De Nederlandsche Bank

Occasional Studies
Vol.1/Nr.2 (2003)

The Blurring of Distinctions between Financial Sectors: Fact or Fiction?

Annemarie van der Zwet

The Blurring of Distinctions between Financial Sectors: Fact or Fiction?

Annemarie van der Zwet

Occasional Studies Vol.1/Nr.2
De Nederlandsche Bank

Corresponding author: Annemarie van der Zwet
e-mail: a.m.c.van.der.zwet@dnb.nl

Aim of Occasional Studies is to disseminate thinking on policy and analytical issues in areas relevant to the Bank.
Views expressed are those of the individual authors and do not necessarily reflect official positions of De Nederlandsche Bank.

Subscription orders for Occasional Studies and requests for specimen copies should be sent to:

De Nederlandsche Bank nv
Communication and Information Department
p.o. Box 98
1000 ab Amsterdam
The Netherlands
Internet: www.dnb.nl

The Blurring of Distinctions between Financial Sectors: Fact or Fiction?

Annemarie van der Zwet *

January 2003

Abstract

This paper measures the 'blurring of distinctions' phenomenon in an innovative way, namely by means of a breakdown of the revenues of the 50 largest financial groups worldwide. These data show that the blurring of distinctions between financial intermediaries of different nationalities (i.e. international blurring) is clearly more important than the blurring of distinctions between different types of financial intermediaries (i.e. cross-sector blurring). At the same time, there are many initiatives on a national level to cope with the cross-sector blurring of distinctions, whereas so far relatively little initiatives have been taken to respond to the international blurring of distinctions.

jel-classification: g21, g22, g28.
Keywords: financial supervision, financial integration, cross-sector diversification, international diversification.

* The author is attached to the Nederlandsche Bank, po Box 98, 1000 ab Amsterdam. She thanks Périne Davelaar for preparatory work for this paper.

1 Introduction

Since the new Labour government announced plans in 1997 to consolidate financial supervision in a separate agency in the uk, the debate about the institutional structure of supervision has opened up in many countries. Japan, South Korea, Iceland, Austria and Germany have followed the uk example. In Germany, the role of the Bundesbank in the day-to-day supervision of banks has been formalised and strengthened. The Bank of Japan also has continued to carry out on-site inspections of major banks, which are its counterparts in the payment system. In 1998, Australia opted for a so-called 'twin peaks' model under which one regulator, which is separate from the central bank, covers prudential supervision whereas the former securities regulator is responsible for conduct of business supervision.[1] The Netherlands followed this example, by separating prudential supervision from conduct of business supervision in 2002. However, an important difference with the Australian structure is that the Dutch central bank has remained responsible for the prudential supervision of banks, whereas it is closely associated with the insurance supervisor (Jonk et al., 2001).

According to the official declarations by which ministers of finance usually explain these far-reaching reforms, the fundamental argument is the so-called 'blurring of distinctions' between different kinds of financial services business: banks, investment firms, insurance companies and others. This trend is most clearly manifested in the emergence of financial conglomerates, i.e. financial groups conducting at least two types of financial services activities.[2] Since prudential regulation based on *solo* principles might fail to capture the risk characteristics of a financial conglomerate as a whole, financial conglomerates call for a consolidation or at least more co-ordination of prudential supervision. Incidentally, the increase in the number of financial conglomerates has been accompanied by a blurring of the boundaries between products. A common example in the Netherlands is a mortgage combined with a unit-linked life insurance policy; this hybrid financial product embodies banking, securities and insurance components. Since different types of financial institutions can offer these complex financial products, they call for a harmonisation of conduct of business supervision.

The blurring of distinctions also plays a role on an international level. The increasing internationalisation of the activities of financial intermediaries necessitates closer international collaboration by national supervisory bodies. Indeed, in a heavily integrated financial world, supervision in one country can be undermined by developments in other regulatory jurisdictions, and supervisory requirements in one country can have impact on others. In addition, the risk of an international transmission of possible financial difficulties at large financial players rises (contagion risk). Although there exists an elaborate web of sectoral committees and groups to deal with these cross-border issues for a long time already – e.g. the Basel Committee on Banking Supervision was founded in 1974 – several observers argue for more drastic solutions.

The financial integration across sectors and across borders thus clearly affects the national as well as the international organisation of financial supervision. Given this importance, it is remarkable that we know so little about the precise extent of this phenomenon. Besides the numerous studies on the international integration of financial markets, there are some attempts to quantify the degree of internationalisation of banks (see section 4 for a description). However, these studies usually pay little or no attention at all to the degree of internationalisation of other financial intermediaries, particularly insurance companies. To the best of our knowledge, there exist no systematic analyses of the increasing overlaps between the banking, insurance and securities sector. Given these gaps, we can ask ourselves whether the 'blurring of distinctions', which is clearly the most used argument for the above-mentioned (proposed) reforms of financial supervision, is fact or fiction.

This paper measures the 'blurring of distinctions' phenomenon in an innovative way, namely by means of a breakdown of the revenues of the 50 largest financial groups worldwide (section 4). The revenues of these largest financial groups are divided by the type of activity (to measure the integration of different types of financial intermediaries) and into the country in which the revenues are earned (to measure the integration of financial intermediaries of different nationalities). However, we will first examine the ways in which authorities have tried, or can try to adjust the organisation of financial supervision to the blurring of dividing lines on a national and an international level (section 2 and section 3 respectively). A final section compares the institutional reforms undertaken so far with the actual degree of blurring of distinctions, and subsequently draws some conclusions.

2 Answers to the cross-sector blurring of distinctions

When we take the blurring of distinctions between different types of intermediaries and financial product markets as given, countries have several options to adjust their supervisory structure to the changed financial structure. Arranged in order of increasing integration, these options are broadly the following:

1. Strengthen the co-operation between the sectoral supervisors (usually a banking supervisor, an insurance supervisor and a securities supervisor). This approach has been applied in the Netherlands since the summer of 1999 (Ministerie van Financiën, 1999). The three Dutch sectoral supervisors are represented in the *Council of Financial Supervisors*; this Council is not a separate supervisory body, but provides for enhanced co-operation in the formulation of policies regarding important cross-sector dimensions like the supervision of conglomerates, information disclosure to consumers and integrity issues (e.g. fit and proper tests for managers of financial institutions).[3]

2. Organisation of supervision by objectives. This idea was proposed by Taylor (1995) and implemented for the first time in Australia in 1998. In the so-called 'Australian model', a separate prudential supervisory agency and a separate conduct of business agency are set up.[4] The former is responsible for the objective 'financial soundness of all types of financial institutions', whereas the second aims to 'foster orderly and transparent financial markets and correct relations between financial market participants'. Furthermore, the central bank is explicitly responsible for systemic stability in this model; the central bank fosters systemic stability by regulating the payment system and acting as a lender of last resort in extreme circumstances. Important instruments of the prudential supervisor are for example capital adequacy requirements and the supervision of risk management policies and practices of financial institutions. The conduct of business supervisor is involved in the formulation and enforcement of rules to protect investors, to safeguard market integrity and to provide information to consumers of financial products.

3. Creating a single regulatory agency encompassing banking supervision, insurance supervision and securities regulation outside the central bank. Norway was the first country to establish such an integrated agency in 1986, followed by Denmark in 1988 and Sweden in 1991. However, the establishment of a single statutory regulator for financial services, the Financial Services Authority (fsa), in the uk drew much more attention of the international financial press and policymakers worldwide. As was mentioned in the introduction, the uk example was followed by similar reforms in Japan, South Korea, Iceland, Austria and Germany.

4. Creating an integrated supervisory agency under the wings of the central bank. This model is applied only in Singapore, where the responsibility for regulating and supervising all financial institutions has been transferred to the Monetary Authority of Singapore (mas).

In choosing one model – or perhaps a mixture of different models – countries have to take some important decisions. The first decision is whether all types of financial institutions should fall under the same regime (models 2, 3, and 4) or should be subject to different specialist agencies (model 1). Here, we restrict ourselves to a short overview of the main arguments that have been put forward in the lively discussion on this issue (see for example Abrams and Taylor, 2000, Briault, 1999, Goodhart et al., 1998, and Lannoo, 1999 for a more complete explanation). The most persuasive arguments in favour of unification relate to the 'blurring of distinctions' phenomenon, namely facilitating consolidated supervision of financial conglomerates and ensuring regulatory neutrality when different types of financial institutions offer similar services or products ('level playing field'). Secondly, different authors point to efficiency gains of merging multiple specialised regulatory bodies. This efficiency-argument supposes the existence of economies of scale and scope, resulting for example from a shared infrastructure and support systems and the introduction of a single system of risk-based supervision. An important counterargument of unified supervision is that differences in risk profiles and nature of different types of financial institutions require specialised agencies that are more aware of the specific problems of the sector. Distinct approaches of, in particular, banking and insurance supervisors render the achievement of synergy gains highly uncertain. Moreover, the public perception could emerge that the whole financial sector is equally protected, which could reduce the incentive for institutions to manage their business prudently ('moral hazard').

A second decision concerns the desirability of making a distinction between prudential supervision and conduct of business supervision (model 2) or not (model 3 and 4). When we focus again on the most important arguments, the following advantages of objectives based supervision are put forward in the literature (Goodhart et al., 1998 and Carmichael, 2000). Regulatory agencies are probably more effective and efficient when they have clearly defined objectives. This last factor also encourages a regulatory process that is open, transparent and accountable. In addition, objectives based supervision minimises cultural clashes. Market-conduct regulation and prudential supervision are so different in their methodologies and scope that bringing them together under one roof could lead to tensions between cultures, resource allocation and regulatory focus. Briault (1999) criticises objectives based supervision on the grounds that the distinction between prudential and conduct of business regulation is not so neat and simple in practice as it is in theory. A major overlap between the two regulators is that both (should) have a close and legitimate interest in the senior management of any financial institution, e.g. in ensuring that internal systems and controls are in place.

Thirdly, countries have to take a decision on the role of the central bank. In model 4 and possibly in model 1 central banks carry out (a part of) financial supervision themselves, whereas their role is limited to fostering financial stability in model 2 and 3. There exists a remarkable consensus on the pros and cons of combining prudential supervision and central banking, although these arguments are weighted differently (see Abrams and Taylor, 2000, ecb, 2001, Goodhart, 2000, Goodhart and Schoenmaker, 1995 and Lannoo, 1999). To start with the main counterarguments, it is often asserted that there might exist a conflict of interest between supervision and monetary policy. Since interest rate increases might in certain circumstances have damaging effects on the soundness of the banking system, central banks with supervisory responsibilities might pursue less conservative monetary policies. The empirical relevance of this argument is debatable, however (see Goodhart, 2000, on this point). A second argument concerns the risk that independent central banks, being non-elected bodies, would become too powerful when they have supervisory responsibilities (this argument holds in particular for model 4). In addition, central banks are traditionally much less involved in securities and insurance supervision than in banking supervision. The most used arguments in favour of combining prudential supervision with central banking relate to information-based synergies between supervision and central banking and to the close relationship between prudential supervision and the assessment of (systemic) risks for the financial system as a whole (see for example, Healey, 2001). Moreover, the independence and technical expertise (with regard to financial markets) of central banks may benefit the quality of financial supervision.

3 Answers to the international blurring of distinctions

Along with the increasing internationalisation of both financial markets and institutions, concerns about the stability of the international financial system have grown. Apparently, the trend towards global financial integration has coincided with an increased prominence of financial crises. This perception is based particularly on the recent turmoil in Argentina and Turkey and the financial crises in several East Asian countries, Russia and Brazil in 1997-1998. These events have triggered a discussion about the necessity and ways of reforming the 'international financial architecture'. In this discussion, the following proposals were put forward (see Rogoff, 1999):

1. Establishing a global lender of last resort. In the most far-reaching version of this proposal, a world central bank is formed to oversee a global currency. The proposal to create a new emergency credit facility at the imf that would stave off speculative

attacks, is somewhat closer to reality. Countries could qualify for drawing on this emergency credit facility by meeting certain macroeconomic and regulatory standards. However, the industrialised world is probably not prepared to put up the kind of resources that are needed to preclude a currency-attack. In addition, a larger imf-fund could encourage more risk-taking by financial institutions and induce domestic authorities to be more lax in their oversight (moral hazard).

2. Setting up a global bankruptcy court with powers similar to a domestic bankruptcy court. In this way, heavily indebted countries can be allowed a temporary suspension of payments, which can give them the possibility to seek an orderly restructuring of their debts. The recent proposals of Anne Krueger, first deputy managing director of the imf, fall into this category (Krueger, 2001). The main difficulty of this idea is a lack of enforcement clout in debtor countries, since the international court would conceivably not have the right to seize physical assets and to fire managers (in this case, the countries government) as national bankruptcy courts can. On a more mundane level, countries have vastly different types of bankruptcy codes, which complicates agreeing on a common international code.

3. Establishing a global financial regulator. The problem, again, is feasibility. Just as in the case of an international bankruptcy court, it is not obvious how a global financial regulator could be given any real powers, absent a far greater degree of world political integration than we currently observe. Furthermore, Rogoff (1999) argues that competition between different national regulators can be healthy in so far as it provides a safety valve against bad regulation in individual countries.

Whereas the above mentioned ideas are thus not really on the agenda, the discussion about intensifying the co-ordination between financial supervisors within Europe is more concrete. This is not surprising, given the pursuit of financial integration by means of the Internal Market programme and the existing arrangements for political co-ordination within the European Union (eu). The most drastic proposals come from external observers such as Danthine et al. (1999) and Di Giorgio and Di Noia (2001). Danthine et al. make a plea for an independent European-wide regulatory agency, distinct from the European System of Central Banks (escb), which would combine the supervision of banks and markets. Di Giorgia and Di Noia propose to establish two new European supervisory agencies, one responsible for prudential supervision and one for conduct of business supervision, which would exist besides the escb and a European antitrust agency (objective based supervision). These supervisory agencies would be structured similarly to the escb and co-ordinate the different domestic agencies in each country. The ecb has made somewhat more moderate proposals (Padoa-Schioppa, 1999), by calling for a strengthening of the multilateral co-operation of national supervisors up to the point when they act as a 'collective euro area supervisor'. Within this framework, information could be pooled, reporting requirements and examination practices could be developed and standardised, common databases could be created, joint teams could be formed and analyses of developments across the whole banking system could be conducted.[5]

The primary argument in favour of, in fact, a centralisation of European financial supervision, refers to the increasing internationalisation of the financial sector. Although internationalisation is a long-term trend, it has been fostered by the introduction of the euro (e.g. the amalgamation of the infrastructures for large-value payments and interbank markets, the increasing integration of capital markets). Intensifying linkages between financial institutions and markets across borders has enhanced contagion risk, i.e. unexpected financial difficulties at large financial players will probably have an impact well beyond national borders. In these circumstances, a central European supervisor may facilitate crisis management, since the necessity of rescuing a particular financial group can be better assessed with eye on the European financial system as a whole.[6] Incidentally, there exists an elaborate web of groups precisely to deal with these situations; these groups, such as the Banking Supervision Committee and the Groupe de Contact, concentrate on exchanging information and strengthening the co-operation among supervisors, and between supervisors and national central banks. Furthermore, Memoranda of Understanding serve to specify the bilateral cross-border co-operation between sectoral supervisors within the eu.

Other arguments that plead in favour of a centralisation of financial supervision in the eu are the need to counteract regulatory competition between national authorities[7] and the – presumingly – inadequate co-operation between eu supervisors in practice (Bini Smaghi, 2000). The ecb mentions that emu has created a situation were the geographical domain of monetary policy no longer coincides with that of prudential supervision, since monetary policy has been centralised whereas supervision remains to be organised along national lines (ecb, 2000, and Padoa-Schioppa, 1999). In these publications, it is rightly concluded that the divergence of the prudential and monetary domain requires extensive co-operation between national banking supervisors, and between national supervisors and the Eurosystem.

In response to the concerns with respect to the institutional structure of supervision in Europe, the ecofin Council reviewed existing arrangements for the prevention and management of financial crises within the eu and concluded that the existing eu arrangements for prudential supervision are largely adequate. This conclusion was based on two separate reports on financial stability (i.e. the so-called 'Brouwer-reports') carried out by the eu Economic and Financial Committee (efc, 2000, 2001). Both reports stress the fact that no institutional changes are necessary, but that the practical functioning of existing arrangements should be enhanced and that closer co-operation among the authorities (supervisors, central banks and ministries) is required. Essentially, this conclusion implies that the establishment of a European system of supervisors is deemed to be premature by policymakers.

4 **Some data**

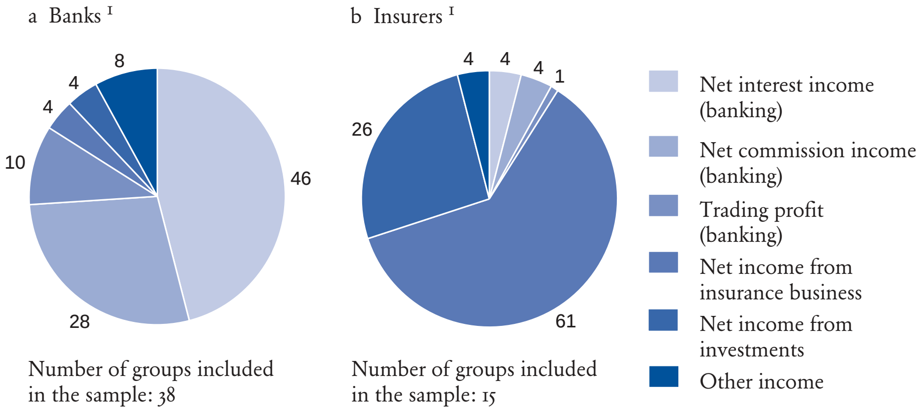
After a review of the lively debate about the proper adjustment of the institutional structure of supervision to the 'blurring of distinctions', it is time to try to nail down the precise extent of this phenomenon. This paper uses a straightforward and innovative approach, based on a breakdown of the revenues of the 50 largest financial groups worldwide in the year 2000 as published in their annual reports. We concentrate on the largest financial institutions, since their activities have most influence on the stability of the financial system. Firstly, the total revenues of the largest financial groups are divided into the type of activity to measure the *cross-sector* blurring of distinctions, i.e. between different types of financial intermediaries. Secondly, the total revenues are divided into the country in which the revenues are earned to measure the *international* blurring of distinctions, i.e. between financial intermediaries of different nationalities. Revenues are in nearly all cases measured by operating income, which can be regarded as net revenues (for example net interest income, defined as interest income minus interest expenses, is part of the operating income of banks).[8] Since not all large financial groups give a geographical breakdown of their revenues in their annual report, we slightly enlarged our sample to the 53 largest financial groups. These groups were selected on the basis of their market capitalisation as reported by the Financial Times. Table 1 gives an overview of the groups included in our sample, and qualifies each group as a bank or an insurance company on the basis of codes defined by the Financial Times.

4.1 *Cross-sector blurring?*

Figures 1a and 1b show the distribution of the operating income of banks and insurers respectively among the following categories: net interest income, net commission and fee income, trading profit, net insurance business income, net income from investments and other income. Within this context, net interest income can be asso-

Figure 1 Sectoral distribution of revenues of the largest financial groups worldwide in 2000

Percentage



Number of groups included in the sample: 38

Number of groups included in the sample: 15

1 The average distribution of operating income of the banks (insurance companies) is determined as follows: First, the amounts taken from the annual reports were converted to a common currency (euro; by means of the average euro exchange rates). These amounts were then added for each income category over the banks (insurance companies) included in the sample. Finally, percentages of total operating income were taken for each income category.

ciated with traditional banking activities, net commission and fee income plus trading profit is related to securities business (or, in other words, 'investment banking'), whereas net insurance income speaks for itself. In this paper, we use a broad definition of banking, which encompasses both traditional banking and investment banking activities ('universal banking' concept). Net income from investments can be earned with all kinds of financial as well as non-financial activities. However, this type of income will usually stem from minority stakes in other firms, which do not really form part of the financial group concerned. Finally, 'other income' refers for example to rents, sales results from movable and immovable property etc. Thus, when analysing the cross-sector blurring of distinctions it appears reasonable leave the categories investment income as well as 'other income' aside.

It is clear from figures 1a and 1b that both banks and insurance companies in our sample focus on their core business. The banks in our sample earn on average only 4% of their operating income with insurance activities, whereas insurance companies earn 9% of their operating income with banking activities (traditional banking plus investment banking activities). When looking at individual banks, it follows that a large majority of them (25 out of 38 largest banks) have no insurance income at all, whereas a few institutions earn more than 10% of their operating income with insur-

Table 1 Financial groups included in the sample

Sorted by market capitalisation

	Group [1]	Home country	Market capitalisation [2]	Sector [3]
1	Citigroup	us	250143	B
2	American International Group	us	206084	I
3	Hsbc Holdings	uk	140693	B
4	Berkshire Hathaway	us	105238	I
5	JP Morgan Chase	us	103113	B
6	Wells Fargo	us	89251	B
7	Allianz	Germany	86530	I
8	Bank of America	us	82745	B
9	ing	Netherlands	77806	I
10	ubs	Switzerland	73673	B
11	Royal Bank of Scotland	uk	62865	B
12	Lloyds tsb	uk	60663	B
13	Munich re	Germany	60532	I
14	Axa	France	58236	I
15	Mizuho Holdings	Japan	58128	B
16	Credit Suisse	Switzerland	57719	B
17	Barclays	uk	53630	B
18	Deutsche Bank	Germany	51048	B
19	Aegon	Netherlands	50754	I
20	Zurich Financial Services	Switzerland	50194	I
21	bsch	Spain	48311	B
22	Bank of Tokyo-Mitsubishi	Japan	46986	B
23	bbv Argentaria	Spain	46774	B
24	Bank One	us	46395	B
25	Generali	Italy	46047	I
26	Fleetboston Financial	us	46022	B
27	Bank of New York	us	41466	B

Table 1 Financial groups included in the sample (continued)

Sorted by market capitalisation

	Group [1]	Home country	Market capitalisation [2]	Sector [3]
28	Fortis [4]	Belgium/Neth.	39368	I
29	bnp Paribas	France	38367	B
30	abn Amro	Netherlands	35370	B
31	Swiss Re	Switzerland	34557	I
32	Sumitomo Bank	Japan	32069	B
33	Prudential	uk	31842	I
34	Marsh & Mclennan	us	30457	I
35	First Union (n c)	us	30379	B
36	Fifth Third Bancorp	us	27912	B
37	Allstate	us	27558	I
38	Societe Generale	France	26802	B
39	Hang Seng Bank	Hong Kong	25985	B
40	Abbey National	uk	25925	B
41	Sakura Bank	Japan	25599	B
42	Unicredito Italiano	Italy	25538	B
43	Metlife	us	24699	I
44	National Australia Bank	Australia	24536	B
45	Mellon Financial	us	24398	B
46	us Bancorp	us	24347	B
47	Banca Intesa	Italy	23096	B
48	Dresdner Bank	Germany	22865	B
49	Nordea	Sweden	22391	B
50	San Paolo- imi	Italy	22303	B
51	Bayerische Hypo-Vereinsbank	Germany	22230	B
52	Commonwealth Bank of Australia	Australia	22007	B
53	Halifax Group	uk	21615	B

1 We left out cgnu (originally number 30), since the data of this company were difficult to find.
2 In million of usd, in the year 2000.
3 b = bank; and i = insurance company
Based on the following codes of the Financial Times: Code 810 = Banks. Code 833 (Insurance Brokers), 834 (Insurance -Non-Life), 836 (Insurance, Lloyds Funds), 837 (Re-insurance), 839 (Other Insurance) and 840 (Life Assurance) = insurance company.
4 Fortis is categorised as a bank by the Financial Times. However, we regard Fortis as an insurance company, since it earned more than half of its (operating) income with insurance activities in 2000.

ance activities (Citigroup, Credit Suisse and Sumitomo Bank). Nearly half of the insurance companies in our sample (7 out of 15) do not earn any banking income. Of all insurance companies considered, Berkshire Hathaway, ING Group and Fortis Group are most diversified, since their operating income stem for more than 20% from banking activities. Seen from these figures, the striking conclusion is that the cross-sector blurring of distinctions is actually very limited.

Do these results imply that authors, who emphasise financial integration across sectors without presenting clear empirical evidence (such as Walter, 2001), are completely wrong? This conclusion would be too blunt for several reasons. Firstly, we have only examined the blurring of demarcations between banks and insurance companies. The list of the largest firms as published by the Financial Times does not make a distinction between different types of banks, e.g. among deposit taking (traditional) banks and securities houses/investment banks. This may be due to the fact that these banking activities are strongly interwoven within institutions, particularly in Europe where the universal banking model has prevailed from old.[9] In fact, the banks in our sample earn a significant part of their revenues with investment activities (measured by net commission income and trading profit, 38%, see figure 1), whereas insurance companies are hardly involved in investment activities (5% of their revenues). Secondly, our general conclusion does not hold for all countries. A clear exception is the Netherlands: since ING Group and a part of Fortis Group – both insurance groups with substantial banking activities – have their head office in this country, the Dutch financial sector is characterised by significant cross-sector blurring of distinctions indeed.

Perhaps the most important complication of our analyses is that we can not be sure that financial groups are always able to make a correct distinction between banking and insurance products, because of the existence of hybrid products that embody banking, securities and insurance components. In the introduction we mentioned the example of a mortgage combined with a unit-linked life insurance policy, which is a common financial product in the Netherlands. It is unclear whether banks and insurance companies that sell this product, will correctly split up the revenues of this service into a banking, securities and insurance part. Thus, the blurring of distinctions on the level of financial products complicates a precise measurement of the blurring of distinctions on the level of financial institutions. It should be noted that we have no information on the accuracy of the administration of financial groups with respect to hybrid financial products, nor on the market share of these products in the financial sector of industrialised countries in general. Our figures could therefore underestimate the actual cross-sector blurring of distinctions.

4.2 *International blurring?*

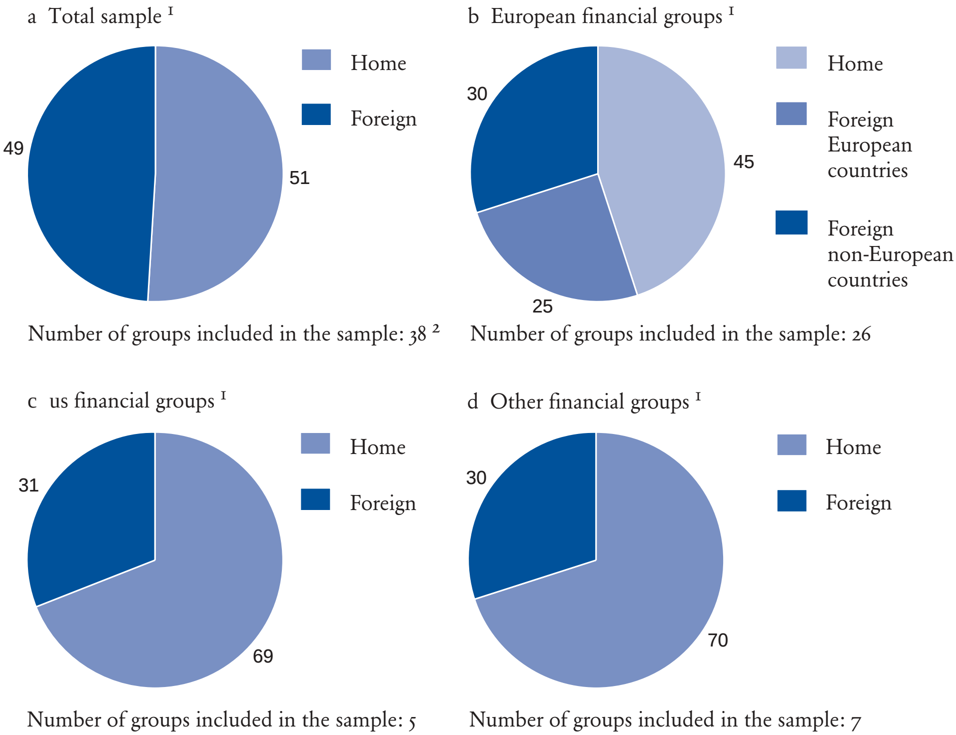
It is evident from figure 2a that the largest financial groups worldwide are significantly diversified internationally. It should be noted that insurance companies are significantly more internationally oriented than banks. Whereas the banks in our sample have a clear home bias (earning on average 61% of their revenues in their home country), insurance companies have a foreign bias (earning 65% of their revenues in foreign countries). Taken together, the largest financial groups appear to focus equally on home and foreign markets. Furthermore, it appears from the geographical breakdown presented in figures 2b, 2c and 2d that European financial groups are most strongly internationally diversified. This may be due to the internal market for financial services; when Europe is treated as one country, European financial groups are as much focussed on foreign markets as financial groups located in Japan, Hong Kong, Australia and the usa.

The advantage of the measure of the international blurring of distinctions used in this paper is that it encompasses all activities undertaken by financial groups, on-balance as well as off-balance. It should be noted, however, that the data used may (again) underestimate the actual phenomenon studied. Apparently, the geographical distribution of the income of financial groups is often based on income earned by their entities (subsidiaries and branches) located in different countries. This implies that revenues that stem from direct transactions from the head office with firms or private persons in a foreign country, may be reported as income earned in the home country. Because of the potential underestimation of international integration, it is useful to compare our results with other studies on the international blurring of distinctions:

- The ecb finds that the weighted average of the combined market share of foreign branches and subsidiaries amounted to 12.7% in terms of banking assets for the euro area countries at end-1997 (ecb, 1999).
- The Commission (European Commission, 2001) shows that in the period 1998-2000 the value of domestic mergers was 50.2 billion eur, compared to a value of 9.3 billion eur for international mergers.
- Finally, bis-data indicate that the international deposits and liabilities held by non-banks at European banks are substantial in the eu (21% and 13% of gdp in 1999 respectively), while these figures are much smaller for the usa and Japan (European Commission, 2001).

Figure 2 Geographical distribution of revenues of the largest financial groups worldwide in 2000

Percentage



1 The average distribution of operating income of the banks (insurance companies) is determined as follows: First, the amounts taken from the annual reports were converted to a common currency (euro; by means of the average euro exchange rates). These amounts were then added for home and foreign income over the groups included in the sample. Finally, percentages of total opeating income were taken for home and foreign income.

2 Not all 53 financial groups included in our sample reported a geographical distribution of their revenues in 2000.

In short, indicators used in other studies point to significantly less international diversification than our figures. This divergence can be explained by two basic arguments. Firstly, the above mentioned indicators cover the whole financial sector, instead of focussing on the largest financial institutions as we do. Since medium sized and small financial institutions are presumably less active in foreign countries, it is not surprising that we find more evidence of international blurring of distinctions. However, it appears appropriate to concentrate on the largest financial institutions from a financial stability viewpoint. A second factor was already mentioned, namely that data on the operating income of financial groups encompass the (net) revenues of all activities, on-balance as well as off-balance. Conversely, the indicators used in other studies only cover on-balance activities, since they are all derived from balance sheets. Off-balance sheet activities may be more internationally diversified than on-balance sheet activities.

There is one remark that applies to all the indicators of the blurring between financial institutions of different nationalities, namely that there are many other ways in which financial institutions can be exposed to shocks originating outside national boundaries. E.g. banks are particularly exposed to one another through the interbank market, in which the share of unsecured, cross-border transactions is high (ecb, 2000). Since trading among banks is typically characterised by thin margins, the revenues from these type of exposures is small relative to their size. Hence, this way of international interwoveness does not really show up in our indicator of international diversification. In addition, all financial institutions are affected by the integration of financial markets (e.g. bond markets, equity markets and money markets). In other words, we should bear in mind that there is a blurring of distinctions between national financial markets, besides the blurring of distinctions between financial intermediaries. By definition, financial market integration results in a larger sensitivity of the allocation and prices on national financial markets to shocks on corresponding foreign markets and vice versa. Thus, financial intermediaries with only national activities will still be affected by foreign influences through the channel of integrated financial markets.[10]

4.3 *A comparison*

A comparison of the data on the cross-sector blurring of distinctions (figures 1a and 1b) with those on international blurring of distinctions (figures 2a, 2b, 2c and 2d), leads to the conclusion that the second trend is clearly more important than the first. As was mentioned before, our data could underestimate the actual integration across financial sectors, but this also holds for the integration of financial intermediaries across borders. Naturally, the question rises at this stage why the trend of 'international blurring' is more advanced than the trend of 'cross-sector blurring'. A possible explanation of the limited cross-sector integration is the so-called 'diversification discount' that has been found in the literature on corporate finance; that is, diversification of activities destroys wealth on average. It follows from empirical research that us publicly traded firms which choose for focus instead of diversification show an improvement in the operating performance and stock returns (John and Ofek, 1995, and Comment and Jarrell, 1995). The researchers concerned attribute this result to the fact that economies of scope are apparently unimportant, in combination with an improved management of the remaining assets after divestiture. However, empirical research specifically directed at bank mergers show that mergers that focus both geography and activity are value-increasing, while those that diversify either geography or activities (or both) do not (DeLong, 1999, and Flannery, 1999). Thus, the arguments that render cross-sector diversification unprofitable, apparently apply to international diversification as well, at least in the banking sector. The question why financial institutions are more integrated across borders than across sectors therefore remains open to further research.

5 Concluding Remarks

Section 2 of this paper has described the ways and motives of the adjustment of financial supervision to the cross-sector blurring of distinctions on a national level. It follows from section 3 that the initiatives to deal with the blurring of distinctions on an international level meet much more difficulties, particularly on a worldwide level. Within Europe, some observers have called for a centralisation of European financial supervision, but the authorities concerned have concluded that the existing arrangements for prudential supervision within the eu are largely adequate. At the same time, the data presented in section 4 show that the international blurring of distinctions is clearly more important than the cross-sector blurring of distinctions. The result is a paradox: many initiatives to respond to cross-sector financial integration, which is relatively a less important trend, and few initiatives to respond to international blurring, which is relatively an advanced trend.

Underlying this paradox is the fact that creating an integrated supervisor on an international level requires countries to give up their sovereignty, whereas an adjustment of financial supervision to the cross-sector blurring of distinctions can be realised within national jurisdictions. Nevertheless, it makes sense to focus first on the issues that can be solved nationally, before considering the necessity of a more far-reaching international solution. As was highlighted in the Brouwer-reports, there exists extensive international co-ordination of supervision in the form of international groups and Memoranda of Understanding. At this stage, there is no clear evidence that this co-ordination model is inadequate, although improvements of the practical functioning of this model may be desirable. In addition, it should be noted that integrating financial supervision at the national level also facilitates the management of international financial crisis. When an international financial group would run into difficulties, it is in practice much easier to co-operate with one integrated supervisor per country, than with three sectoral supervisors per country. This argument also holds for countries that organise their supervision along the objectives of supervision, since the conduct of business supervisor will normally not be involved in the handling of financial crises. Incidentally, the number of parties involved in crisis management will be further reduced when the prudential supervisor is brought under the wing of the central bank, which will naturally be involved in the handling of financial crisis. In this way, it is sensible to reckon with the 'international blurring' besides the 'cross-sector blurring' when evaluating proposed adjustments of the organisation of financial supervision on a national level in the future.

References

Abrams, K., and M.W. Taylor (2000). Issues in the Unification of Financial Sector Supervision. imf Working Paper WP/00/213. International Monetary Fund. Washington.

Belaisch, A., L. Kodres, J. Levy, and A. Ubide (2001). Euro-Area Banking at the Crossroads. imf Working Paper WP/01/28. International Monetary Fund. Washington.

Bini Smaghi, L. (2000). Who Takes Care of Financial Stability in Europe? In: C.A. Goodhart (ed.), *Which Lender of Last Resort for Europe?* London: Central Banking Publications.

Briault, C. (1999). The Rationale for a Single National Financial Services Regulator. *Journal of International Financial Markets: Law and Regulation* 6: 249-256.

Carmichael, J. (2000). The Australian Model of Integrated Regulation. iosco Conference. Sydney.

Comment, R., and G.A. Jarrell (1995). Corporate Focus and Asset Returns. *Journal of Financial Economics* 37: 67-87.

Danthine, J.P., F. Giavazzi, X. Vives, and E.L. von Thadden (1999). The Future of European Banking. Monitoring European Integration (9). Centre for Economic Policy Research. London.

DeLong, G.L. (1999). Stockholder Gains from Focusing Versus Diversifying Bank Mergers. *Journal of Financial Economics* 59 (2).

Di Giorgio,G., and C. Di Noia (2001). Financial Regulation and Supervision in the Euro Area: A Four-Peak Proposal. The Wharton Financial Institutions Center. University of Pennsylvania.

Economic and Financial Committee (2000). Report on Financial Stability. Brussels.

Economic and Financial Committee (2001). Report on Financial Crisis Management. Brussels.

Eichengreen, B., M. Mussa, G. Dell'Ariccia, E. Detragiache, G.M. Milesi-Ferretti, and A. Tweedie (1998). Capital Account Liberalization; Theoretical and Practical Aspects. imf Occasional Paper 172. International Monetary Fund. Washington.

European Central Bank (1999). Banking in the euro area: structural features and trends. ecb Monthly Bulletin (April 1999). Frankfurt.

European Central Bank (2000). emu and Banking Supervision. ecb Monthly Bulletin (April 2000). Frankfurt.

European Commission (2001). The eu Economy 2001 Review. European Economy 73. Brussels.

Enria, A., and J. Vesala (2001). Externalities in Financial Supervision: the European Case. Paper presented at the conference 'Financial Supervision in Europe' organised by the Dutch Ministry of Finance on 20 June 2001 in the Hague.

European Central Bank (2001). The Role of Central Banks in Prudential Supervision. Frankfurt.

Flannery, M.J. (1999). Comment on Milbourn, Boot and Thakor. *Journal of Banking and Finance* 23: 215-220.

Goodhart, c. (2000). The organisational structure of banking supervision. fsi Occasional Papers No. 1. Financial Stability Institute, Bank for International Settlements. Basel.

Goodhart, C., Ph. Hartmann, D. Llewellyn, L. Rojás-Suàrez, and S. Weisbrod (1998). *Financial Regulation: Why, how and where now?* London and NewYork: Routledge, Bank of England.

Goodhart, C., and D. Schoenmaker (1995). Should the Functions of Monetary Policy and Banking Supervision be Seperated? *Oxford Economic Papers* 47: 539-560.

g10, Report on Consolidation in the Financial Sector, 2001 (available on the website of the BIS, IMF and oecd).

Healey, J. (2001). Financial Stability and the Central Bank: International Evidence. In: R.A. Brealey, A. Clark, C. Goodhart, J. Healey, G. Hoggarth, D.T. Llewellyn, C. Shu, P. Sinclair, F. Soussa, *Financial Stability and Central Banks: a Global Perspective*. London and New York: Routledge, Bank of England.

John, K., and E. Ofek (1995). Asset Sales and Increase in Focus. *Journal of Financial Economics* 37: 105-126.

Jonk, A., J. Kremers and D. Schoenmaker. A new Dutch Model. *The Financial Regulator* 6(3): 35-38.

Krueger, A. (2001). International Financial Architecture for 2002: A New Approach to Sovereign Debt Restructuring. Address given at the National Economists' Club Annual Members'Dinner, American Enterprise Institute. Washington dc.

Lannoo, K. (1999). Financial Supervision in emu. *Yearbook of International Financial and Economic Law* 1998: 146-171.

Padoa-Shioppa, T. (1999). emu and Banking Supervision. Lecture given at the Financial Markets Group of the London Scool of Economics.

Rogoff, K. (1999). International Institutions for Reducing Global Financial Instability. *Journal of Economic Perspectives* 13(4): 21-42.

Taylor, M. (1995). Twin Peaks: A Regulatory Structure for the New Century. Center for the Study of Financial Innovation.

Ministerie van Financiën (1999). Reform of Financial Supervision in the Netherlands. The Hague.

Wallis Committee Report (1997). Financial System Ingiving: Final Report.- Canberra: Australian Government Publishing Company.

Walter, I. (2001). Financial Integration Across Borders and Across Sectors: Implications for Regulatory Structures. Paper presented at the conference 'Financial Supervision in Europe' organised by the Dutch Ministry of Finance on 20 June 2001 in the Hague.

Notes

1 Prudential supervision is directed at the financial soundness of intermediaries. Conduct of business supervision promotes orderly and transparant financial markets and correct relations between financial market participants.
2 See the g10-study 'Report on Consolidation of the Financial Sector' (2001) for an elaborate overview of this trend.
3 After the most recent adjustment regarding the organisation of financial supervison in the Netherlands (see section 1), the Council of Financial Supervisors has continued to exist to discuss issues that are relevant for all three supervisory bodies.
4 The recommendations of the Wallis Committee formed the basis of the innovative organisation of financial supervision in Australia (Wallis Committee, 1997).
5 Analysts from the imf give a similar recommendation: they advise the creation of a centralised surveillance unit at the ecb to monitor the positions and market flows of the institutions that are considered of systemic importance, as well as tailored supervision of their risk management systems (Belaisch et al., 2001).
6 Enria and Vesala (2001) draw attention to the fact that eu supervisors may not have the right incentives to prevent and manage a crisis of an eu-wide financial group. Particularly, the home country authority is only focused on the domestic consequences, and not on the spill-over effects on host countries (negative externalities). Host country authorities might also be reluctant to take action, e.g. since they are unsure whether an emergency loan would benefit those at risk in their own jursidiction.
7 This phenomenon has positive effects as well. An important example is the us, where there exist national supervisors (the sec, and the occ for example) besides supervisors on a state level (in particular insurance supervision) and the regional Feds within the Fereral Reserve System.
8 Some financial groups give a geograpghical breakdown of their gross revenues. In this cases, gross revenues are used to calculate the international blurring of distinctions.
9 Our sample contains no (separate) pension funds, since pension funds typically do not issue shares (recall that the largest financial groups are selected on the basis of market capitalisation).
10 See Eichengreen et al. (1998) for an overview of the advantages and risks of financial market integration. With regard to the actual degree of the integration of financial markets, these authors conclude in appendix I that there exists clear evidence of capital market integration in the most recent decade, but also before World War i (1880-1912). On this basis, they regard the recent period of financial market integration not as unprecendented.

Earlier publications in this series as from January 2003

Vol. 1/Nr. 1 (2003)	Requirements for succesful currency regimes: The Dutch and Thai experiences *Robert-Paul Berben, Jan Marc Berk, Ekniti Nitihanprapas, Kanit Sangsuphan, Pisit Puapan and Piyaporn Sodsriwiboon*