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BANKING INTEGRATION IN THE EURO AREA

BY INÊS CABRAL, FRANK DIERICK AND JUKKA VESALA

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Executive summary

The competent public authorities are striving to complete financial integration in Europe by 2005. The ECB has a substantial interest in further financial integration because it would enhance the effectiveness of the transmission of the single monetary policy to the real economy. Equally important from a central bank perspective are the broad economic benefits of integration in terms of increased efficiency and competitiveness of the economy. Hence there is considerable interest in the progress of financial integration thus far and in the efficiency of the policy measures adopted to date. The present paper wishes to contribute to this debate by focusing on the degree of banking sector integration and its evolution over time.

Most of the empirical evidence on European financial integration relates to the financial markets, while there is less evidence on the financial products and services provided by banks to corporate and personal clients. This paper diverges from the typical analysis of integration in financial markets and concentrates on filling the gap in information on financial products and services. To this end, it relies on an extensive set of available data from official statistics, commercial databases and ad hoc sources. The analysis is divided into three main areas of banking activity: wholesale, capital market-related and retail, looking at different products and services within each category.

Markets for financial products and services, as for any goods, can be defined as integrated when the same price is charged for the same product throughout the markets in the different locations. In banking, however, it is often impossible to verify whether this law-of-one-price holds, owing to a lack of data and wide differences in banking products. For these reasons we also use, as systematically as possible, quantity-based indicators of integration, which may point to further integration but need to be assessed prudently. Such indicators may, for example, be cross-border borrowing and investment, the cross-border establishment and acquisition of financial institutions, changes in the structure of local markets, and the share of foreign suppliers in the local markets. The main findings of the paper are as follows:

First, there is evidence pointing to a fully integrated market in wholesale banking services as far as the predominant unsecured interbank loans and deposits are concerned. Integration is clearly less advanced in the repo segment, mainly because of clearing and settlement obstacles.

Second, as regards capital market-related activities, there is evidence to show that the formerly segmented national currency-based markets for underwriting corporate bond issues have already largely transformed into an integrated area-wide market. This has resulted from the fierce competition by international intermediaries, especially US investment banks, challenging the previously leading role of domestic intermediaries. In the equity and syndicated lending fields, the role of local information and risk assessment, and thus the presence of local intermediaries has been more durable. The still fragmented infrastructure for cross-border clearing and settlement of securities transactions represents a major obstacle to cross-border trading and the provision of related asset management services. Notwithstanding these impediments, the share of national (i.e. domestic) investments by equity mutual funds in euro area countries declined from 49% in 1997 to 28% in 2002, reflecting significant progress in diversification across borders.

Third, the integration process has clearly been slower in the retail area, which is due to the traditionally strong local nature of these activities. Monetary union in the euro area has led to convergence in the levels of retail loan and deposit interest rates, but significant differences have remained across countries in banks' margins, suggesting that market segmentation has remained strong. Nevertheless, emerging convergence in the margins of household loans, in particular, can be detected in the euro area.

Moreover, foreign entry has intensified, suggesting stronger links across local markets and, potentially, a gradual progress towards greater integration. Cross-border mergers and acquisitions in banking reached 42% of the value of "bank-bank" mergers in 2000, while over a longer period of time (1990-2001) most of the transactions were domestic. Foreign involvement in national banking systems appears larger in terms of the ownership structures than in terms of the branching network. Foreign ownership in terms of banking capital is currently well over 20% in the euro area on average, and over 30% in four countries. Foreign branches typically hold no more than 5% of the local banking assets, even though the role of foreign branches has increased over time.

The development of remote access technologies in banking has taken off, but at varying speeds across the euro area, and is still at a fairly early stage. Internet banking could provide a strong boost to integration, as it makes it possible to bypass the traditional requirement of geographical proximity between banks and their customers.

The paper also looks at indications of greater competition in addition to indicators of integration. Within corporate finance services there has been a remarkable reduction in bond intermediation fees in all transaction sizes, but especially in the case of the largest bond issues (by over 60% between 1995 and 2000). In equity intermediation, the decline in fees has been sizeable, but not as large as in bonds. Fees have also declined significantly in syndicated lending, but interest rate margins and fees on undrawn credits increasingly reflect risk differentiation across borrowers. The most visible reductions in price levels in the retail field seem to have taken place in household lending. In deposit-taking though, banks' margins have tended to widen. Finally, the evidence presented on the consolidation process in banking may also be broadly in line with positive developments from a consumer perspective (i.e. gradual efficiency increases and greater market contestability).

Introduction

The concept of integration refers to a situation in which, out of previously segmented markets for a single product (or substitute products), one coherent market is created. Markets are considered integrated when the law-of-one-price holds, i.e. the prices for the products in question are the same irrespective of the geographical domicile of the seller or the buyer of the product. The law may fail to hold true because of factors such as transport and transaction costs, consumer switching costs or barriers to entry, maintaining market segmentation.

This study deals with banking products and services. Thus, "prices" can refer to investment returns which, in integrated markets, should converge to the same levels, provided that the risk features are identical (see, for example, Adam et al., 2002, and Bernard and Bisignano, 2002). In addition, they can refer to bank service charges, which should be similar in integrated markets. Price information on returns and charges is used as much as possible in this study, because it provides the strongest and most clear-cut evidence of integration, due to the reference to the law-of-one-price. However, in the banking field, the law-of-one-price criterion may not be easily verifiable, owing to a lack of data. In addition, many financial products and services are heterogeneous, of different quality or even tailored to the needs of individual clients. Hence, the validity of the law would be very difficult to establish, as the price signals are obscure.

For these reasons, it is useful to also evaluate quantity-based indicators, which can be interpreted as weaker, but still valuable, indicators of integration in the light of portfolio theory (e.g. allocation of investments across the single market area).[1] These data can also show emerging linkages between previously segmented markets. Such indicators include cross-border borrowing and investment, the cross-border establishment and acquisition of financial institutions, changes in the structure of local markets and the share of foreign suppliers in the local markets. These indirect, quantity-based indicators of integration need to be interpreted prudently, however. For instance, an entry by a foreign bank via the purchase of an existing local bank does not necessarily imply integration, as the acquired bank may continue to operate as before in the local market, and the pricing conditions will not necessarily converge across local markets.

Despite being two different concepts, integration and competition may be linked in the sense that more integration is likely to generate more competition. Competition refers to the pricing behaviour of firms in a given market. Increasing competition implies that firms' profit margins decrease to the benefit of consumers. This can occur if the number of suppliers in the market increases (as in the standard Cournot oligopoly model) or if the threat of new entry becomes more realistic (as in the model of contestable markets, Baumol et al., 1982).[2] Integration implies that competition is extended from a particular market (the local level) to a larger set of markets (the European level), which generally leads to an increase in the number of competing firms. In addition, a higher degree of competition can be achieved through the increased ease of entry under the single market and single currency conditions. Indeed, reducing the barriers to entry and fostering integration has been pursued as a major policy objective because of the significant economic benefits of increased competition.[3]

Competition is most commonly measured against the benchmark of perfect competition, in which the number of firms operating in a market is high and price equals marginal cost.[4]

1 *Data included in this paper are from a variety of sources, using different statistical concepts, collection techniques, etc. This makes it difficult to compare series across indicators and countries. The reader should keep this caveat in mind when interpreting and possibly using the data.*

2 *The literature on repeated games also recognises the possibility of occasional price wars among the existing set of firms as part of a collusion enforcement mechanism. See e.g. Slade (1995) for a review.*

3 *See e.g. Obstfeld (1994), Martin and Rey (2000), and European Commission (2001).*

4 *There are few studies which address the degree of competition in the European banking markets using the methods of empirical industrial organisation (e.g. Bikker and Groeneveld, 2000; Corvoisier and Gropp, 2002a; and Vesala, 2001).*

It is rather difficult to implement this benchmark in banking, again on account of product heterogeneity. The paradigm of contestable markets may be more appropriate, since it is applicable to differentiated products and recognises that the extent of competition may be unrelated to the number of suppliers in a given market. A perfectly contestable market is one in which there are no excessive barriers to entry or exit. If the barriers are not prohibitively high, incumbent firms will not be in a position to charge excessively high prices (above marginal cost) to customers, even in concentrated local markets, since this would attract new entry. Perfect contestability does not require actual entry, but simply the discipline exerted by potential competitors on the pricing behaviour of the established firms. However, any empirical evidence pointing to contestable markets must be interpreted prudently as a signal of greater competition, as consumers need to benefit from new entrants. This may not happen in all acquisitions of local firms by foreign financial institutions, for instance.

Several existing studies find evidence of integration in the main EU financial markets, especially following the introduction of the euro. For example, a prior ECB Occasional Paper (Santillán et al., 2000) documents the creation of common money and derivative markets and progressive integration in the bond and equity markets operating in the single currency. Other official studies (e.g. a European Commission report, 2001; and BIS research, Galati and Tsatsaronis, 2001) and academic studies (e.g. Danthine et al., 2000; and Gros and Lannoo, 2000) present similar evidence. The existing studies mainly relate to financial market instruments, and do not look at the services provided by financial institutions.[5]

This study contributes to filling the gap by exploiting several data sources to present indicators of integration in banking products and services. Even though conclusive evidence cannot always be found, the paper aims to enhance our understanding of the degree of integration in banking. The focus of the study is on integration, but it will also comment on whether, in addition to signs of integration, a simultaneous tendency towards increasing competition can be detected. Finally, in the European universal banking model, banks offer a wide range of products, whose markets may exhibit different degrees of integration. This calls for a breakdown of the analysis into product categories, as is the case in this study, in which wholesale, capital market-related and retail products are examined separately.

The paper is organised as follows. Section 1 reviews the legal progress towards a single market for banking services in the EU, in particular the dismantling of regulatory barriers to entry. On the basis of the above methodological notes, Sections 2 – 4 break banking activities down into the three broad product categories, for which indicators of integration are presented. These Sections begin with a review of the available price data, which is followed by an examination of other possible quantitative indicators of integration – primarily cross-border entry patterns and the emerging euro area market structures. Section 5 concludes the paper.

5 Some implicit evidence of a lack of integration in European banking markets can be obtained from certain macro-level studies of convergence in banking variables (e.g. Calcagnini et al., 2000; and Kleimeier and Sander 2001) and monetary policy transmission (e.g. Mojon 2000, and Angeloni et al., 2002).

1 Regulatory framework

The Treaty of Rome (1957) already contained the basic principles for the creation of a single European market for financial services. In practice, however, the formation of the single market continued to be hampered by divergent national regulations. A major step in the further opening-up of cross-border competition was the Single European Act (1986) which provided for the completion of the single market by the end of 1992.

The single market for financial services relies on the building blocks of home country control and mutual recognition. Under these principles, a bank (or more generally any financial firm) that is operating in another Member State (host country) continues to be supervised by the authority in the country of origin (home country). Any bank incorporated in a Member State may, directly or indirectly, provide services across EU borders on the basis of a single licence issued by the home country authority and under its control. However, several areas, in particular those relating to consumer protection, competition and other conduct-of-business rules, continue to be covered by the host country's rules.

Minimum harmonisation of regulations has been pursued in a number of Directives in order to create a level playing-field for financial institutions. In banking, the European regulatory framework is to a large extent determined by the First (1977) and Second (1988) Banking Directives, which are now integrated in the Directive relating to the taking-up and pursuit of the business of credit institutions (2000). A number of key Directives have also been introduced in the insurance and securities sectors.

1.1 Recent initiatives

Despite the successful implementation of the core Directives, legal obstacles to the integration of financial services have continued to exist. In 1999 the European Commission identified a number of areas in which action was required in order to complete financial integration. This took the form of the Financial Services Action Plan (FSAP), covering policy initiatives to be implemented by 2005 in the areas of financial law, regulation and supervision, and taxation. The aim is to create fully integrated wholesale banking and capital markets and to develop open and secure markets for retail financial services. Many important initiatives have already been launched with a view to achieving these objectives. For European banks, both areas are of vital importance. Banks are increasingly present in capital markets, not only to acquire funds, but also to support their investment banking and asset management activities.

In the capital market field, an ad hoc committee chaired by A. Lamfalussy (2001) emphasised the need to increase the speed and flexibility of European regulatory processes in order to meet the objectives of the FSAP. Consequently, two new European committees have been set up to design and implement common regulations in this area. Two Directive proposals, one on market abuse and one on prospectuses, have already been put forward under the new structure, and a similar committee set-up is now being considered for other financial sectors, notably banking. In the course of 2002, two Directives were also approved which update the regulation of collective investment undertakings (UCITs), extending the range of assets in which UCITs benefiting from a single licence may invest and establishing a single licence regime for portfolio management companies. Since European banks are very active in the UCITs market, their cross-border asset management business is expected to benefit from these initiatives.

In addition, some general conditions have to be fulfilled in order to achieve integration in capital markets, for example with regard to company law, provision of financial information and taxation of savings income. First, very few truly cross-border firm structures exist at present, but this may change following the recent political agreement on the establishment of a European Company Statute (2001). This will give companies (including banks) operating in more than one Member State the option of being established as a single company under Community Law and operating on the basis of one set of rules throughout the EU. Second, the recently adopted regulation requiring listed companies (including banks) to prepare consolidated accounts in accordance with the International Accounting Standards (IAS) from 2005 onwards will result in more reliable and transparent accounts, thereby reducing barriers to cross-border trading. However, it is not yet clear whether the national implementation will extend beyond the consolidated accounts of listed companies.

In the retail field, the FSAP recognised the lack of harmonisation in the field of customer information and the lack of efficient procedures for solving cross-border disputes as major obstacles. Several initiatives were taken to address these concerns. For example, a revision of the Consumer Credit Directive was launched to promote transparency and ensure harmonised conditions. In addition, an out-of-court complaints network for financial services has been set up. Similarly, a voluntary code of conduct has been concluded between the mortgage lending industry and consumer groups, which covers harmonised information to be made available to consumers. Finally, as e-commerce and e-banking become more widespread, an appropriate regulatory framework is necessary. An important step was taken with the recent political agreement on a proposed Directive relating to the remote marketing of consumer financial services e.g. through the internet.

1.2 Remaining legal obstacles

Many of the regulatory obstacles in the capital market field are identified in the FSAP and could be removed within the scheduled deadlines. However, important challenges remain. The draft Directive on takeover bids did not receive the European Parliament's approval. The lack of minimum harmonised rules on takeovers continues to act as a brake on the cross-border consolidation process, also in banking. According to current merger regulations, Member States can take appropriate measures in order to protect certain legitimate interests (such as public security or prudential rules), which is sometimes too broadly interpreted. National competition authorities may also favour domestic consolidation and discourage acquisitions by foreign banks.

Other constraints continue to hamper bank customers and investors in diversifying across borders. For example, host countries may require compliance with national regulations intended to protect the public interest (such as consumers' interests). The creation of a single market may have been eroded by too broad an interpretation of this exception to the "home country" rule. Divergent taxation rules for savings remain a significant hurdle to further integration. An agreement has recently been reached on the exchange of information on savings held by residents from other Members States, but a long transition period is scheduled. In addition, the process of establishing harmonisation in consumer information and procedures for solving disputes with financial services' providers is still incomplete. The result of all these barriers is that it is difficult to acquire services abroad, and banks need to develop products separately for the different local markets.

Finally, the high costs which banks charge for cross-border retail payments continue to act as a brake on the development of cross-border trade and e-commerce. Following failed attempts to bring these costs down, a Regulation was adopted to oblige banks to charge the same amount for domestic and similar cross-border payments. As a result, the European banking sector agreed to take the necessary steps to establish a single payment area by no later than 2010.

2 Wholesale banking activities

Wholesale banking refers to activities in which the two sides of the transaction are banks or other financial institutions. Whenever two parties to a transaction do not have the same bank as their service provider, the transaction in question will also require a wholesale transaction, namely, an interbank funds transfer. The wholesale market is instrumental in increasing the efficiency of the financial system inasmuch as a bank which lacks liquidity is able to borrow from another bank and thereby continue channelling payments and credit. Efficiency gains from integration in this area can also translate into ultimate benefits to the consumer as a result of banks' reduced funding costs.

In the bank-dominated financial system of Continental Europe, the interbank transmission of liquidity among universal banking groups is the major component of wholesale activity, as these groups control a large share of the overall financial services activity. According to survey information collected by the European System of Central Banks (ESCB), unsecured deposits and corresponding derivative contracts account for the largest share of the overall interbank activity in euro, namely over 70% (e.g. Santillán et al., 2000; ESCB 2002, and Ciampolini and Rhode, 2000).[6] Derivatives are becoming increasingly important, because of increasing use of such instruments for risk management and re-allocation purposes. The remaining part consists of secured repo transactions, whereby liquidity is exchanged against collateral.

The common risk-free yield curve and access to central bank liquidity under the single currency conditions support the creation of a fully integrated money market for interbank liquidity transfers, replacing the previous national markets in the constituent currencies. However, full integration is not a priori guaranteed, since unsecured transactions entail credit risk for the lending banks, and banks need to monitor the creditworthiness of their counterparties (Calomiris and Kahn, 1991, and Flannery, 1996). Holthausen and Freixas (2001) show that market segmentation is, in theory, a possible outcome even under the single currency conditions if cross-border information on the soundness of banks is of low quality (and banks suspect that cross-border borrowing is triggered by an inability to borrow at the domestic level). The emergence of an integrated market is only possible when the quality of cross-border information is sufficiently good and there is trust in the quality of counterparties located in other countries.

2.1 Pricing developments

Comprehensive data on overnight rates are available for a range of what are known as EONIA (euro overnight index average) banks which are active participants in the euro interbank market. These data are meaningful, since they are based on actual transaction rates, rather than on "declared" rates.

During the first weeks of 1999 the differences in the overnight rates across countries fell to a level of around 2 basis points, beyond which arbitrage is no longer profitable (i.e. below the usual bid-ask spread). These differences also resemble those observed in national markets before the introduction of the euro. Another strong indication of rapid integration is that any existing differences in the overnight rates have been much greater across individual banks within a country than across countries.[7] By way of illustration, Chart 1 shows the convergence of the average overnight rates in Spain, Italy, Portugal and Ireland as compared with the German rates before and after the introduction of the euro. It can be seen that, following the introduction of the euro, the higher rates in these countries very rapidly converged to the lower levels already

6 It should be noted that the information stemming from these surveys covers a sample of major banks and does not meet rigorous statistical standards.

7 The contribution of inter-country variance to the total variance in the EONIA overnight rates has on average been less than 30% since the introduction of the euro (source: The ECB).

prevailing in Germany. This is a good indication of the emergence of a single market from the national markets segmented through different currencies and risk-free yield curves.

Similar evidence is available for longer maturities, as the dispersion of the offered rates by the EURIBOR banks to the calculation of the respective reference rates has been low. Ciampolini and Rhode (2000) have calculated that, between July 1999 and January 2000, the cases in which the average one-month rate for banks from euro area countries deviated by more than 3 basis points vis-à-vis the average German rates were highly exceptional. Given all the evidence, the law-of-one-price apparently began to work within a few days of the launch of the euro in the most important unsecured segment of the wholesale market.

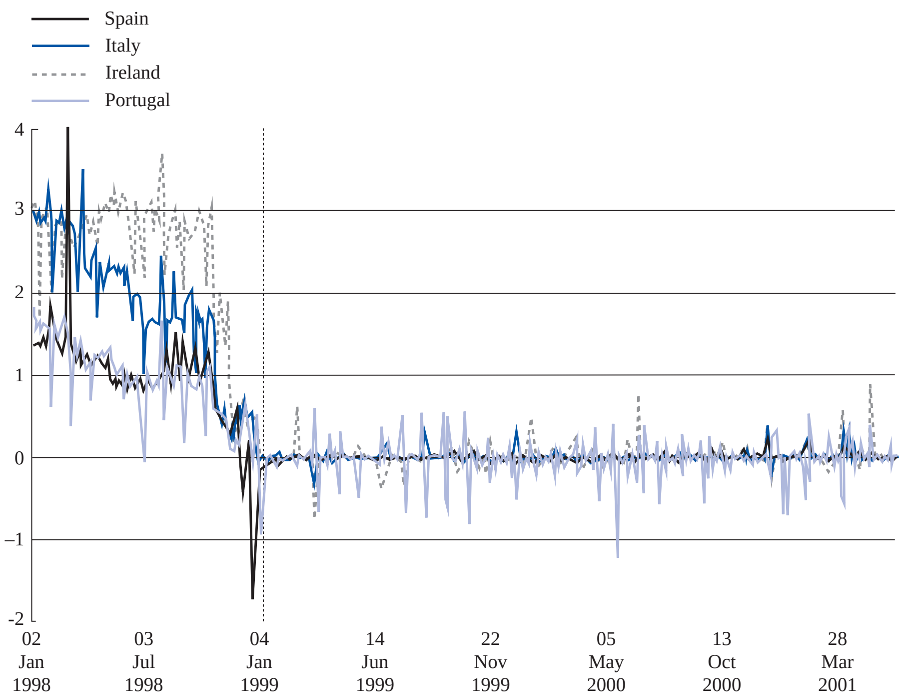
In principle, the repo market provides a perfect medium for channelling liquidity between banks and across countries without assuming credit risk, and any lack of information should not significantly constrain cross-border activity. However, the available evidence points to weaker integration in the repo segment, as wider price differentials have prevailed across countries than in the unsecured segment (Ciampolini and Rhode, 2000). This reflects lower liquidity, but also remaining segmentation of the national markets, due to legal and fiscal obstacles in collateralised cross-border transactions and, in particular, difficulties in clearing and settling them effectively. The development of the market infrastructure has been crucial to the successful integration of the unsecured segment. The TARGET system can be used for clearing and settling these transactions across borders, while a similar common infra-structure is not yet in place for repo trans-actions. The TARGET system now connects more than 5,000 credit institutions in the EU in an interbank network. Before the launch of the TARGET system, cross-border interbank operations were mainly conducted through correspondent banking channels.

Market participants have generally expressed satisfaction with the efficiency of liquidity

Chart 1

Differences in average overnight rates vs. average German rates

(%-points)



Source: The ECB.

distribution across the euro area via unsecured instruments. This is also indicated by the scarce recourse by banks to the ESCB's standing facilities (the marginal lending and deposit facilities) during the first three weeks of the reserve maintenance period. Banks are evidently able to borrow liquidity from each other instead of having to resort to borrowing from or depositing with central banks. An even stronger indication of integration is provided by the data for the last few days of the maintenance period (i.e. the period used to calculate the reserve requirement), when banks have to manage their end-of-the-day reserve account balances. Only one of the standing facilities has been used to any great extent. Thus, the use of the facilities seems to be due to a liquidity shortage or excess in the entire euro area banking system, rather than to any problems in the distribution of liquidity across banks or countries.

2.2 Cross-border intermediation

The available data on cross-border flows reveal that market integration has indeed taken place through active cross-border arbitrage. These quantitative indicators supplement the picture of an integrated market, in particular for unsecured transactions.

As regards interbank transactions, regular data do not exist and survey information is scarce. Nevertheless, ESCB surveys have indicated a substantial increase in major banks' cross-border interbank transactions since the introduction of the euro. The share of transactions in which the counterparty is from another euro area country increased from 21% in 1998 to 42% in 2001 in the unsecured segment (Santillán et al., 2000; ESCB 2002). Over the same period, the share of domestic transactions dropped from 68 to 31% (cross-border trades with the rest of the world covering the remaining part). In the repo segment, the share of cross-border transactions within the euro area rose much less, from 33 to 37%.[8]

The increasing share of cross-border interbank activity has been reflected in a rising share of cross-border transactions processed in the settlement systems for large-value payments. Interbank trading accounts for by far the largest part of all cross-border TARGET payments (more than 95%). The share of cross-border

8 *Ciampolini and Rhode (2000) provide similar evidence with regard to cross-border repo transactions.*

Table 1

TARGET payment flows

	1999 Q1	2000 Q1	2001 Q1	2002 Q1
All TARGET payments				
• Daily average total value (EUR billions)	964	1003	1237	1539
• Daily average volume (thousands)	155	180	198	248
• Average daily payment (EUR millions)	6.2	5.6	6.2	6.2
Cross-border TARGET payments				
• Daily average total value (EUR billions)	349	413	518	479
• (% of all TARGET payments)	(36.2%)	(41.2%)	(41.9%)	(31.1%)
• Daily average volume (thousands)	25	37	44	51
• (% of all TARGET payments)	(16.0%)	(20.8%)	(22.1%)	(20.8%)
• Average daily payment (EUR millions)	14.1	11.1	11.8	9.3
Domestic TARGET payments				
• Daily average total value (EUR billions)	615	590	719	1060
• (% of all TARGET payments)	(63.8%)	(58.8%)	(58.1%)	(68.9%)
• Daily average volume (thousands)	130	142	154	196
• (% of all TARGET payments)	(84.0%)	(79.2%)	(77.9%)	(79.2%)
• Average daily payment (EUR millions)	4.7	4.1	4.7	5.4

Source: The ECB.

Table 2

Payment flows in other euro area cross-border large value payment systems

	1999 Q1	2000 Q1	2001 Q1	2002 Q1
Euro 1 (EBA)				
• Daily average total value (EUR billions)	175	187	217	193
• Daily average volume (thousands)	52	90	109	126
• Average daily payment (EUR millions)	3.3	2.1	2.0	1.5
Euro Access Frankfurt (EAF)				
• Daily average total value (EUR billions)	172	163	170	146 1)
• Daily average volume (thousands)	48	50	52	48 1)
• Average daily payment (EUR millions)	3.6	3.2	3.3	3.0
Paris Net Settlement (PNS)				
• Daily average total value (EUR billions)	92	88	91	82
• Daily average volume (thousands)	22	19	32	31
• Average daily payment (EUR millions)	4.2	4.6	2.9	2.7
Servicio Español de Pagos Interbancarios (SEPI)				
• Daily average total value (EUR billions)	5	2	2	1
• Daily average volume (thousands)	5	4	4	7
• Average daily payment (EUR millions)	1.1	0.5	0.5	0.2

Source: The ECB.
1) Values from 2001 Q4.

payments in total TARGET payments has been around 40% of the total payment value, although it dropped to 31% in the first quarter of 2002 (Table 1). The daily average value of close to EUR 500 billion indicates that the amounts exchanged across borders are substantial. The other major payment systems operating in the euro area – of which Euro 1 (EBA) and Euro Access Frankfurt (EAF) are the largest – also have substantial daily transaction values, consisting largely of cross-border interbank payments (Table 2).

Looking at the aggregated euro area balance sheet data (which includes many banks which have no international operations at all), one can see a gradual increase in cross-border interbank assets and liabilities within the euro area. The overall share of both cross-border interbank assets and liabilities has been steadily increasing and amounted to close to 20% of the total in the first quarter of 2002 (Table 3).[9] This pattern is shared in most, but not all, euro area countries. Cross-border activity involving non-euro area counterparties has tended to decrease in favour of euro area business (except during the last quarter of 2000 in the case of interbank deposits). Non-euro area cross-border activity still exceeds the activity involving euro area counterparties, but the difference has almost vanished in interbank assets. The interbank asset and liability structure of the major banks is more cross-border-oriented than the average banking industry figures would imply. Major banks have also been inclined to expand the scope of their wholesale business to the euro area as a whole and to strengthen their positions in cross-border interbank business, as further discussed in the next section.

The importance of cross-border activity differs quite strongly across euro area countries, mainly, it appears, because of the size of the local money market. Interbank business is more strongly domestic in Spain, France and especially Germany than in the euro area as a whole. In a larger country there are more local counterparties available, which may partly explain these observations. By contrast, in the Benelux countries, Ireland, Portugal and Finland, cross-border activities account for a share of more than 50% of interbank assets or liabilities.

9 As the data in Table 3 are collected on a non-consolidated "host country" basis, the cross-border assets and liabilities of the subsidiaries of euro area banks (e.g. in London) are not included in the figures.

Table 3

Euro area banks' interbank assets and liabilities by counterparty

(% of total, end of period)

		Interbank assets			Interbank liabilities		
		Domestic	Euro area	Rest of the World	Domestic	Euro area	Rest of the World
Euro area	1997Q4	60	15	25	59	15	26
	1998Q4	61	17	22	58	16	26
	1999Q4	62	18	20	57	16	27
	2000Q4	61	18	21	55	16	29
	2001Q4	59	18	23	53	16	31
	2002Q1	59	19	22	53	16	31
BE	1997Q4	30	27	43	25	26	49
	1998Q4	31	32	37	25	26	49
	1999Q4	26	40	34	27	22	51
	2000Q4	22	43	35	20	25	55
	2001Q4	21	40	39	16	30	5420
	2002Q1	22	40	38	18	29	53
DE	1997Q4	73	9	18	75	9	16
	1998Q4	73	10	17	71	11	18
	1999Q4	74	11	15	70	10	20
	2000Q4	71	12	17	67	11	22
	2001Q4	69	13	18	66	12	22
	2002Q1	68	13	19	65	12	23
GR	1997Q4	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1998Q4	70	9	21	41	20	39
	1999Q4	69	11	20	36	22	42
	2000Q4	63	10	27	32	22	46
	2001Q4	50	21	29	38	27	35
	2002Q1	42	21	37	32	25	43
ES	1997Q4	71	13	16	69	11	20
	1998Q4	71	15	14	62	15	23
	1999Q4	72	17	11	63	19	18
	2000Q4	68	18	14	57	23	20
	2001Q4	71	15	14	58	22	20
	2002Q1	69	17	14	58	24	18
FR	1997Q4	66	8	26	67	9	24
	1998Q4	69	9	22	69	11	20
	1999Q4	70	12	18	67	11	22
	2000Q4	70	11	19	63	10	27
	2001Q4	69	12	19	61	11	28
	2002Q1	71	12	17	62	11	27
IE	1997Q4	41	17	42	28	24	48
	1998Q4	46	23	31	29	29	42
	1999Q4	36	29	35	24	32	44
	2000Q4	35	29	36	23	28	49
	2001Q4	36	25	39	24	28	48
	2002Q1	34	26	40	22	26	52
IT	1997Q4	57	16	27	43	24	33
	1998Q4	53	24	23	43	26	31
	1999Q4	59	22	19	47	25	28
	2000Q4	63	20	17	47	24	29
	2001Q4	67	17	16	43	25	32
	2002Q1	64	19	17	44	26	30
LU	1997Q4	20	53	27	24	35	41
	1998Q4	22	55	23	28	34	38
	1999Q4	25	52	23	28	35	37
	2000Q4	22	55	23	31	31	38
	2001Q4	22	55	23	30	33	37
	2002Q1	24	53	23	32	30	38

Table 3 (continued)

Euro area banks' interbank assets and liabilities by counterparty

(% of total, end of period)

		Interbank assets			Interbank liabilities		
		Domestic	Euro area	Rest of the World	Domestic	Euro area	Rest of the World
NL	1997Q4	39	23	38	34	19	47
	1998Q4	37	24	39	32	20	48
	1999Q4	41	21	38	35	17	48
	2000Q4	48	17	35	43	13	44
	2001Q4	38	17	44	36	14	50
	2002Q1	39	17	44	35	14	51
AT	1997Q4	56	18	26	55	21	24
	1998Q4	63	16	21	59	18	23
	1999Q4	65	14	21	59	17	24
	2000Q4	61	18	21	57	19	24
	2001Q4	61	18	21	56	16	28
	2002Q1	61	18	21	58	16	26
PT	1997Q4	43	30	27	42	20	38
	1998Q4	43	29	28	38	24	38
	1999Q4	52	23	25	41	27	32
	2000Q4	39	23	38	26	25	49
	2001Q4	37	34	29	21	30	49
	2002Q1	37	37	26	23	29	48
FI	1997Q4	36	11	53	42	16	42
	1998Q4	35	19	46	31	20	49
	1999Q4	38	15	47	36	17	47
	2000Q4	28	18	54	24	9	67
	2001Q4	37	6	57	32	5	63
	2002Q1	33	3	64	29	6	65

Source: The ECB.

2.3 Market structure

The interbank trading and market structure patterns across countries (e.g. the role of financial centres) can also be studied on the basis of TARGET data. These data are representative, as TARGET is the main channel for unsecured trades.[10] Table 4 presents the ratios of the interbank payments received by country i from country j (PAYij) to the total payments made by country j (PAYj). Reading the table by columns we can see, for instance, that the payments sent by Austrian banks to German banks account for around 45% of the total cross-border payments sent by Austrian banks. The final column indicates that the share of payments received by Austria accounts for approximately 3% of the total cross-border payment flow.[11]

Hence, cross-border interbank trading seems to be characterised by the existence of financial centres. In particular Germany, whose share of the payments received (or sent) accounts for more than 24% of the total payments between EU countries, is one of these centres. For instance, the payments sent to Germany by Austrian and Greek banks

10 *These data have some drawbacks, however. First, they also contain liquidity transfers between "in" and "pre-in" countries (i.e. the United Kingdom, Sweden and Denmark) for the purpose of allocating daylight euro liquidity to "pre-in" countries and between head offices and foreign affiliates, particularly from "in" to "pre-in" countries. These two types of transfer do not reflect real interbank transactions between different banking organisations and can lead to some overestimation of the share of "pre-in" banks in the interbank businesses. Second, the data are not entirely clean, as some transactions with third parties may be recorded as interbank transactions (e.g. with broker-dealers).*

11 *Although the table refers to a particular month (December 2000), the pattern of cross-border payment flows appears quite stable across months. The volumes of total payments sent and received are relatively similar across countries. Hence, there is no indication of large imbalances in liquidity supply and acquisition at the aggregated country level. Finally, a fairly similar picture of cross-border links can be obtained from banks' balance sheet data.*

Table 4

Cross-border interbank payment transactions between EU countries

(% of the total payments made by each country, monthly average of daily TARGET flows, December 2000)

	From															
To	**AT**	**BE**	**DE**	**DK**	**ES**	**FI**	**FR**	**UK**	**GR**	**ES**	**IT**	**LU**	**NL**	**PT**	**SE**	**Total received**
AT	-	1.5	4.9	0.8	3.4	5.2	2.3	1.5	5.1	1.5	1.7	3.9	1.3	5.6	2.6	**2.7**
BE	5.2	-	12.4	11.5	9.4	12.0	8.2	6.0	8.7	10.2	9.3	15.7	7.5	10.5	7.2	**8.6**
DE	45.1	28.7	-	24.3	26.3	15.3	35.1	39.0	42.7	25.5	31.2	34.0	30.9	15.1	24.3	**24.6**
DK	0.4	2.8	1.8	-	0.4	14.8	1.6	1.5	0.4	0.3	0.4	4.3	4.1	3.3	14.3	**2.3**
ES	4.4	3.5	4.3	2.9	-	1.4	3.4	2.8	0.4	3.6	6.8	1.0	1.4	12.2	1.6	**3.5**
FI	3.3	2.7	1.0	14.9	1.2	-	0.9	0.7	1.1	1.4	2.7	0.6	1.9	0.1	16.8	**2.0**
FR	11.8	14.1	19.6	5.7	16.4	6.9	-	22.9	5.4	10.0	18.0	10.0	12.8	7.0	6.5	**14.5**
UK	8.9	19.5	26.5	10.0	12.0	6.6	24.9	-	9.5	29.6	17.4	10.6	29.9	12.5	7.7	**17.7**
GR	0.6	0.2	0.6	0.2	0.1	0.0	0.1	0.1	-	0.6	0.1	1.0	0.3	1.8	0.2	**0.3**
IE	1.1	1.8	1.2	1.2	1.5	2.3	0.8	2.4	1.4	-	0.3	0.9	0.9	5.5	3.0	**1.4**
IT	5.8	9.7	11.2	2.1	18.9	11.2	12.3	6.9	3.3	2.0	-	12.3	5.0	17.5	4.4	**8.7**
LU	3.4	4.6	3.7	2.1	1.0	1.0	2.2	1.4	10.1	1.8	4.0	-	1.3	3.1	1.3	**2.7**
NL	3.4	8.0	9.9	12.5	3.3	6.9	6.5	13.0	8.4	4.7	4.6	3.5	-	4.4	9.3	**7.8**
PT	3.4	1.2	0.8	1.9	5.1	0.1	0.7	0.7	3.7	4.2	2.6	0.8	0.8	-	0.7	**1.2**
SE	3.2	1.8	2.1	10.1	1.0	16.4	1.1	1.1	0.0	4.7	1.0	1.6	2.1	1.3	-	**2.1**
Total sent	**2.7**	**8.6**	**24.6**	**2.4**	**3.6**	**1.8**	**13.8**	**17.1**	**0.4**	**1.5**	**8.9**	**3.0**	**7.9**	**1.4**	**2.2**	**100**

Source: The ECB.

account for almost half of the total payments made by these countries. All other countries also have important relationships with Germany. There are also two other significant countries, namely the United Kingdom (around 17% of total cross-border payments) – highlighting the importance of London as a financial centre (which also deals in euro) – and France (14%). The table also shows that the importance of some smaller countries can be comparatively high (e.g. Belgium).

It is also interesting to look at the concentration of the bilateral payment flows in particular countries (Table 5). It appears that the flows are relatively concentrated owing to the importance of the financial centres. The single most important bilateral country link accounts for 30% of all transactions on average. There is relatively little activity between smaller countries. For instance, there are few transactions between Finnish banks and Portuguese, Spanish or Greek banks. However, smaller countries may be relatively well connected with their neighbouring countries in a specific region. For instance, the payments sent by Irish banks to the United Kingdom and those from Finland to Sweden are more significant than those sent to Germany.

The available TARGET data do not allow investigation of trading patterns at the individual bank level. However, anecdotal evidence from the surveys cited above clearly suggests that the largest banks, acting as

Table 5

Concentration of cross-border interbank payment transactions to individual countries

(% of all payments, December 2000)

	AT	BE	DE	DK	ES	FI	FR	UK	GR	IE	IT	LU	NL	PT	SE	Average
One most important country	45.1	28.7	26.5	24.3	26.3	16.4	35.1	39.0	42.7	29.6	31.2	34.0	30.9	17.5	24.3	30.1
Two most important countries	56.9	48.2	46.1	39.2	45.2	31.8	60.0	61.9	52.7	55.1	49.2	49.7	60.8	32.6	41.1	48.7
Three most important countries	65.8	62.3	58.5	51.7	61.6	46.5	72.2	74.9	62.2	65.4	66.6	62.0	73.6	45.1	55.4	61.6

Source: The ECB.

"money centre" banks for the euro market as a whole, essentially carry out the redistribution of liquidity across borders. Some of these banks are resident outside the euro area, primarily in London. Hence, the euro market is characterised by a "two-tier" system in which large banks trade among themselves and with the smaller banks in their own local market, while smaller banks mainly transact in a local market context. Such a structure resembles that of the national markets prior to the euro and that of the "money centre" banks in the United States.

In addition to the information from the market, the TARGET statistics show that daily cross-border interbank transfers are, on average, significantly larger, in terms of value, than domestic ones and that the number of transactions is smaller (Table 1). This supports the notion that cross-border transactions are mainly carried out by large institutions, with high transaction amounts. Moreover, the finding that financial centres (Frankfurt, London, Paris) trade among themselves and with all other countries, while other bilateral cross-border flows are rather limited, indicates that cross-border transactions are to a significant extent carried out with the major banks of these centres as counterparties.

The largest banks also have a notable share of total euro area interbank assets and liabilities. Large banks have traditionally specialised in wholesale activities, and the tendency has been for their market shares to increase (Table 6). ESCB surveys also point to the fact that the market shares of the biggest players are increasing across all instrument types (unsecured, secured and derivative). In addition to the "organic growth" of the major banks, these results are also affected by mergers and acquisitions (M&A), as these account for around half of the increase in the concentration of interbank assets and, even more so, of liabilities. In any event, the enlargement of the market has for the time being led to a less concentrated interbank market by comparison with the national currency-based markets prior to the introduction of the euro. For example, at the end of 1998, the share of the five largest banks (CR5) in the most dispersed banking systems, such as those of France, Germany and Italy, was around 30% of total interbank activity, while in the euro area as a whole the same ratio was around 15% (Table 6).

The "two-tier" structure may be a result of higher information costs for lending to smaller foreign banks. This structure may endure, as is evident from the US example, since information problems may prevent the emergence of a larger number of relationships between smaller banks from different countries, or between large banks of one country and smaller banks of another. Another factor supporting the concentration of business among the largest banks are economies of scale, because banks

Table 6

Interbank market concentration ratios (CR) for the euro area

(%-share)

	Interbank assets					
	Effective ratio			Ratio after neutralisation of M&A's		
	CR5	CR10	CR20	CR5	CR10	CR20
1998	14.5	23.7	37.6	14.5	23.7	37.6
1999	15.0	24.8	38.3	15.0	24.6	37.9
2000	16.2	26.6	40.0	15.2	25.2	38.7
	Interbank liabilities					
	Effective ratio			**Ratio after neutralisation of M&A's**		
	CR5	**CR10**	**CR20**	**CR5**	**CR10**	**CR20**
1998	15.4	26.1	40.6	15.4	26.1	40.6
1999	15.1	26.5	42.1	15.1	26.0	41.3
2000	16.7	28.1	44.5	14.4	26.1	42.2

Sources: Fitch IBCA Bankscope and the ECB. The use of different data sources for the numerator and denominator should be noted. The ratio after neutralisation of M&A's excludes the increasing impact of mergers and acquisitions on the concentration ratios.

need to process area-wide rather than national market information, and they need to execute larger transactions than before in order to effectively participate in the common area-wide market (see, for example, Dermine, 1999). The establishment of an electronic trading system for interbank deposits across the euro area could result in more diversified relationships. At the country level, electronic trading systems have been established, such as the Italian e-MID, with a large number of participants.[12]

12 E-MID is currently expanding in the other euro area countries.

3 Capital market-related banking activities

Capital market-related activities are associated with the allocation of savings to the users of long-term funds via marketable securities or lending. They include several corporate finance services, such as underwriting and other investment banking services, syndicated lending, corporate restructuring and investment, corporate advice, etc. This area also includes the part of asset management and trading relating to large-scale portfolios and institutional investors.

Highly specialised professional skills are required in these activities, and customers are often large financial or non-financial corporations, to whom several different financial products and services are offered at the same time. Hence, elements such as service quality, product bundling, distribution capacity and the financial intermediary's reputation are often very relevant. Because of these features, the law-of-one-price is more difficult to apply than in the case of wholesale activities, and it is relevant to look also at quantity-based indicators of integration.

3.1 Market developments

In Europe, capital markets have grown and deepened substantially over the past years, a process driven by macroeconomic, demographic, technological and financial innovation factors. Over the longer term, growth is likely to be stimulated by increased disposable income and wealth, a greater propensity to invest in securities, and the development of collective investment and supplementary pension schemes. In the euro area, the share of securities holdings in households' assets (including collective vehicles) is for instance already considerably greater than the share of traditional bank deposits.

The introduction of the euro has given a major impetus to the growth and integration of capital markets. Before the introduction of the euro, the markets were largely segmented because of factors such as different risk-free yield curves, foreign exchange risk and currency matching rules, which restricted geographical diversification of investment by institutional investors and limited the size of the markets. Under the single currency conditions, these factors have been largely overcome.

The developments on the demand side and the emergence of a wider capital market in euro have opened up possibilities for firms to diversify funding sources and to reduce funding costs. Table 7 demonstrates that in the period from 1995 to 2001 euro area firms had a strong appetite for accessing capital markets. There was an increase in all types of transaction, with bond issuance – with issue volumes 16 times higher in 2001 than in 1995 – growing at the fastest rate. This reflects the increased trust in stable borrowing costs and the ability of firms to go beyond their domestic markets under the single currency conditions.

Table 7

Issuance of securities in euro (or euro legacy currencies) by euro area resident firms

(value in EUR billions and number of transactions)

	Bonds		Equities		Syndicated loans	
	Value	Transactions	Value	Transactions	Value	Transactions
1995	5.3	53	20.6	56	22.9	111
1998	18.8	109	51.5	219	45.1	178
1999	37.0	123	76.1	301	107.5	296
2000	56.4	134	111.4	347	197.8	313
2001	83.5	161	44.7	119	159.3	312

Source: Dealogic (Bondware and Loanware).

Syndicated loans[13] and equity issuance also grew strongly. In late 2001 and 2002, equity and also bond market turbulence made it difficult to issue securities and thus resulted in a halt in the growth of capital market activity.

The above figures are also illustrative of the progress of disintermediation in Europe, i.e. the shift in the financial system away from the dominance of non-marketable bank loans towards an increasing role for marketable securities. For banks, such an evolution implies a growing demand for services in the areas of investment banking and asset management.

3.2 Corporate finance services

3.2.1 Pricing developments

Signs of integration in corporate finance services can be seen in the convergence of intermediaries' fee levels, although it must be recognised that the exact content of the services provided strongly influences the fees charged. In order to investigate pricing developments separately for different size-classes of transactions, we first ranked the available fee data according to the value of the transactions and then broke them down into quintiles (i.e. 20%-segments).[14] For each of these segments, we calculated weighted average fees as a percentage of the face value of the transactions (using transaction sizes as weights). In the following, information is presented for the largest and medium-sized transactions (the upper and median quintiles).[15]

There is evidence that integration has increased through enhanced cross-border competition. Gross fees[16] in the securities issues by euro area firms show a declining trend over the period 1995-2000 for both size-classes; this is particularly discernible in bond issues (Table 8). In 2000, fees for the largest bond transactions were less than one-third of their level five years earlier. Combined with the quantity-based evidence presented below, this evolution points to greater competition in a market that is indeed integrated and operates on a European (or even global) basis. The downward pressure on fees has been somewhat more subdued in medium-sized transactions, but fees also decreased in this category, to roughly half their level in 1995.[17]

13 Syndicated loans are bank loans with several credit providers which can be re-sold in the capital market.
14 The analysis is based on data retrieved from comprehensive commercial databases. We focus on the instruments expressed in euro or euro legacy currencies.
15 The data are not sufficient to systematically evaluate the fees in small-value transactions.
16 Gross fees equal total commissions for managing, underwriting and selling a new issue, which is expressed as a percentage of the nominal face amount of the issue.
17 The downward tendency in bond underwriting fees in the case of European issuers is confirmed, using a different database, by Santos and Tsatsaronis (2002), also suggesting that the fee levels in Europe have already tended to drop to those prevailing for issuers in the US market.

Table 8

Gross fees on securities issues and commitment fees on syndicated loans in euro (or euro legacy currencies) taken-up by euro area resident firms

(% of face value or basis points)

	Bonds		Equities		Syndicated loans[1)]	
	Upper quintile	Median quintile	Upper quintile	Median quintile	Upper quintile	Median quintile
1995	1.9	2.1	2.8	3.8	26.2	35.5
1998	2.1	1.7	2.2	4.0	12.3	13.5
1999	1.3	1.7	2.6	4.5	21.0	42.6
2000	0.6	1.1	2.4	3.0	17.9	54.0

Source: Dealogic (Bondware and Loanware).
1) Gross fees in basis points.

In equity issuance, the decline in fees has not been so strong, which may signal weaker integration and the even greater importance of local factors in equity markets (local information and contacts). In addition, fees have been higher in equity than bond intermediation. As underwriting fees typically form a significant part of gross fees in securities' issuance, this also reflects the different risk nature of the instruments when underwriting guarantees are provided. Hence, local information is more valuable in equities than in the case of bonds, since the risks involved in equity underwriting are higher.

Commitment fees[18] in large syndicated loans have also declined, but less smoothly than in bond and equity issues. The upturn in fees in the late 1990s was probably to a large extent due to the financing of TMT (telecom, media, technology) sector companies, which have been riskier than on average, therefore justifying higher commitment fees. TMT companies absorbed around 30% of the syndicated loans in 1998 and 1999, and lending to these sectors, mainly to finance the acquisition of licences and investment in new third generation mobile phone technology, remained strong until early 2001.

There is also evidence that the variability of fees across countries and intermediaries increased over the period 1995 to 2000. However, this evolution cannot be taken as negative evidence of integration, since two different forces are at work. On the one hand, there is integration into a larger market, which leads to converging as well as declining fee levels as a result of increased competition. On the other hand, the growth in capital market activity has occurred in higher-risk transactions in particular, leading to higher fee variability (since underwriting entails the intermediary bearing some of the risk). The increasing share of riskier transactions over time is evident from the growing number of lower-rated European companies tapping the capital markets. For example, in the euro area, the share of high-risk bond issuers with a rating below A increased to 25% in 2000, from 10% in 1998.

3.2.2 Cross-border intermediation

Because of the degree of product heterogeneity and the risk premia and service charges intertwined with the pricing data, more unambiguous, albeit indirect, evidence of integration can be obtained from quantity-based indicators. The greater scope of capital markets could be expected to also integrate the market for corporate finance services by expanding the use of financial intermediaries beyond the domestic sector. In a potentially larger market, international distribution capacity will carry a heavier weight, eroding the franchises that previous "house banks" had in the distribution of securities of firms located in their own country. A knowledge of local market conditions and investor bases is no longer a big advantage for domestic institutions. Hence, in an integrating market, the nationality of an intermediary, and in particular the fact that it is of the same nationality as the firm being financed, should become less important. In the following we will investigate the links between euro area issuers of bonds, equities and syndicated loans and their intermediaries.

In matching the firm-intermediary nationalities, the following approach was adhered to. The intermediaries were investigated on a group basis, i.e. all transactions involving intermediaries belonging to the same financial group were aggregated and grouped according to the nationality of the intermediary's controlling group (including all foreign affiliates of the parent organisations).[19] The issuing firms were considered without taking into account the nationality of the controlling shareholder. This made it possible to focus on the business conducted on behalf of firms located in the euro area.

As regards bonds, the importance of bookrunners[20] of the same nationality as the

18 A fee paid by a borrower on undrawn portions of a loan.

19 As the leading financial intermediaries are often based in London, such an approach makes it possible to bypass this specific residential element and to focus instead on the nationality of the intermediary's controlling group.

20 Bookrunners are responsible for initiating the transaction with the borrower and for organising the underwriting and placing of the issue in the primary capital market.

issuer followed a decreasing trend between 1995 and 2000, and the role non-European, essentially US intermediaries increased over the same period (Chart 2). This suggests significant integration within the euro area, as well as an ever-increasing global component in the competition in these markets. These two tendencies were evident in all size-classes, but foreign competition was most prevalent in the largest transactions. The role of domestic intermediaries eroded quite rapidly. In 1995, domestic intermediaries were always involved in large issues, while five years later they were involved in only 60% of transactions.[21] In 2000, a US bookrunner was already present in 80% of cases, demonstrating that US firms had made aggressive inroads into the European market.

There are no such clear trends in equity issuance, which is in line with the notion of more localised equity than bond markets (Chart 3). The involvement of domestic and US bookrunners in the upper segment of the transactions was more or less equal throughout the period covered. Thus, in spite of the introduction of the euro, bookrunners' national franchise for equity issuers has seemingly not yet been affected, unlike in bond issuance.

A similar survey was carried out for co-lead managers,[22] which are more junior members among the set of intermediaries. Acting as a co-lead manager has always implied the involvement of at least one domestic intermediary in order to ensure a local link.[23] Here also one can identify a decrease in the importance of domestic intermediaries. For example in the period 1995 to 2000, the involvement of domestic co-lead managers dropped from 100% to 80% in large bond issues, and in large equity issues from 80% to 60%. Other euro area banks in particular increased their share from 40% to 70% and from 40% to 50% in bonds and equities respectively. This suggests that a non-domestic euro area intermediary can also provide the desired "local link".

Lastly, developments were even more different in syndicated loans (Chart 4). Non-domestic intermediaries have increased their presence in large transactions, especially banks from other euro area countries. In 1995, 15% of large syndicated loans involved at least one non-domestic euro area arranger,[24] and in 2000 this figure was over three times higher, indicating substantially increased cross-border lending. However, this evolution did not reduce the share of domestic banks, as they continued to be involved in 80% of the transactions. In lending (as well as equity issuance) the need for local information and risk assessment seems to have endured. In smaller-sized transactions, the position of domestic intermediaries actually strengthened. This may reflect the fact that large internationalised intermediaries now show less appetite for smaller transactions, where the need for local information and the asymmetry in information about the creditworthiness of the borrower are high.

3.2.3 Market structure

Tables 9, 11 and 13 provide summary information on the nationality distribution of the top 20 intermediaries of bonds, equities and syndicated loans issued by euro area firms between 1995 and 2001 in order to characterise the markets from a euro area-wide perspective. Since the top 20 lists cover the large majority of the markets for the three instrument categories, they give a good overview of the area-wide markets. The leagues of top 20 intermediaries in 2001 are contained in Tables 10, 12 and 14.

Euro area banks have been incurring fairly heavy losses in their market share in bond intermediation because of the aggressive

21 Since several intermediaries may be involved in each transaction, the shares do not total 100%.

22 Co-lead managers are ordinary members of the management group of a securities offering.

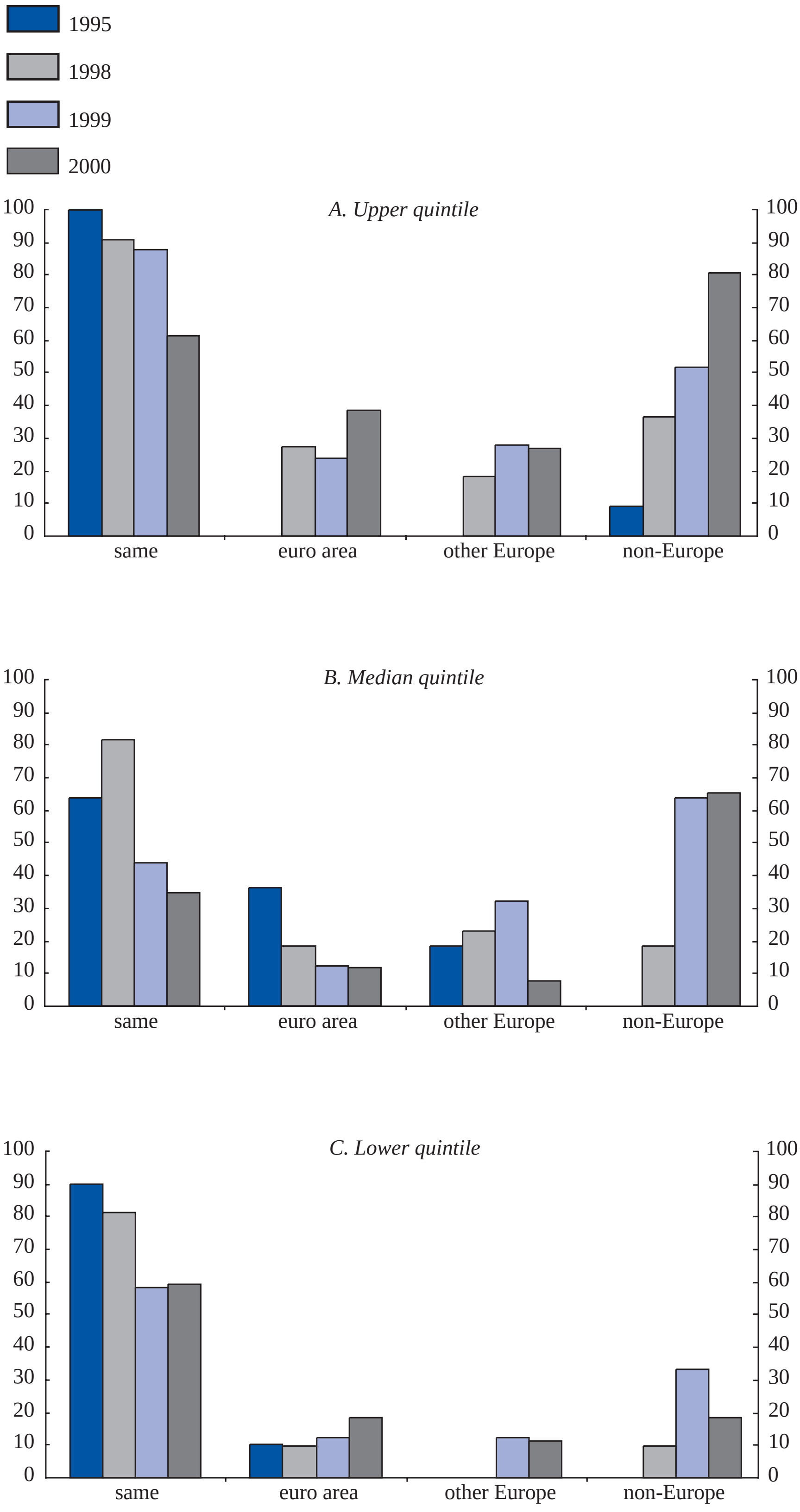
23 While almost all bond and equity issues have implied the involvement of a bookrunner, this is not the case for co-lead managers. In fact, the smaller the transaction size, the higher the likelihood that no co-lead managers are involved.

24 Arrangers are mandated banks responsible for originating, structuring and syndicating the loan transaction.

Chart 2

Bookrunners of euro area firms' bond issues

(%-share in all transactions)

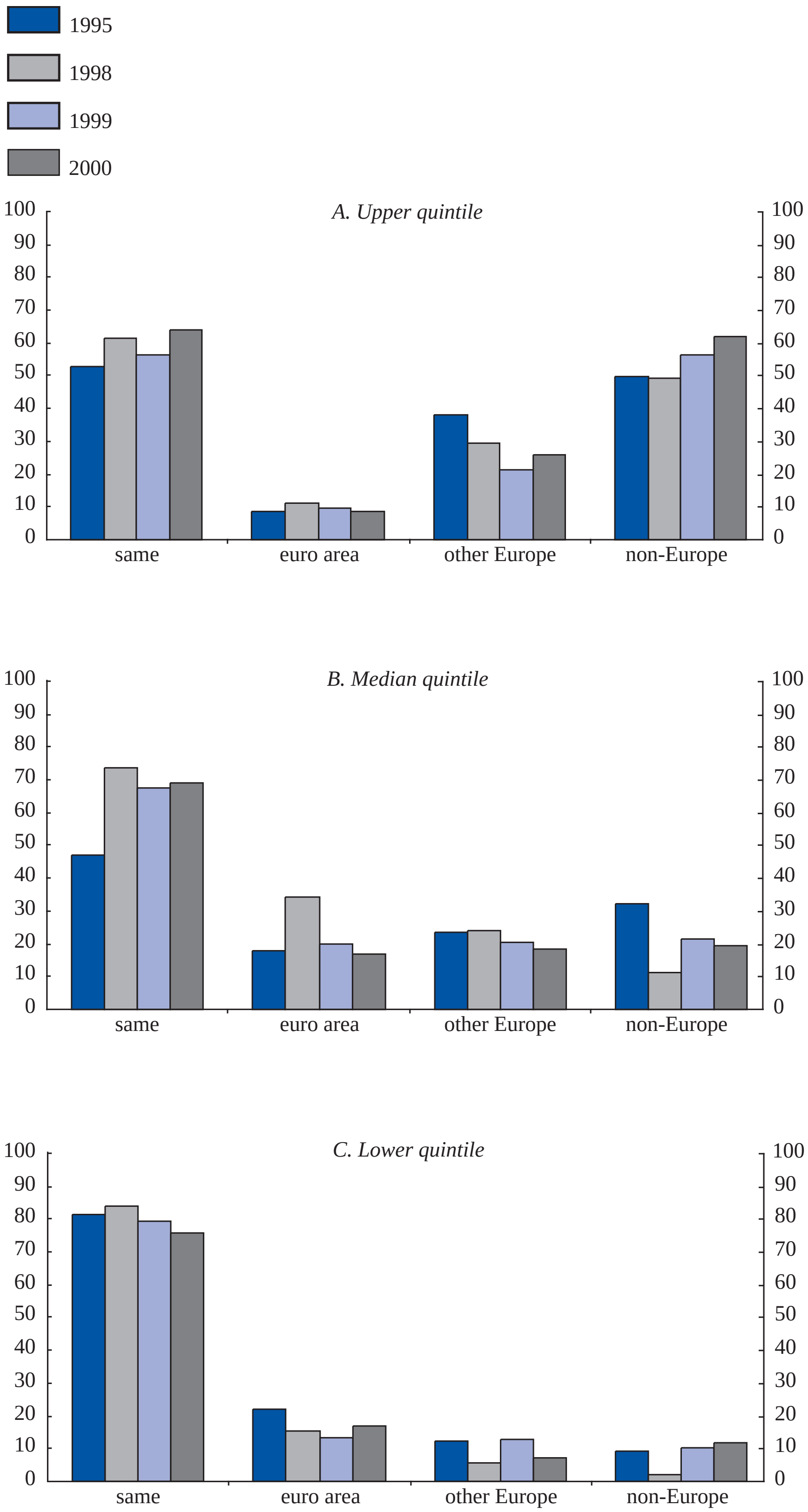


Source: Dealogic (Bondware). Note that shares sum above 100%, because single transactions can have several bookrunners.

Chart 3

Bookrunners of euro area firms' equity issues

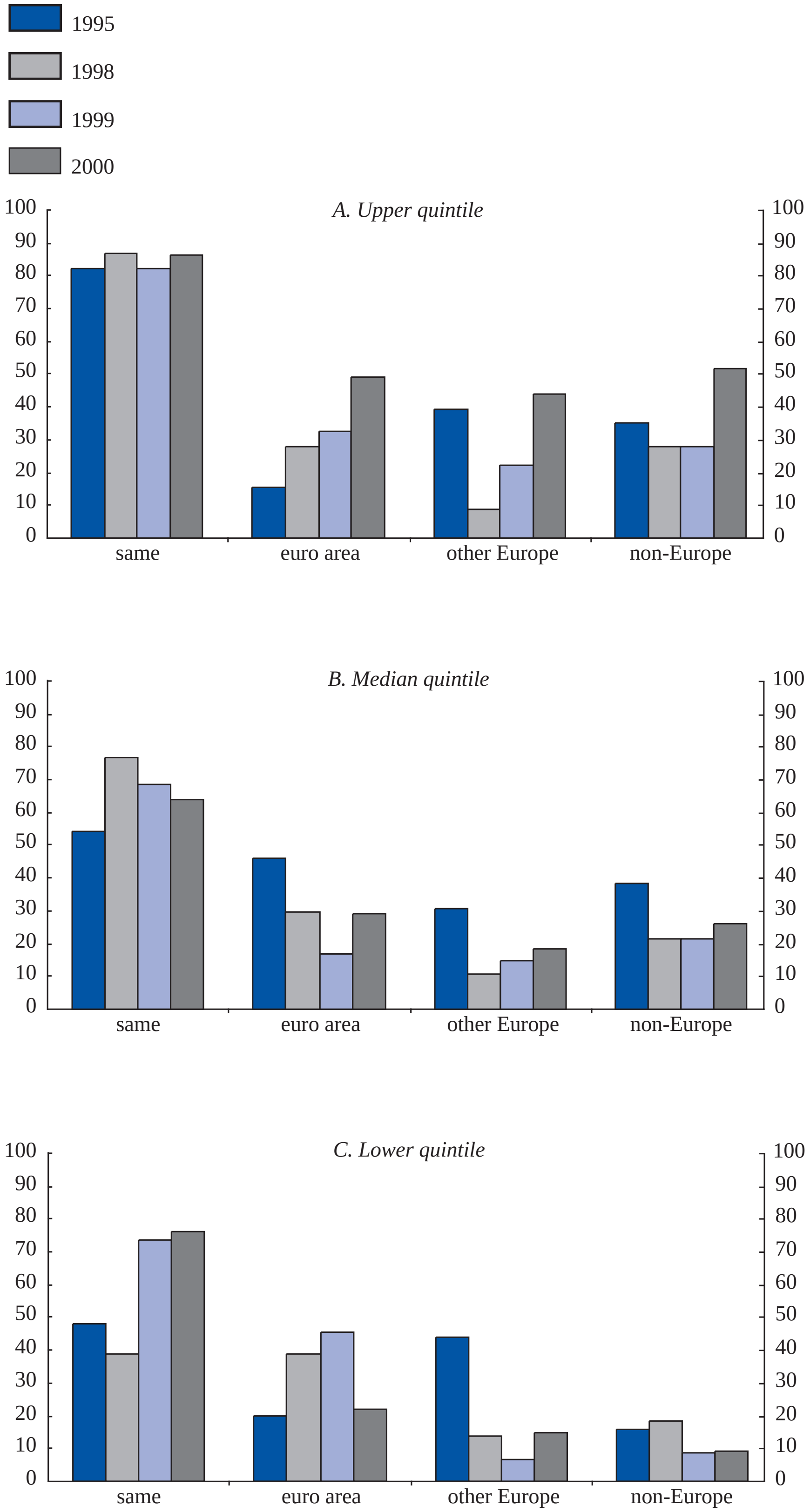
(%-share in all transactions)



Source: Dealogic (Bondware). Note that shares sum above 100%, because single transactions can have several bookrunners.

Chart 4
Arrangers of euro area firms' syndicated loans

(%-share in all transactions)



Source: Dealogic (Loanware). Note that shares sum above 100%, because single transactions can have several arrangers.

Table 9

Distribution of top 20 bookrunners in bonds in euro (or in euro legacy currencies) issued by euro area resident firms and grouped according to bookrunner's nationality

(% of total)

		1995	2000	2001
euro-area		95.8	43.2	46.4
of which	DE	9.0	11.6	12.9
	FR	53.6	23.6	26.2
	NL	25.7	5.7	4.8
other europe		1.0	10.6	14.2
of which	UK	0.0	4.1	6.1
	CH	1.0	6.5	8.1
rest of the world		2.1	40.6	32.0
of which	US	2.1	40.6	32.0
	JP	0.0	0.0	0.0
Total top 20		98.9	94.4	92.6

Source: Dealogic (Bondware).

Table 10

Top 20 bookrunners in 2001 of bonds in euro issued by euro area resident firms

Rank	Nat.	Bookrunner	Amount (EUR millions)	Nr. of Issues	%-Share	Cumu-lative %-share
1	FR	BNP Paribas	10,445.4	33	12.5	12.5
2	US	Salomon Smith Barney	8,319.7	25	10.0	22.5
3	DE	Deutsche Bank	8,181.2	20	9.8	32.2
4	US	Morgan Stanley	6,891.6	18	8.2	40.5
5	FR	Societe Generale	6,741.6	17	8.1	48.6
6	CH	Credit Suisse First Boston	5,989.8	16	7.2	55.7
7	US	JP Morgan	5,099.6	22	6.1	61.8
8	NL	ABN AMRO	4,043.1	11	4.8	66.7
9	UK	HSBC	3,034.3	13	3.6	70.3
10	FR	Credit Agricole Indosuez	3,013.0	14	3.6	73.9
11	DE	Dresdner Kleinwort Wasserstein	2,562.1	11	3.1	77.0
12	US	Merrill Lynch & Co	2,293.6	13	2.7	79.7
13	US	Goldman Sachs & Co	2,187.5	5	2.6	82.3
14	UK	Barclays Capital	2,066.7	5	2.5	84.8
15	US	Lehman Brothers	1,977.5	10	2.4	87.2
16	IT	UniCredito Italiano SpA	1,537.6	8	1.8	89.0
17	FR	Natexis Banques Populaires	816.7	6	1.0	90.0
18	FR	Lazard	813.0	4	1.0	91.0
19	CH	UBS Warburg	750.0	2	0.9	91.9
20	IT	Mediobanca - Banca di Credito Finanziario SpA	618.6	6	0.7	92.6

Source: Dealogic (Bondware).

inroads made by US banks. Euro area banks lost more than half of their market share between 1995 and 2001. However, the rapidly increasing market size and the fact that several intermediaries (local and non-local) could be present in individual transactions tended also to increase the business volumes of the European intermediaries until the declines in capital market activity witnessed in 2001 and 2002. In the period between 1995 and 2001, US players were able to increase their market share impressively, from 2% to 32%. To a certain extent, this may be linked with the use of the funds raised to finance acquisitions in the United States.

The intermediation of equity issues shows a similar pattern, albeit somewhat more subdued. Here too, euro area banks have been losing their market share to US firms. A comparison of bonds and equities reveals some differences across intermediaries. For

Table 11

Distribution of top 20 bookrunners in equities in euro (or euro legacy currencies) issued by euro area resident firms and grouped according to bookrunner's nationality

(% of total)

		1995	2000	2001
euro-area		64.2	41.4	45.6
of which	DE	14.5	20.1	15.8
	FR	20.7	6.3	12.4
	NL	9.5	6.1	7.9
other europe		20.3	10.6	15.1
of which	UK	0.0	0.0	0.0
	CH	20.3	10.6	14.0
rest of the world		11.5	35.7	36.6
of which	US	10.8	35.7	36.6
	JP	0.7	0.0	0.0
Total top 20		96.0	87.7	97.3

Source: Dealogic (Bondware).

Table 12

Top 20 bookrunners in 2001 of equities in euro issued by euro area resident firms

Rank	Nat.	Bookrunner	Amount (EUR millions)	Nr. of Issues	%-Share	Cumu-lative %-share
1	US	Morgan Stanley	5,119.9	9	11.5	11.5
2	US	Goldman Sachs & Co	4,630.5	10	10.4	21.8
3	CH	Credit Suisse First Boston	4,441.3	8	9.9	31.7
4	US	Merrill Lynch & Co	4,431.7	10	9.9	41.7
5	FR	Societe Generale	4,373.3	8	9.8	51.4
6	NL	ABN AMRO	3,534.9	12	7.9	59.3
7	DE	Deutsche Bank	3,513.1	15	7.9	67.2
8	DE	Dresdner Kleinwort Wasserstein	3,364.4	7	7.5	74.7
9	US	Salomon Smith Barney	1,898.4	13	4.2	79.0
10	CH	UBS Warburg	1,822.9	9	4.1	83.0
11	IT	Banca IMI SpA	1,527.2	4	3.4	86.5
12	FR	BNP Paribas	1,163.4	6	2.6	89.1
13	ES	Banco Santander Central Hispano SA	1,063.2	4	2.4	91.4
14	ES	Banco Bilbao Vizcaya Argentaria SA - BBVA	649.2	2	1.5	92.9
15	IE	J & E Davy	623.0	3	1.4	94.3
16	SE	SEB	479.0	2	1.1	95.4
17	US	Lehman Brothers	271.1	2	0.6	96.0
18	IT	Mediobanca - Banca di Credito Finanziario SpA	214.5	3	0.5	96.4
19	DE	Commerzbank Securities	199.1	2	0.4	96.9
20	ES	Caja de Madrid	162.8	1	0.4	97.2

Source: Dealogic (Bondware).

example, the focus of French banks is on bond intermediation, while German banks have a stronger presence in the equity business. The same picture emerges for mandated arrangers of syndicated loans, although changes in the market share of euro area and US banks are not as strong as in the case of bond and equity issues. In this area, euro area arrangers have tended to maintain a higher market share of over 50%.

Tables 9, 11 and 13 reveal a strong market concentration, even at the area-wide level. The largest 20 intermediaries (CR20) account for around 95% of the markets in bond and equity intermediation and for roughly 85% of syndicated lending. Indeed, economies of scale are extremely relevant in capital market-related activities under the single currency conditions (see, for example, Dermine 1999). Analysts are required to process industry-wide (rather than country-specific) information,

Table 13

Distribution of top 20 mandated arrangers in syndicated loans in euro (euro legacy currencies) taken up by euro area resident firms and grouped according to arranger's nationality

(% of total)

		1995	2000	2001
euro-area		61.0	47.2	53.3
of which	DE	26.2	10.0	25.0
	FR	10.8	18.6	15.4
	NL	7.6	13.7	5.7
other europe		13.2	9.9	7.8
of which	UK	8.1	6.3	7.8
	CH	5.1	3.6	0.0
rest of the world		10.7	29.6	21.4
of which	US	10.7	29.6	21.4
	JP	0.0	0.0	0.0
Total top 20		84.9	86.7	82.5

Source: Dealogic (Loanware).

Table 14

Top 20 mandated arrangers in 2001 of syndicated loans in euro taken up by euro area resident firms

Rank	Nat.	Bookrunner	Amount (EUR millions)	Nr. of Issues	%-Share	Cumu-lative %-share
1	US	JP Morgan	16,963.9	32	10.6	10.6
2	DE	Deutsche Bank AG	15,849.2	35	9.9	20.6
3	US	Citigroup Inc	13,512.6	38	8.5	29.1
4	FR	BNP Paribas	12,748.5	46	8.0	37.1
5	FR	SG	7,965.7	21	5.0	42.1
6	DE	Dresdner Kleinwort Wasserstein	6,921.6	16	4.3	46.4
7	DE	Credit Agricole Indosuez	6,457.6	22	4.1	50.5
8	NL	ABN-AMRO Bank NV	6,219.3	21	3.9	54.4
9	IT	Mediobanca SpA	5,632.6	8	3.5	57.9
10	UK	Barclays	4,784.6	24	3.0	60.9
11	UK	HSBC	4,413.8	16	2.8	63.7
12	FR	Credit Lyonnais SA	3,899.7	40	2.4	66.1
13	US	Goldman Sachs & Co	3,707.4	8	2.3	68.4
14	DE	Commerzbank AG	3,659.5	14	2.3	70.7
15	DE	HVB Group	3,550.4	14	2.2	73.0
16	DE	WestLB	3,524.0	11	2.2	75.2
17	IT	IntesaBci SpA	3,523.7	8	2.2	77.4
18	UK	Royal Bank of Scotland	3,247.1	19	2.0	79.4
19	NL	ING Barings	2,815.6	17	1.8	81.2
20	IT	UniCredito Italiano SpA	2,339.5	4	1.5	82.7

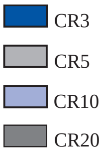
Source: Dealogic (Loanware).

which means monitoring a large number of European companies. This requires a wide network of corporate contacts. In addition, the provision of underwriting and other investment banking services to large clients also requires a large scale on the part of intermediaries. All other concentration indicators presented in Chart 5 also point to the considerable significance of the largest players in all three activities.[25] The top 10 firms (CR10) control between 60 and 70% of the euro area market and the top three (CR3) between a quarter and a third.

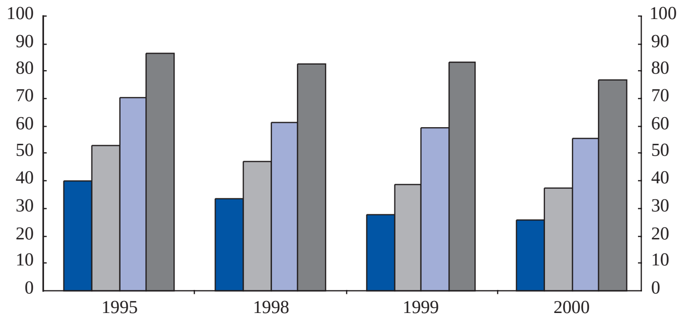
In the bond market, the relative importance of the top 10 and 20 bookrunners remained fairly stable over the period 1995-2000, while the

25 A Similar concentration of the market also applies in the case of corporate advice and restructuring services, e.g. based on the league tables published by Euromoney.

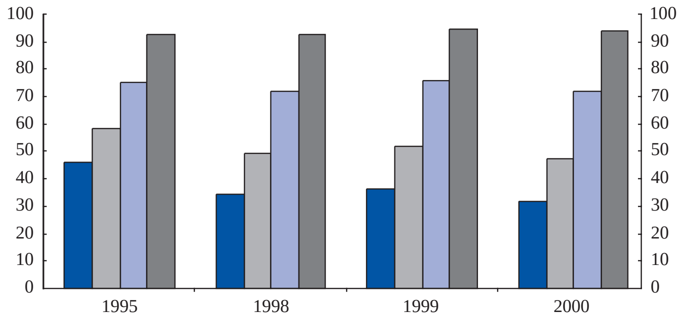
Chart 5
Concentration indicators



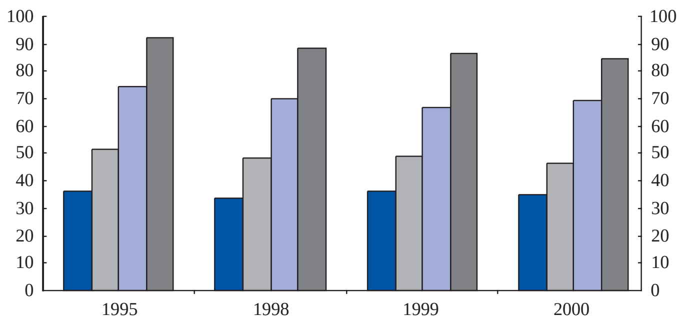
A. Bookrunners of bonds in euro (or euro legacy currencies) issued by euro area resident firms, %



B. Bookrunners of equities in euro (or euro legacy currencies) issued by euro area resident firms, %



C. Arrangers of syndicated loans in euro (or euro legacy currencies) taken up by euro area resident firms, %



Source: Dealogic (Bondware and Loanware).

top three lost around 15% of their share, and the top five 10%. This indicates that the largest (domestic) players lost some of their market share to other intermediaries, confirming the picture of a strongly expanding market with an increasing role for non-domestic (US) players. A similar development can be identified in the syndicated loan market, while the concentration ratios have been fairly stable in the case of equities and syndicated loans.

3.3 Asset management and trading

Asset management and trading have become an integral part of banking through two channels. First, according to the evidence collected by the ECB, banks are responsible for the management of around 80% of all mutual funds in the euro area (ECB, 1999a). Second, large financial groups have emerged involving banks and securities firms (and occasionally also insurance companies). Asset management activities have a capital market component, in which intermediaries trade assets in order to offer diversified products for final retail investors. This is distinct from the distribution of the products via retail networks.

Reliable figures for the different aspects of the asset management activities are scarce. However, it is clearly the supply of portfolio diversification services (i.e. the capital market part of the business) which has been most affected since the introduction of the euro, as cross-border diversification has become less costly and risky, and free of any previously currency-based regulatory restrictions. There is also increasing diversification across asset classes, as funds are increasingly managed on an asset type and industry, rather than country, basis.

Quantity-based indicators show that there is increasing portfolio diversification across borders within the single currency area. This offers evidence of further integration as regards the capital market-related leg of the activity. The retail interface with the final investor, on the other hand, still remains largely local (as discussed in the next Section).

To take the most significant example, (open-ended) mutual funds sold to euro area residents are already fairly diversified geographically. In the case of equity funds, the share of domestic equities was around 28% on average in March 2002, while the share of non-domestic European equities and non-European equities reached 26% and 46% respectively (Table 15). At end-1997, the share of domestic equities was still almost 50%. In the case of bond funds (for which data are less comprehensive), the respective shares were 30%, 50% and 20% in March 2002.[26]

However, as highlighted in the recent report by a group led by A. Giovannini (2001), a major obstacle to cross-border trading (and integration) is the fragmented infrastructure for cross-border clearing and settlement of securities transactions. As a consequence, direct and indirect costs associated with trading can be several times higher in Europe than in the United States. The importance of an efficient clearing and settlement infrastructure is well demonstrated by the successful integration of the money markets, in which operations involving unsecured instruments can be cleared and settled through the TARGET system. Thus, there is certainly room for a substantial consolidation of the securities settlement industry. There are also other market-related aspects hampering trading in capital markets, in particular differences in technical requirements and market practices.

26 FEFSI data excluding Ireland, Luxembourg, the Netherlands and Finland, for which the breakdown (domestic, European, non-European) is not available.

Table 15

Breakdown of the assets of the equity mutual funds operating in the euro area countries

(% of total funds)

	March 2002			
	Domestic	Total European	Non-European	Total value (EUR millions)
Belgium	10	47	43	47.6
Germany	23	27	50	125.1
Greece [1]	91	N.A.	N.A.	4.9
Spain	31	20	48	48.7
France	50	16	34	215.5
Ireland	N.A.	N.A.	N.A.	N.A.
Italy	16	34	51	111.6
Luxembourg	N.A.	N.A.	N.A.	332.6
The Netherlands	14	17	68	55.2
Austria	2	34	64	13.2
Portugal	33	41	26	2.2
Finland	18	41	41	6.8
Total euro area [2]	**28**	**26**	**46**	**963.3**
	December 1997			
Belgium	41	32	27	
Germany	50	17	33	
Spain	77	N.A.	23	
France	59	N.A.	41	
Ireland	N.A.	N.A.	N.A.	
Italy	49	15	36	
The Netherlands	22	N.A.	78	
Austria	6	75	19	
Portugal	80	N.A.	20	
Finland	44	36	20	
Total euro area [2]	**49**	**10**	**41**	

Source: European Federation of Investment Funds and Companies (FEFSI).
Split into domestic and foreign according to whether investments are made in domestic or foreign markets.
1) Equity is only split between domestic and foreign.
2) Weighted average for the countries for which data exist.

4 Retail banking services

Retail banking is often perceived as the traditional business of banks. In this area, banks' counterparties are mainly households or small firms. Retail banking includes the traditional loan and deposit types, such as consumer credit, mortgages, small and medium-sized commercial loans, and demand and savings deposit accounts. Payment services are an integral part of the retail business associated with the deposit products. Asset management, in the form of investment accounts, investment advice, mutual funds, private pension schemes and life insurance, are also increasingly important components of retail financial services.

The markets for retail services differ from those for wholesale and capital market-related services in two main respects, promoting a much greater degree of market segmentation. First, the proximity of banks to customers is very important, because clients are scattered and typically have little mobility. Until electronic delivery techniques become widespread, distribution networks will continue to play a major role in the retail area. Second, the market landscape in the retail services sector is relatively diversified, with small banks and securities firms competing with large financial institutions. This institutional variation is illustrated by the very large number and wide range of different credit institutions operating in the euro area (Table 16), even though the consolidation process has led to a reduction in their number in most countries.[27]

With regard to the assessment of integration, the major obstacle is that retail products are supplied by a variety of financial institutions and therefore appear in a very wide, and not always comparable, range. Price data are available at the national level at a highly aggregated level, rather than for clearly defined individual products. However, even if such data existed, differences across products would make cross-border comparisons very difficult. Moreover, indirect pricing of retail products is frequently an obstacle to cross-country comparisons. Charging payment and account services implicitly to the deposit

27 The link between the number of credit institutions and the retail market structure needs to be considered carefully, however. First, in some countries branch banks not counted as independent credit institutions may dominate over stand alone institutions. Second, not all credit institutions engage in retail banking. Third, despite large numbers, some banks may still have a strong market share from a national perspective.

Table 16

Number of credit institutions

(end of year figures)

	1990	1995	1998	1999	2000	2001	June 2002
Belgium	157	145	123	117	118	112	110
Germany	4,720	3,785	3,238	2,992	2,742	2,526	2,485
Greece	39	53	59	57	57	61	62
Spain	696	506	402	387	368	367	364
France	2,027	1,469	1,226	1,159	1,099	1,050	1,024
Ireland	48	56	78	81	81	88	86
Italy	1,156	970	934	890	861	843	839
Luxembourg	177	220	212	211	202	194	185
The Netherlands	111	102	634	616	586	561	543
Austria	1,210	1,041	898	875	848	836	834
Portugal	260	233	227	224	218	212	207
Finland	529	381	348	346	341	369	370
Euro area	**11,130**	**8,961**	**8,379**	**7,955**	**7,521**	**7,219**	**7,109**
Denmark	124	122	212	210	210	203	198
Sweden	704	249	148	148	146	149	214
The United Kingdom	624	564	521	496	491	452	447
EU	**12,582**	**9,896**	**9,260**	**8,809**	**8,368**	**8,023**	**7,968**

Source: 1990, 1995 figures: ECB (1999a); 1998 to 2002 figures: The ECB.
The Netherlands: figures from 1998 onwards include credit institutions affiliated to a central credit institution.

account holders in the interest margin on deposits (i.e. the opportunity return from money markets minus the deposit rate) has been the usual practice in many European countries (Humphrey et al. 1998). Although there is evidence for some countries that the direct pricing of payment and account-keeping services has become more important, this practice is apparently not yet very common in the EU countries (ECB, 1999b, and 2000a). For these reasons, the law-of-one-price benchmark is not easily applicable in the retail area and quantity-based indicators of integration can play an important role.

4.1 Pricing developments

Broad aggregated retail interest rate data are available from the ECB and can be used as an indication of pricing developments, despite embracing a wide range of different products.[28] We first averaged the monthly retail interest rate data on household lending, corporate lending and deposit accounts over one-year periods from 1998 to 1999 and from 2001 to 2002 in order to abstract from short-term fluctuations. We then calculated banks' respective margins vis-à-vis market interest rates, corresponding to the average maturities behind the retail interest rate aggregates. The overall intermediation margin equals the average total lending rate minus the average deposit rate.

The retail interest rate levels reflect both macro and microeconomic factors. The macro-factors refer to market interest rate levels. The micro-factors include banks' risk premia, market power, and other pricing features, such as the cross-subsidisation of payment or other services. By contrast, margins mostly represent the micro-factors,

28 This shortcoming will soon disappear with the forthcoming production of harmonised retail interest rate statistics by the ECB.

Table 17

Lending retail interest rates and margins

(%-points)

	Household lending rates				Corporate lending rates			
	Average (May 98-May 99)		Average (May 01-May 02)		Average (May 98-May 99)		Average (May 01-May 02)	
	Rate	Lending margin	Rate	Lending margin	Rate	Lending margin	Rate	Lending margin
Austria	6.33	2.35	6.42	1.70	6.11	2.69	6.07	2.21
Belgium	5.36	1.38	6.37	1.65	4.98	1.57	5.64	1.78
Germany	6.25	2.27	6.74	2.03	6.23	2.83	7.05	3.19
Finland	5.24	1.25	5.24	0.53	4.31	0.89	4.71	0.85
France	7.16	3.18	7.23	2.52	4.52	1.12	5.31	1.45
Greece	12.56 1)	6.55 1)	7.65	2.94	16.44	5.61	8.09	4.23
Ireland	7.49	3.43	6.84	2.12	8.68	5.28	8.67	4.81
Italy	6.71	2.67	6.31	1.60	6.13	2.50	5.64	1.77
Luxembourg	5.18	1.19	5.12	0.40	N.A.	N.A.	N.A.	N.A.
The Netherlands	5.29	1.31	5.81	1.09	3.67	0.29	4.35	0.49
Portugal	6.36	2.34	6.09	1.38	6.36	2.83	5.51	1.65
Spain	5.85	1.83	5.78	1.06	6.06	2.53	6.20	2.34
Euro area	**6.65**	**2.48**	**6.30**	**1.58**	**6.68**	**2.56**	**6.11**	**2.25**
Std. dev.	**2.01**	**1.48**	**0.76**	**0.76**	**3.50**	**1.67**	**1.34**	**1.34**

Source: The ECB and Datastream. Retail interest rates should be used with caution since national interest rates are not harmonized in terms of their coverage, the nature of the data (nominal or effective) or the compilation method. Margins are calculated as the difference between average retail interest rates (using ECB monthly adjusted country weights) and a reference market rate (obtained from Datastream), corresponding to the maturity distribution of the recorded retail business. Reported averages are unweighted.

1) Jan 99-May 99.

Table 18

Deposit retail interest rates and margins

(%-points)

	Average (May 1998-May 1999)			Average (May 2001-May 2002)		
	Rate	Deposit margin	Overall margin	Rate	Deposit margin	Overall margin
Austria	2.18	1.24	4.04	2.17	1.69	4.09
Belgium	2.31	1.10	2.81	2.37	1.49	3.57
Germany	2.46	0.94	3.78	2.49	1.37	4.39
Finland	1.20	2.21	3.60	1.59	2.27	3.40
France	2.65	0.75	3.04	2.68	1.18	3.48
Greece	8.48	2.35	7.77	2.06	1.80	5.89
Italy	2.26	1.37	3.94	1.72	2.14	4.02
Luxembourg	2.50	0.91	2.67	2.54	1.32	2.58
The Netherlands	2.33	1.06	2.55	2.32	1.55	3.18
Portugal	2.44	1.08	3.91	2.45	1.41	3.33
Spain	2.08	1.46	3.89	2.32	1.54	3.68
Euro area	**2.81**	**1.32**	**3.82**	**2.25**	**1.61**	**3.78**
Std. dev.	**1.92**	**0.52**	**1.42**	**0.34**	**0.34**	**0.85**

Source: The ECB and Datastream. Retail interest rates should be used with caution since national interest rates are not harmonized in terms of their coverage, the nature of the data (nominal or effective) or the compilation method. Deposit margins are calculated as a difference between average retail interest rates (using ECB monthly adjusted country weights) and a reference market rate (obtained from Datastream), corresponding to the maturity distribution of the recorded retail business. The overall margin is the difference between average lending and deposit rates. Ireland is excluded due to the very small coverage of the provided deposit rate. Reported averages are unweighted.

once one abstracts from the very short-term fluctuation stemming from the variability of the market interest rates.[29] Thus, after abstracting from the short-term volatility, banks' margins are more reliable indicators for assessing integration or competition than the interest rate levels in an international comparison. Convergence in the margins can be taken as a reasonable indicator of integration, and a decline in the margins may mean increased competition.

Between 1998-99 and 2001-02 differences across countries in household and corporate lending rates and deposit rates declined sharply in the euro area (Tables 17 and 18). However, this development seems to be mainly due to convergence in the macro-level monetary conditions brought about by the introduction of the euro. The variability in banks' margins has diminished to a much smaller extent, which suggests that differences in the micro-factors have persisted.[30] Household lending margins have tended to converge most significantly: standard deviation across countries decreased by 50% between 1998-99 and 2001-02. The variability of corporate lending and deposit margins diminished less visibly. Thus, while emerging convergence can be observed, the significant discrepancies in margins seem to imply that retail markets are still segmented across the euro area countries.

Important differentials in retail interest rates and thus banks' margins can also still be seen within individual euro area countries. In the Italian banking system, for example, average lending rates in 2001 ranged from 6.2% in Northern Italy to 8.4% in the islands. Likewise, lending and deposit rates vary significantly across the German Federal Laender.[31] Differences between them can be similar to those across countries in the euro area. Such facts support the idea that retail markets have tended to be local even within countries. As retail customers choose banks close to their own location, banks have been able to exert

29 Banks margins are affected in the short-term by market rate movements, because banks' lending and deposit rates are stickier and adjusted to the changes in market conditions (ECB, 2000a) only after a time-lag.

30 As the market interest rate levels have converged in the euro area, the differences in the retail interest rate levels only reflect differences in margins. This can be seen in the standard deviations of the interest rates and margins, which have equalised since the introduction of the euro (see Tables 17 and 18).

31 Interest rate statistics available on the websites of the Banca d'Italia and the Deutsche Bundesbank.

local market power in retail pricing. This feature is not unique for the euro area countries. According to a survey conducted in the United States, more than 90% of households and small businesses chose banks located no more than 20 miles from their location (Kwast et al., 1997).

The margin data can also be indicative of changes in competition, while on the lending side changes in banks' average risk premia can also affect the margins. Comparing the two time periods, household-lending margins have fallen most significantly, on average by almost 1 percentage point between 1998-99 and 2001-02. In household lending, risk premia also play a smaller role than in corporate lending. Corporate lending margins have also decreased somewhat, possibly signalling increased competition. By contrast, deposit margins have even tended to increase.

To our knowledge, systematic data on other retail prices are not available; however, certain survey information exists which also points towards localised pricing and a lack of integration. For instance, the inquiries made by the European Commission and the Eurosystem in 1999 and 2000 respectively indicate that major differences have persisted in the service charges levied on cross-border payment services.

4.2 Cross-border intermediation

As regards quantity-based indicators of integration, anecdotal evidence suggests that cross-border flows are still negligible in retail loans and deposits. The statistics collected by the ECB on banks' assets and liabilities on a local (unconsolidated) basis confirm this picture. On the basis of March 2002 data (Table 19) banks in the euro area still work with their domestic customers in the case of 89% of their loans and 84% of their deposit base. Growth in cross-border activities has picked up, but it is likely that this is due primarily to other than retail customers.

The lack of cross-border flows is natural considering the requirement for banks to be close to their retail customers. Indeed, different indicators of cross-border entry show more clearly that links are emerging between euro area retail markets. Looking first at the internationalisation of European banks within the euro area via the establishment of branches, one can see a clear increase between 1997 and 2000 (Table 20). A particularly strong increase took place in France, mainly due to the acquisition of CCF by the French branch of HSCB. However, in terms of the market share in the target country, branches from other euro area or EU countries hold a relatively minor position of less than 3 or 6% of the total local banking assets respectively. Only in the case of Luxembourg and Ireland is the market share of branches of EU banks above 10% (around 17% in Luxembourg).

One can also observe increased relevance of foreign branches of euro area banks in the EU market between 1997 and 2000 (Table 21). On average, euro area banks' branches in the EU account for 6.6% of their assets (on a consolidated basis). There is no strong correlation between inward and outward internationalisation. German and Dutch banks' branches, for example, show a strong position in foreign markets, but the respective home markets have remained rather closed to foreign branches. For Belgium, Greece and Luxembourg the situation is the opposite.

Foreign bank branches often concentrate on corporate finance services, trading activities and private banking, rather than retail activities. Retail businesses are much more difficult to enter and domestic banks enjoy substantial competitive advantages because of their widespread branch distribution networks. Thus, the most effective way of gaining access to the retail sector has been to merge with or acquire an existing local bank. A significant number of such operations has indeed taken place over the past three years or so, as

Table 19

Domestic and cross-border on-balance-sheet activities of euro area banks

(EUR billions)

	Dec. 1997	Dec. 1998	Dec. 1999	Dec. 2000	Dec. 2001	Mar. 2002
Total interbank assets [1]	*4,649*	*4,979*	*5,369*	*5,719*	*6,274*	*6,308*
Loans to MFIs	3,859	4,079	4,298	4,478	4,880	4,835
domestic business (%)	60.1	61.4	62.5	61.2	59.3	59.2
business with other euro area countries (%)	15.3	16.7	17.7	17.9	18.3	18.6
business with the rest of the world (%)	24.6	21.9	19.8	20.9	22.4	22.2
Other claims on MFIs (securities, money market paper)	790	900	1,071	1,241	1,395	1,474
domestic business (%)	80.5	77.6	71.4	67.4	63.8	62.5
business with other euro area countries (%)	12.7	14.5	18.2	19.2	19.5	20.2
business with the rest of the world (%)	6.8	7.9	10.4	13.4	16.7	17.3
Total loans to non-banks [2]	*5,905*	*6,349*	*6,867*	*7,491*	*7,952*	*8,046*
domestic business (%)	91.6	91.6	90.4	89.9	88.9	88.7
business with other euro area countries (%)	2.2	2.6	3.0	3.2	3.4	3.6
business with the rest of the world (%)	6.2	5.8	6.6	6.9	7.7	7.7
Fixed income securities issued by non-banks [2]	*1,380*	*1,522*	*1,592*	*1,550*	1,686	1,745
domestic business (%)	72.5	68.0	62.1	57.0	53.0	52.6
business with other euro area countries (%)	15.6	18.9	23.7	25.7	29.3	30.5
business with the rest of the world (%)	11.9	13.1	14.2	17.3	17.7	16.9
Equity holdings	*380*	*588*	*753*	*903*	*972*	*984*
Other assets	*1,069*	*953*	*1,120*	*1,234*	*1,332*	*1,231*
Total assets	**13,383**	**14,390**	**15,700**	**16,898**	**18,217**	**18,314**
Total interbank deposits	*4,057*	*4,468*	*4,909*	*5,232*	*5,521*	*5,534*
domestic business (%)	59.5	58.3	57.3	55.0	52.9	52.6
business with other euro area countries (%)	14.6	15.9	16.1	15.5	16.4	16.4
business with the rest of the world (%)	25.9	25.8	26.6	29.5	30.7	31.0
Total deposits from non-banks [2]	*5,104*	*5,444*	*5,740*	*6,090*	*6,576*	*6,586*
domestic business (%)	88.0	87.8	86.2	85.1	84.3	83.7
business with other euro area countries (%)	5.4	5.5	5.3	5.2	5.0	5.2
business with the rest of the world (%)	6.6	6.7	8.5	9.7	10.7	11.1
Fixed income securities [3]	*2,064*	*2,262*	*2,604*	*2,826*	*3,030*	*3,117*
Capital and reserves	*688*	*765*	*867*	*960*	*1,043*	*1,054*
Other liabilities	*1,470*	*1,450*	*1,579*	*1,790*	*2,047*	*2,022*
Total liabilities	**13,383**	**14,390**	**15,700**	**16,898**	**18,217**	**18,314**

Source: The ECB. Data refer to monetary financial instructions (MFI) (excluding the Eurosystem).
1) These items do not include shares.
2) Including general government.
3) The item includes money market paper.

documented in the next section. This might be the strongest available indicator that integration is progressing, but it is subject to the caveat that a mere change in the ownership structure may not necessarily change the pricing behaviour of financial institutions.

Table 20
Inward branching of banks from EU countries into euro area

	Number of branches from				Assets of foreign branches as a % of total unconsolidated assets of host country			
	Euro area		EU		Euro area		EU	
Host country	**1997**	**2000**	**1997**	**2000**	**1997**	**2000**	**1997**	**2000**
Austria	4	12	6	15	0.6	N.A.	0.7	0.8
Belgium	23	28	25	34	N.A.	N.A.	*8.5*	5.7
Finland	1	0	9	0	0	N.A.	0	*7.3*
France	36	73	52	93	N.A.	N.A.	*2.6*	*3.3*
Germany	90	113	118	145	0.7	1.0	1.0	1.3
Greece	9	9	14	13	5.3	4.2	9.0	6.4
Ireland	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	*13.5*
Italy	27	32	34	41	3.0	3.0	3.4	3.5
Luxembourg	55	47	62	55	N.A.	N.A.	*17.9*	*16.6*
Netherlands	6	0	9	0	N.A.	N.A.	*2.1*	*2.7*
Portugal	13	18	15	22	N.A.	N.A.	*4.0*	*4.2*
Spain	28	33	34	41	4.0	2.8	4.7	3.4
Euro area average	**27**	**33**	**34**	**42**	**2.3**	**2.8**	**4.9**	**5.7**

Source: Eurostat and the ECB. Data in italics refer to branches from EEA countries and were calculated based on comparable figures from the ECB (2002).

Table 21
Outward branching of banks from euro area countries into EU

	Number of foreign branches from				Assets of foreign branches as % of total consolidated assets of home country [1)]			
	Euro area		EU		Euro area		EU	
Home country	**1997**	**2000**	**1997**	**2000**	**1997**	**2000**	**1997**	**2000**
Austria	9	14	13	17	0.2	0.3	0.2	3.5
Belgium	19	23	24	28	0.6	0.4	0.6	5.0
Finland	0	1	4	2	0	0	0.4	0
France	61	68	72	83	2.5	2.0	2.6	7.4
Germany	64	83	78	109	0.2	0.4	0.2	15.1
Greece	3	6	7	11	0.2	0.3	0.2	9.9
Ireland	1	7	10	16	0.9	0.2	0.9	9.0
Italy	35	41	48	57	1.0	0.9	1.0	5.6
Luxembourg	35	39	38	40	0.1	0.0	0.1	0.0
Netherlands	24	35	29	44	2.6	1.6	2.9	16.6
Portugal	10	12	14	16	0.9	0.4	0.9	3.0
Spain	31	36	37	42	1.9	2.2	1.9	4.3
Euro area average	**24**	**30**	**31**	**39**	**0.9**	**0.7**	**1.0**	**6.6**

Source: Eurostat and the ECB.
1) Data only cover the assets of branches in: AT, BE, DE, GR, IT, ES, SE, UK.

4.3 Bank mergers and acquisitions

At the global level, the pace at which bank consolidation has evolved has been very fast in recent times, as described in a recent G10 report (Ferguson, 2001), mainly driven by bank mergers and acquisitions (M&As) both within the banking sector and across other financial sectors.

It is often argued that only cross-border bank M&As are relevant for integration. This is not unambiguously the case, since domestic M&As too have been motivated by a desire to strengthen their market position with a view to competing effectively in the area-wide dimension (Padoa-Schioppa, 2000). This applies, in particular, to wholesale and capital market activities where economies of scale are significant and where the proximity requirement is not very compelling or can be met by establishing a few foreign branches. The increase in the average size of bank M&A transactions after 1999 indicates that banks are indeed concerned with becoming large players, which is essential in order to effectively participate in area-wide wholesale and capital market-related banking operations. By contrast, cross-border M&As have been pursued in Europe and elsewhere as a strategy for internationalisation in the retail field (Ferguson, 2001). Foreign retail markets will not be easily conquerable from distance as long as the use of remote banking remains limited.

As regards consolidation across sectors, the costs of maintaining close proximity to retail customers may be spread over an increasing range of retail products, which generates economies of scope – for example, between traditional banking, asset management and insurance products. For this reason, the conglomeration process leading to the establishment of financial groups active in banking, securities and insurance, has very often focused on retail services. Banks have linked up with securities firms in order to take advantage of the developing securities markets and boost their sales of asset management products. Interestingly, in some countries new types of conglomerate structures have also emerged, such as the combination of banking activities and pension fund management. The traditional setting up of bankassurance groups has also continued to develop.

In what follows, we describe the main elements of the recent bank M&A process in the euro area. To this end, we start with all large and medium-sized transactions in the financial sector – comprising banking, insurance and securities firms – which involve euro area banks as a target.[32] We then classify the transactions which became effective in the period from January 1990 to August 2001 in four categories on the basis of the country and industry of the target firm: domestic/cross-border, and within-industry/cross-industry. Within-industry mergers consist of mergers between two or more banks, and cross-industry mergers involve a bank as target and an insurer or a securities firm as bidder.

In the euro area, 70% of M&A activity between 1990 and 2001 occurred after 1998, as measured by transaction values (Table 22). Between 1990-1997 and 1998-2001 the total transaction values more than doubled in all

32 Our analysis is based on the Thomson Financial commercial database. Despite some caveats, due to the limited inclusion of small-value transactions, these data allow a coherent treatment of significant M&A deals involving European banks.

Table 22

Value of M&A's involving banks in the euro area

(EUR billions or % of total)

			Within-industry		Cross-industry	
	Total value	Total	Domestic	Cross-border	Domestic	Cross-border
1990	15.4	5	45	7	45	3
1991	8.7	3	76	2	10	12
1992	5.2	2	17	4	19	60
1993	12.0	4	22	3	17	58
1994	6.1	2	73	5	22	0
1995	11.0	3	39	26	32	3
1996	6.4	2	74	1	6	19
1997	27.9	9	74	2	5	19
1998	72.4	23	70	3	17	10
1999	70.9	22	79	13	3	5
2000	49.7	16	38	42	12	8
2001 (August)	31.3	10	31	1	67	1
1990-2001	**316.9**	**100**	**60**	**11**	**18**	**11**

Source: Thomson Financial. The value of a M&A transaction is defined as the total value paid by the acquiror within six months of the announcement date.

Table 23

Average size of M&A deals in the euro area

(EUR millions)

	1990-1997	1998-2001 (August)	1990-2001 (August)
Average size	273.5	1116.9	549.6
of which: Domestic/Within-industry	315.4	1279.5	648.8
Domestic/Cross-industry	205.8	1075.3	413.5
Cross-border/Within-industry	163.6	1011.7	456.8
Cross-border/Cross-industry	38.5	575.2	429.5

Source: Thomson Financial.

cases except in the cross-border/cross-industry category. The average transaction size also sharply increased in all four categories (Table 23), which suggests that large banks increasingly became involved in merger activity towards the year 2000. Merger transactions in the early 1990s mostly involved smaller banks (often savings and co-operative banks) and typically had cost-saving objectives. The more recent transactions, which tend to involve larger banks, have typically been more aggressive, aiming at enhancing competitive positions in the more integrated markets.

A clear majority of transactions involving banks has occurred with other banks. Nevertheless, we have witnessed a notable creation of financial conglomerates involving banks, insurance companies and securities firms. Over the entire period, roughly 30% of the total M&A value was due to cross-sector transactions. Such transactions were most prominent in Belgium, Germany, Finland and Ireland.

Throughout the decade, M&As involving euro area targets were predominantly domestic. Over the entire period, domestic transactions accounted for 78% of the total transaction value, of which 60% took place within the banking sector (Table 22). However, a clear increase in within-industry/cross-border transactions can be observed for 1999 and 2000, when such transactions reached 42% of the total value of the M&A activity. In Austria, France, Ireland, Luxembourg, the Netherlands and Finland, cross-border transactions accounted for more than half of the transactions in the period 1998-2001, while in Greece and Italy, M&A activity was still predominantly domestic.[33] In the case of cross-industry transactions, cross-border transactions were already fairly prominent in the early-1990s.

Cross-border transactions involving euro area banks as targets have been fairly strongly European. In 90% (60%) of the M&As between 1990 and 2001 the acquirer was from another EU (euro area) country (Table 24).[34] Where the acquirer was a non-bank financial institution, it more often came from outside Europe. Such acquirers accounted for around 50% of the activity between 1990 and 2001.

33 The cross-border M&A activity has also given rise to "regional financial clusters" with strong cross-border ownership linkages, such as Benelux, Nordic, Spanish-Portuguese and Irish-UK clusters.

34 Swizerland is the major acquirer in the "rest of the world" category.

Table 24

Origin of acquirers in cross-border bank mergers in the euro area

(% of total)

	Within-industry			Cross-industry		
	1990-1997	1998-2001	1990-2001	1990-1997	1998-2001	1990-2001
Euro area	53	59	58	50	47	48
Other EU countries	9	38	31	1	0	1
USA	21	2	7	2	13	8
Rest of the world	17	1	4	47	40	43

Source: Thomson Financial.

4.4 Market structure

The bank M&A wave has had substantial implications for ownership structures, market concentration and capacity utilisation. In this context, we are particularly interested in the extent of the cross-border links. Indeed, cross-border M&As have led to an increase in the number of subsidiaries of euro area and EU banks in other euro area countries. In some cases, the foreign component in the domestic banking system has significantly increased. Systematic data on the assets of EU banks' subsidiaries are not available, but in Austria, for example, the assets increased from EUR 5 to EUR 126 billion in 2000 on account of the merger between Bank Austria and the German HypoVereinsbank. In France and Portugal these assets more than doubled in 2000. In France this was due to the restructuring of the Dexia Group and the acquisition of CCF by HSBC, and in Portugal to the acquisition of the banks of the Champalimaud group by the Spanish BSCH. In the Nordic countries, the creation of Nordea has led to a major increase in foreign ownership.

In order to present an overview of the importance of foreign banks in the euro area banking markets, we calculated the amount of capital held by foreign entities in 2000. Banks in which more than half of total capital is owned by foreign institutions constitute subsidiaries, while lower stakes represent other cross-border participations (Table 25).[35] The data point to a much greater degree of internationalisation than the branching figures alone, as the average foreign ownership is 23% of total banking capital. These ownership stakes are largely held by other euro area country banks. The role of other EU country banks and, in particular, that of Japanese and US banks is significantly smaller. Luxembourg constitutes the extreme case, as its banks are to a great extent owned by foreign, mostly German, banks. Ireland and Finland have 40% of their banking systems controlled by foreign owners, and Belgium 30%. At the lower end are Germany, the Netherlands and Greece, where no more than 6% of banks' capital is in foreign possession.

The significant amount of foreign ownership reflects tangible links between local banking

35 This calculation was based on the broadest available data at the bank level.

Table 25

Capital of euro area banks owned by foreign residents

(end – 2000, % of total equity capital)

Country of the participations	Country of the owners															
	BE	**DK**	**DE**	**GR**	**ES**	**FR**	**IT**	**LU**	**NL**	**PT**	**SE**	**UK**	**JP**	**US**	**Other**	**Total**
BE		0.00	1.11	0.00	0.23	0.47	0.00	0.04	27.04	0.00	0.00	0.00	0.00	0.24	0.37	**29.5**
DE	0.00	0.00		0.00	0.66	0.38	0.86	0.06	1.98	0.00	0.03	0.00	0.02	0.49	0.68	**5.2**
GR	0.00	0.00	0.00		0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.96	0.00	1.25	2.72	**6.1**
ES	0.00	0.00	2.87	0.00		1.26	1.92	0.00	0.00	1.18	0.00	2.29	0.00	0.00	0.00	**9.5**
FR	6.17	0.00	2.54	0.00	1.44		1.09	0.19	0.58	0.02	0.00	1.56	0.67	0.00	0.00	**14.3**
FI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.64	0.00	0.00	2.81	0.22	**40.7**
IE	2.88	0.00	26.30	0.00	0.00	0.00	2.79	0.91	5.82	0.00	0.00	1.14	0.00	0.01	0.38	**40.2**
IT	0.09	0.00	1.74	0.00	1.12	2.59		0.28	0.67	0.00	0.00	0.11	0.00	0.00	3.68	**10.3**
LU	18.40	2.17	47.30	0.32	0.00	9.80	4.28		1.49	0.00	0.27	0.79	0.00	0.00	1.02	**85.8**
NL	1.23	0.00	1.65	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.59	3.10	0.10	**6.7**
AT	1.01	0.00	9.03	0.00	0.00	0.02	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**10.2**
PT	0.86	0.00	2.02	0.73	0.99	0.78	3.19	2.82	1.83		0.00	0.25	0.00	3.10	0.10	**16.7**
Average	**2.79**	**0.18**	**8.60**	**0.10**	**0.40**	**1.50**	**1.29**	**0.39**	**3.58**	**0.11**	**3.16**	**0.59**	**0.11**	**0.92**	**0.77**	**22.9**

Source: Fitch IBCA Bankscope. Includes 570 euro area banks for which data are available. Includes all types of owners and participations (also minority holdings). The columns include the countries that appear as owners. Columns of Ireland and Finland were excluded given that there are no reported participations abroad.

Table 26

Assets of five largest credit institutions (CR5)

(as % of total local banking assets)

	1990	1995	1999	2000	2001
Belgium	48	54	76	75	78
Germany	14	17	19	20	20
Greece	83	76	67	65	66
Spain	35	46	52	54	53
France	42	41	43	47	47
Ireland	44	44	41	41	43
Italy	19	26	26	23	29
Luxembourg	N.A.	21	26	26	28
The Netherlands	73	76	82	81	82
Austria	35	39	41	43	45
Portugal	58	74	44	59	60
Finland	53	69	86	87	80
Euro area average	**46**	**49**	**50**	**52**	**53**
Denmark	76	74	71	60	68
Sweden	70	86	88	88	N.A.
The United Kingdom	N.A.	27	29	30	30
EU average	**50**	**51**	**53**	**53**	**52**

Source: 1990, 1995 figures: ECB (1999a); 1999 to 2001 figures: ECB (2002). Averages are unweighted and ignore missing values. CR5 is reported on a non-consolidated basis from 1999 onwards.

markets in the euro area. However, these linkages might not be definite indicators of integration, as pricing may also remain unaffected after a change in ownership. To recall, the analysis of the margins suggested that, as far as the retail markets are concerned, a significant amount of segmentation persists in the euro area, while only gradual convergence in pricing was observed.

As a result of domestic M&As, increased banking market concentration throughout the euro area has been witnessed. In the euro area, the average share of the domestic banking assets controlled by the five major banks (CR5) increased from 46% in 1990 to 53% in 2001 (Table 26). The increased involvement of the largest banks has accelerated the concentration tendency; most of the above increase in concentration took place in the late 1990s. Significant differences continue to exist across countries. Smaller countries like Belgium, Finland and the Netherlands have CR5 figures of around 80%, followed by Greece and Portugal with figures above 60%, while Germany has the most dispersed banking system, in which the five largest banks control only 20% of all banking assets.[36]

As domestic concentration levels have increased so has the vigilance of competition authorities, watchful that individual transactions do not lead to abuse of the market position. Individual transactions can be motivated by offensive (market penetration, diversification) and defensive (cost saving) objectives. Both types of motive can be socially beneficial. Offensive mergers may result in greater competition as a result of firms striving to gain higher market shares. Defensive mergers may result in reduced excess capacity and lower prices.[37] There is evidence of excess capacity in the EU banking sector (Davis and Salo, 1998). However, if the merged partners are able to increase their market power via a strong market position, customers are likely to be worse off, and the merger partners will be able to increase their profits.

Research on the impact of bank M&As has mostly looked into the cost implications. Studies in the United States have generally been inconclusive, and some studies have been quite sceptical about the realisation of cost-

36 Table 26 must be interpreted with caution, since there is a problem of comparability of the figures over time (see Table notes).

37 In fact, increased competition may have been the driving force behind these mergers, since cost-inefficiencies cannot be maintained in more competitive markets.

efficiency gains (see Berger et al., 1999). The few existing studies on European bank mergers seem to conclude that there are often significant efficiency gains, which also result in better conditions for customers. Huizinga et al., (2001) analyse 52 major mergers among European banks between 1994 and 1998, which are found to be largely socially beneficial. Cost-efficiency typically improved after mergers and there was some evidence of increased profits, although there was a tendency for deposit rates to increase. However, a previous study conducted by Vander Vennet (1996) on European bank mergers between 1988 and 1993 pointed more convincingly to profit increases following mergers. These contrasting results may be due to increasing banking market contestability throughout the last decade.[38]

In addition, bank M&As seem to have been associated with capacity reductions, even though several other important factors such as business volume expansion, technological developments or changes in the business mix of universal banks are also relevant. Indeed, since the early 1990s, the largest reductions in bank branches have taken place in the countries with the greatest increases in concentration due to M&As (Belgium, Finland, the Netherlands and, in the EU context, Denmark and Sweden) (Table 27). The number of bank employees has also declined significantly in these countries (except in the Netherlands) (Table 28). In general, the increased sophistication of banking services, with a greater demand for advice, has tended to maintain the level of bank employees, despite labour-saving technological improvements (ECB, 2000b).

All in all, economic literature and evidence on capacity reductions suggest that M&As can indeed perform a disciplining function against cost-inefficiency and excess capacity and support market contestability. It would appear that this disciplining force is increasingly at work on a cross-border basis, because of the clear increase in cross-border M&As (as well as in cross-border branching and the establishment of subsidiaries).

38 A number of further studies exist at the country level. For example, Focarelli and Panetta (2001) examine the pricing effects of M&As in the Italian bank deposit market. They find strong evidence that, in the long-run, efficiency gains dominate the market power effect, leading to more favourable prices for consumers.

Table 27

Number of bank branches

(per 1,000 inhabitants)

	1990	1995	1999	2000	2001	%-change 1990-2001
Belgium	0.90	0.76	0.68	0.64	0.60	–33
Germany	0.63	0.59	0.71	0.69	0.66	5
Greece	0.19	0.23	0.26	0.27	0.28	47
Spain	0.83	0.93	0.99	0.98	0.97	17
France	0.45	0.44	0.43	0.43	0.44	–2
Ireland	0.27	0.29	0.29	0.26	N.A.	–4
Italy	0.31	0.41	0.47	0.49	0.51	65
Luxembourg	0.78	0.85	0.71	0.68	N.A.	–13
The Netherlands	0.54	0.44	0.39	0.37	0.33	–39
Austria	0.58	0.58	0.57	0.56	0.56	–3
Portugal	0.20	0.35	0.53	0.55	0.69	245
Finland	0.58	0.38	0.24	0.23	0.23	–60
Euro area average	**0.53**	**0.54**	**0.59**	**0.59**	**N.A.**	**11**
Denmark	0.58	0.42	0.43	0.44	0.44	–24
Sweden	0.38	0.30	0.24	N.A.	N.A.	–37
The United Kingdom	0.35	0.33	0.26	0.24	N.A.	–31
EU average	**0.50**	**0.50**	**0.53**	**0.49**	**N.A.**	**–2**

Source: 1990, 1995 figures: ECB (1999a); 1999 to 2001 figures: ECB (2002). Weighted averages. Changes calculated using the latest available figure.

Table 28

Number of bank employees

(per 1,000 inhabitants)

	1990	1995	1999	2000	2001	%-change 1990-2001
Belgium	7.94	7.56	7.45	7.44	7.41	–7
Germany	11.10	9.28	9.83	9.85	9.77	–12
Greece	4.61	5.07	5.55	5.69	5.65	23
Spain	6.22	6.35	6.47	6.46	6.5	5
France	7.63	7.05	7.06	N.A.	N.A.	–7
Ireland	4.99	6.40	N.A.	N.A.	N.A.	28
Italy	5.92	6.23	5.90	5.95	N.A.	1
Luxembourg	41.78	44.90	48.65	52.20	54.14	30
The Netherlands	7.86	7.13	7.84	8.09	7.96	1
Austria	9.86	9.78	9.07	9.07	9.19	–7
Portugal	6.20	6.09	6.02	5.67	5.47	–12
Finland	10.15	6.31	4.66	4.86	N.A.	–52
Euro area average	**8.04**	**7.43**	**7.42**	**N.A.**	**N.A.**	**–8**
Denmark	10.60	8.90	9.00	9.07	9.07	–14
Sweden	5.32	4.91	4.88	N.A.	N.A.	–8
The United Kingdom	8.98	7.98	8.07	7.44	N.A.	–17
EU average	**8.16**	**7.48**	**7.49**	**N.A.**	**N.A.**	**–8**

Source: 1990, 1995 figures: ECB (1999a); 1999 to 2001 figures: ECB (2002). Weighted averages. Changes are calculated using the latest available figure.

The ownership structure is also highly significant as regards the governance of banks. Looking at the 50 largest banks (for which data are available), it emerges, first, that the ownership of these banks is typically relatively concentrated. The first three shareholders hold about one-third of total capital on average. Only in the case of three banks do the three major shareholders hold less than 10%. In seven cases, the three largest owners hold 100%; in most cases these are banks owned by local or central governments. In the case of 70% of these banks, a part of their capital is held by other banks or financial institutions (Table 29). Other banks hold large stakes (above 10%) in 17 cases. In addition, some of these banks are controlled by banks from other countries, as discussed above. Very often the ownership stakes involve some form of strategic co-ordination, through board participation, coincidence of managers, joint ventures, etc. More extensive information available for some banks also hints at hidden links established through investment funds belonging to the group. These links might support the conduct of business from a European perspective, helping to create a more efficient and integrated market for retail services.

Central and local governments and other public sector entities constitute another significant class of shareholders in the major euro area banks. The public sector has a capital participation in 17 banks and still holds more than 50% of the capital in 7 of them. In some cases, the public sector holdings reflect unfinished privatisation. Finally, in a few cases existing and former employees are among the most relevant shareholders. It might be argued that these kinds of ownership structure conflict with rationalisation measures, which could trigger a significant downsizing of staff.

Table 29

Ownership structure of 50 major banks operating in the euro area

(end-2000)

% of capital owned by	>50%	10%-50%	<10%
Other banks	6	11	21
Other financial institutions	2	18	13
Employees & pensioners	0	2	3
Public sector	7	4	6
Other owners	26	21	18

Source: Fitch IBCA Bankscope.

4.5 Obstacles to further integration

While single market legislation has relaxed most of the legal and regulatory barriers to entry from another Member State, some of these barriers have – as noted in Section I – remained in place.

The most important economic barrier to entry is still the necessity of having a wide branch delivery network in order to gain a share of the retail markets. Branch networks involve very large sunk investment costs, giving incumbent banks a major competitive advantage. Extra costs and difficulties in cross-border M&As as well as in other forms of entry also arise from cultural and linguistic factors.

Second, economic barriers may be related to the reluctance of consumers to switch to foreign suppliers and thus to customers' indifference to price offers by foreign entrants. Various reputation effects, e.g. lack of name recognition or lack of confidence, may work against foreign entrants. However, in the single market these additional demand-related barriers are likely to become more limited owing to the harmonisation of prudential regulations. Well-known and highly rated large international banks should be well positioned to operate throughout the single market.

Third, barriers to entry might arise from strategic behaviour on the part of incumbent banks to deter entry. Traditionally, wide margins in less competitive segments have allowed incumbent banks to compete intensively in other segments, even if incurring temporary losses. A further possibility for strategic behaviour may lie in domestic payment systems, if incumbent banks can limit the entry of, or increase the costs for, foreign participants in the networks established by the banks themselves. However, effective EU competition policy should guard against these possibilities.

Perhaps most significantly, further development of the techniques for remote access to retail banking services could lower these entry barriers and increase contestability.[39] Thus, attempts to guarantee effective cross-border competition in remote access services through EU legislation could significantly promote further integration. First, an extensive branch network could lose its significance as a barrier, as customers could be reached via, inter alia, telephone or the internet. Second, the technological transformation process would increase customer information on competing offers, allowing customers to compare prices more easily. Consequently, customers could become more mobile than before and more responsive to price differentials in the market as a whole. Finally, the development of new delivery techniques could also reduce the possibilities for strategic behaviour aimed at preventing entry through the exploitation of dominance in domestic branch networks and payment systems. However, in no other industry is customer confidence in a service provider as important as in banking. Low confidence in virtual banks, and in the general security of transactions, are likely to be the main reasons

39 See Corvoisier and Gropp (2002b).

hindering the expansion of internet banking. Customers who frequently conduct online operations typically use internet banking as a complementary service offered by their existing bank.

Thus far, internet-banking has been offered by established banks, and as an integrated part of the existing delivery strategy ("multi-channel strategy"). A few banks have also started to use this method to break into foreign markets by offering products at competitive prices. New start-ups have, however, found it quite difficult to acquire customers through the internet, even through substantial price reductions.

While initial high expectations of the diffusion of remote banking have not been met, remote access options already exist for a wide range of retail banking services in many countries. Telephone banking developed first, but more recently banks have shifted their focus towards internet applications for transaction and information purposes. Since official data are lacking, the analysis must rely on scattered and heterogeneous market sources (mainly investment banks and consultancy firms). Thus, some uncertainty surrounds the current use of remote banking techniques.

Undoubtedly, the penetration of online brokerage has been the fastest among financial services. Its estimated market share is around 10% for Europe (compared with 35% in the United States). The diffusion of internet banking has been slower, as the benefits vis-à-vis branch or telephone-based accounts are perceived to be smaller than for online brokerage. Moreover, the current penetration rates are significantly lower for lending than savings-related products. For deposit-related services, the average market penetration rates in Europe are less than 5% on average (compared with estimates of 15% in the United States). In the Nordic countries internet banking has entered the rapid diffusion phase, reaching 50% of banks' retail customers in Finland and 20% in Sweden, according to existing estimates.

5 Conclusion

The purpose of this paper is to assess integration in banking services in the euro area. Indicators of integration are reviewed for three product areas: wholesale, capital market-related and retail. Different findings for each of these areas confirm the need to address the various kinds of banking products separately.

The evidence points to the emergence of a strongly integrated market in wholesale banking services as far as the predominant unsecured instruments are concerned. Integration is clearly less complete in the repo segment, mainly because of clearing and settlement obstacles in cross-border collateral transactions. The "two-tier" structure, based on major banks dominating cross-border transactions and smaller institutions trading with domestic banks only, does not appear to be hampering the equalisation of market conditions throughout the euro area, as banks can take advantage of any pricing anomalies in local markets.

As regards capital market-related services (corporate finance services, and asset management and trading), a transformation of previously segmented national currency-based markets into a significantly integrated area-wide market can be observed, in particular in the case of intermediating bond issues. This may be concluded from the replacement of the leading role of domestic intermediaries by international ones. US investment banks, in particular, have significantly increased their share of the euro area market. Even though a similar increase in integration was observed for equity issuance and syndicated loans, these two segments present clear differences. Intermediating equity issuance and large-scale lending have remained more local, probably because of the greater need for local information and risk assessment than in the case of bonds.

From the perspective of asset management and trading, the fragmentation of the European clearing and settlement structure still significantly complicates post-trade processing of cross-border securities transactions relative to domestic ones. Complications arise because of the need to access many national systems, with differences in technical requirements, market practices and fiscal regulations acting as additional barriers to an efficient delivery of clearing and settlement services. These factors constitute major impediments, notwithstanding the fact that portfolio diversification across borders seems to have significantly increased according to the data presented in this study.

Market segmentation remains strongest in the retail area. For instance, discrepancies in lending and deposit margins across the euro area indicate that integrated retail banking markets are not yet in place. Such segmentation results from the fact that closeness to customers is still important in dealings with retail counterparties (households and small and medium-sized firms). Nevertheless, some convergence in margins can be observed, in particular in household lending. Moreover, the substantial links across local markets which have evolved through cross-border acquisitions and the establishment of subsidiaries, as well as through strategic alliances, could, over time, promote greater integration, while wider use of remote banking (such as internet banking) could constitute a "shortcut" to integration.

Thus, the general picture is that integration has progressed fastest in the areas where professional market participants have the resources to overcome or circumvent the existing obstacles to integration (i.e. in the wholesale and capital market area). By contrast, retail clients do not usually have such resources, the outcome being a slower pace of integration.

The paper also surveys developments in competition in addition to the indicators of integration. Within corporate finance services, we show a remarkable reduction in bond intermediation fees in all transaction sizes, but especially in the case of the largest bond issues. There is evidence which suggests that the fees are approaching the levels charged for issuers in the US market. In equity intermediation, the decline in fees has been tangible, but not as large as in bonds. Fees have also declined significantly in syndicated lending, but margins and fees on undrawn credits increasingly reflect risk differentiation across borrowers. The most visible reductions in price levels in the retail field seem to have taken place in household lending. In deposit taking, banks' margins have, according to the data presented, even tended to widen. Finally, the evidence presented on the banking consolidation process would appear to signal positive developments from a consumer perspective: gradual efficiency increases and greater market contestability.

The study also highlights the impact of the euro in fostering integration. This has been particularly relevant in the wholesale and capital market fields. In these areas, the common risk-free yield curve and access to central bank liquidity under the single currency conditions have supported the creation of integrated money and capital markets, replacing the previous national markets in the constituent currencies. This has also paved the way for the operation of financial intermediaries at the European level. In the retail field, the introduction of the euro does not appear to be having such an impact, and markets have continued to operate at the national level. Naturally, also many other forces influence the markets for banking services (economic, demographic, technological and financial innovation factors).

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