and related measures can be summarised as follows:

Measure	Description
<b>Prospectus Directive</b>	The purpose of this Directive is to harmonise requirements for the drawing up, approval and distribution of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market situated or operating within a Member State.
<b>Transparency Directive</b>	The purpose of this Directive is to establish requirements in relation to the disclosure of periodic and ongoing information about issuers whose securities are already admitted to trading on a regulated market situated or operating within a Member State. This Directive sets out the rules governing the issue of annual and semi-annual financial reports for securities issuers.
<b>Investment Services Directive</b>	The Directive recommends that investment services provided to professional investors could be governed exclusively by the conduct of business rules in force in the country of the service provider ("home country") without prior harmonisation and with respect to retail investors; since differences persist between national conduct of business protection, host country authorities may thus impose local business rules for such investors in accordance with Treaty principles and secondary legislation.
<b>Market Abuse Directive</b>	The directive ensures that any person who possesses inside information from using that information by acquiring or disposing of, or by trying to acquire or dispose of, for his own account or for the account of a third party, either directly or indirectly, financial instruments to which that information relates. This Directive also sets out measures to combat market manipulation.
<b>Markets in Financial Instruments Directive</b>	The Directive addresses investment firms and regulated markets whereby the home Member State shall ensure that the authorisation specifies the investment services or activities which the investment firm is authorised to provide. The authorisation shall be valid for the entire Community and shall allow an investment firm to provide the services or perform the activities, for which it has been authorised, throughout the Community, either through the establishment of a branch or the free provision of services.
<b>Fair Value Accounting</b>	This will enable European companies to report in conformity with current international developments.
<b>International Accounting Standards</b>	The Commission proposed that all EU companies listed on a regulated market (estimated at around 6,700) should be required to prepare consolidated accounts in accordance with IAS. Finally, the adoption of the IAS Regulation introducing the International Financial Reporting Standards (IAS/IFRS) for listed companies in the EU.

<sup>37</sup> European Commission, (1999), *Financial Services: Implementing the Framework for Financial Markets: Action Plan*.

<b>Post Trade Financial Services Directive</b>	The Communication aims to achieve the liberalisation and integration of existing Securities Clearing and Settlement Systems through the introduction of comprehensive access rights at all levels and the removal of existing barriers to cross-border clearing and settlement; the continued application of competition policy to address restrictive market practices and to monitor further industry consolidation; the adoption of a common regulatory and supervisory framework that ensures financial stability and investor protection, leading to the mutual recognition of systems; the implementation of appropriate governance arrangements.
<b>Financial Collateral Directive</b>	The Directive only covers arrangements where the collateral is either cash or financial instruments (mainly securities or interests in securities); it does not cover arrangements governing other types of collateral, for example commercial property, plant and machinery, or book debts (receivables). The purpose of the Directive is to promote the integration and cost efficiency of financial markets. It requires Member States to make collateral arrangements easier to enter into and to enforce.
<b>Settlement Finality Directive</b>	The Directive provides that the opening of insolvency proceedings against a participant shall not prevent funds or securities available on the settlement account of that participant from being used to fulfil that participant's obligations in the system on the day of the opening of the insolvency proceedings. Furthermore, Member States may also provide that such a participant's credit facility connected to the system be used against available, existing collateral security to fulfil that participant's obligations in the system. Insolvency proceedings shall not have retroactive effects on the rights and obligations of a participant arising from, or in connection with, its participation in a system earlier than the moment of opening of such proceedings.
<b>Takeover Bids Directive</b>	The Directive sets minimum guidelines for the conduct of takeover bids involving the securities of companies admitted to trading on a regulated market. It also includes provisions to protect minority shareholders, by establishing a framework of common principles and general requirements which Member States are to implement through more detailed rules.
<b>Company Law Directive on Cross-Border Mergers</b>	The Directive includes all companies with share capital which, in the unanimous view of the Member States, may be typified as companies having legal personality and separate assets which alone serve to cover the company's debts. It is aimed primarily at companies which are not interested in forming an European Company. A company taking part in a cross-border merger shall be governed, as far as the merger formalities are concerned, by the provisions of national law to which it is subject that apply to mergers of this type of company with other companies with share capital subject to the same national law.
<b>European Company Statute Directive</b>	The Regulation sets out the grounds on which a company can become a European Company (SE). The Directive governs the involvement of employees in the affairs of such European public limited-liability companies. It sets out the formulae for involvement in company negotiations and consultations.
<b>Supplementary Pensions Directives</b>	The Communication believes that a fully functioning Single Market for occupational pensions is essential to ensure that citizens are able to exercise their rights to free movement enshrined in the EC Treaty and thus to enhance labour mobility. The Communication seeks a coordinated approach adapted to the diversity of Member States' rules rather than harmonisation; calls for the elimination of unduly restrictive or discriminatory tax rules; and presents measures to safeguard Member States' tax revenues.

**Undertaking for the Collective Investments of Transferable Securities (UCITS)** This consists of two directives. The first sets out the essential harmonisation necessary and sufficient to secure the mutual recognition of authorisation and of prudential supervision systems, making possible the grant of a single authorisation valid throughout the EU and the application of the home Member State supervision. The second directive widens the scope of financial instruments in which UCITS can invest.

**Institutions for Occupational Retirement Provisions** The Directive aims to optimise the conditions in which pension investors operate in order to increase security of returns for the pension scheme. It seeks to create prudential supervision of pension funds including a common approach to registration and authorisation. The Directive includes rules on the covering of liabilities, the investment of such assets and rules governing how such institutions can operate on a cross-border basis.

**Distance Marketing Directive** The object of this Directive is to approximate the laws, regulations and administrative provisions of the Member States concerning the distance marketing of consumer financial services. The Directive sets out the information which must be given to the consumer, the right of withdrawal from a contract, and the parameters for administrative and judicial redress.

**Electronic Commerce Directive** This sets a programme of convergence covering contractual and non-contractual rules to pave the way for a country of origin approach to work in practice covering all financial services sectors and distance trading modes. Includes targeted steps to encourage consumer confidence in cross-border redress and internet payments. A Community-wide network of financial services complaints bodies will be established to provide effective and rapid out of court redress on a cross-border basis.

**Consumer Credit Directive** This Regulation lays down rules on cross-border payments in euro in order to ensure that charges for those payments are the same as those for payments in euro within a Member State (up to €50,000). The Regulation also sets out the obligation for transparency when charging its customers fees on cross-border payments and the obligation on Member States to remove balance of payment statistics (for payments up to €12,500) and obstacles to the automatic execution of transfers.

**Mortgage Credit Directive** Same outcome as envisaged in the FSAP. Recommends that the lender should supply to the consumer in the course of the pre-contractual phase: general information; personalised information to be presented in a European Standardised Information Sheet; and the lender should supply to the consumer information on the identification, address and telephone number of the competent body to which the consumer can refer in the event of difficulties in relation to the application of the Code on pre-contractual information for home loans.

**Insurance Mediation Directive** The Directive lays down rules for the taking-up and pursuit of the activities of insurance and reinsurance mediation by natural and legal persons which are established in a Member State or which wish to become established there. The Directive sets out the home Member State requirements for registration, professional standards (including information) and the notification procedures for the host Member State(s).

**Payment Service Directive** The three main blocks of the proposal are: the harmonisation of market access requirements of non-credit institution payment service providers; the introduction of clear and succinct information requirements for payment services replacing 25 sets of national rules; and clarity and certainty on core rights and obligations of users and providers of payment services. However, the proposed Directive establishing New Legal Framework for payments (NLF) is not a part of the FSAP and should not be included in the Evaluation.

**Savings Tax Directive** The aim of the Directive is to enable savings income in the form of interest payments made in one Member State to beneficial owners who are individuals resident for tax purposes in another Member State to be made subject to effective taxation in accordance with the laws of the latter Member State.

**Electronic Money Directive** The Electronic Money Directive mandates the establishment of a new prudential supervisory regime for electronic money institutions (ELMIs). The main objectives of the Directive are: (a) to create a regulatory framework to ensure the stability and soundness of ELMIs, so as to increase business and consumer confidence in this new and developing means of payment; (b) to eliminate legal uncertainty created by the lack of harmonisation in field; and (c) to facilitate access by ELMIs from one Member State into another.

**Money Laundering Directives** The Directive sets out identification requirements on transactions (and specific requirements for over €15,000). The Directive also makes amendments concerning casinos, when transactions should be suspended upon suspicion of money laundering and for the dissemination of information to financial institutions. The substantial revision of the FATF recommendations on money laundering and terrorist financing led to adoption of a 3rd Money Laundering Directive (Directive 2005/60/EC on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing), which additionally covers terrorist financing. It also provides definition of serious offences and states that money laundering should be regarded as a criminal offence. The 3rd ML Directive repealed the 2nd Directive. Its transposition deadline is 15 December 2007.

**Capital Requirements Directive** The Directive lays down the capital adequacy requirements applying to investment firms and credit institutions, the rules for their calculation and the rules for their prudential supervision.

**Reinsurance Directive** The Communication provides examples of how to deal with certain areas which an economic actor might be confronted with in the area of insurance and how the application of the principle of general interest applies to them. The Communication analyses 11 different areas and the ability to freely provide services in these areas.

**Table 7-2: Proportion of total UK costs of the FSAP directives attributed to wholesale finance**

<b>Directive</b>	<b>Proportion of total costs</b>
Accounts Modernisation	4%
Capital Requirements (Basel II)	47%
Consumer Credit	0%
Distance Marketing	0%
Supplementary Pensions	47%
Fair Value Accounting	4%
Insurance Mediation	0%
International Accounting Standards	4%
Institutions for Occupational Retirement Provisions	100%
Market Abuse	100%
Markets in Financial Service Instruments	100%
Mortgage Credit	0%
Payment Services	47%
Post Trade Financial Services	0%
Prospectus	100%
Re-insurance	100%
Savings Tax	47%
Second Money Laundering	100%
Third Money Laundering	100%
Transparency	100%
Undertaking for the Collective Investments of Transferable Securities (UCITS)	100%

## The City of London Corporation

The City of London is exceptional in many ways, not least in that it has a dedicated local authority committed to enhancing its status on the world stage. The smooth running of the City's business relies on the web of high quality services that the City of London Corporation provides.

Older than Parliament itself, the City of London Corporation has centuries of proven success in protecting the City's interests, whether it be policing and cleaning its streets or in identifying international opportunities for economic growth. It is also able to promote the City in a unique and powerful way through the Lord Mayor of London, a respected ambassador for financial services who takes the City's credentials to a remarkably wide and influential audience.

Alongside its promotion of the business community, the City of London Corporation has a host of responsibilities which extend far beyond the City boundaries. It runs the internationally renowned Barbican Arts Centre; it is the port health authority for the whole of the Thames estuary; it manages a portfolio of property throughout the capital, and it owns and protects 10,000 acres of open space in and around it.

The City of London Corporation, however, never loses sight of its primary role – the sustained and expert promotion of the 'City', a byword for strength and stability, innovation and flexibility – and it seeks to perpetuate the City's position as a global business leader into the new century.

