EUROPEAN FINANCIAL CROSS-BORDER CONSOLIDATION:

AT THE CROSSROADS IN EUROPE? BY EXCEPTION, EVOLUTION OR REVOLUTION?

Jean-Paul Abraham & Peter Van Dijcke

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CIP

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EUROPEAN FINANCIAL CROSS-BORDER CONSOLIDATION:

At the crossroads in Europe? By exception, evolution or revolution?⁺⁾

by

Jean-Paul Abraham*) & Peter Van Dijcke**)

Abstract

In the context of the New Economics of Banking, the study analyses cross-border financial consolidation from the point of view of bank strategies. The main hypothesis of the work is that, in the present decade, the Pan-European landscape of the financial sector will be determined by what is happening in a limited number of banks, this number being rather arbitrarily fixed at 100. The basic issue to be clarified is not whether a second round of cross-border mergers and acquisitions will occur after the present pause; but how it will occur: according to an 'evolution' or a 'revolution' scenario. In the study, the sample comprises the 100 largest banking groups in Europe, selected on the basis of the Bankscope data. This sample is supposed to be composed of subgroups with similar characteristics, which can be discovered by statistical analysis, using clustering techniques. The clusters help identify peer groups.

⁺⁾ The present text is a full and updated (until 30th June 2002) version of the study prepared for the Ente Einaudi project '*Verso un sistema bancario e finanziario europeo?*' It is being published in the series of the *SUERF Studies* by courtesy of Ente Luigi Einaudi.

^{*)} Jean-Paul Abraham (*1930) is a Professor (em.) at the Universities of Namur and Leuven and also at the College of Europe (Bruges), Belgium. He is a former Executive Director of Paribas Bank Belgium and a former Adviser to Artesia Bank.

^{**)} Peter Van Dijcke (*1966) holds a degree in commercial engineering and a MBA of the KU Leuven. He has served as an economist at the Belgian Association of Savings Banks, the Belgian Banking Association, and the Federation of the Coordination Centers in Belgium. He is now Senior Economist at the Research Department of DEXIA Bank, under the directorship of Frank Lierman. Peter Van Dijcke is a laureate of the Marjolin Prize (2000).

Particularly interesting for the study are the cases where banks want to overcome the constraints of a domestic market, which, in the perspective of European integration, no longer suffices to satisfy their ambitions and the competition rules of the national and European authorities. After a general discussion of motives, driving forces and discouraging factors in cross-border financial consolidation, the study concentrates on four topics, mostly discussed within the same conceptual and statistical framework: (i) a factual analysis of the M&A activity of the late Nineties and the first years of the present decade, where cross-border deals were overshadowed by domestic transactions; (ii) a presentation, via self-organising maps, of the European banking panorama in the year 2000 and of the panorama changes in the period 1995–2000. The clusters in this panorama feature at the same time national and comparative advantage aspects. In the clusters of high efficiency British and Nordic Banks predominate. In the clusters of higher vulnerability German and some Italian banks are prominent; (iii) a discussion of the track record of 29 European banking groups, divided into three groups according to their M&A activity (domestic M&A, cross-border M&A, steady state without much M&A). On the average, the performance of the domestic M&A reference group is stronger than the results of the other groups; (iv) a more detailed discussion of four cases, all of them belonging to the crossborder M&A reference group: ABN-AMRO, ING and FORTIS in the Benelux area, NORDEA in Scandinavia. The origin of the consolidation differentiates the three Benelux cases from the Scandinavian one: necessity to overcome the limitations of the national domestic market in a perspective of growth on the one hand, new perspectives in the aftermath of the Scandinavian banking crisis of the early Nineties on the other. On the basis of the preceding analysis, the answer to the basic issue favours the 'evolution' scenario, where the cross-border M&A activity remains a gradual enlargement of and a complement to the domestic market activity, but with an increasing weight of cross-border deals, when large banks become more sensitive to the limitations of their own national domestic market. In this way Europe would gradually and partly become the enlarged home market of the national champions and their challengers.

Foreword

About the study

This study is a contribution to the project "Verso un sistema bancario e finanziario europeo?", initiated in 1999 by the Ente per gli studi monetari, bancari e finanziari Luigi Einaudi in Rome, successively chaired by Prof. Tancredi Bianchi (Università Luigi Bocconi, Milano) and by Prof. Ignazio Musu (Università di Venezia), and coordinated by Prof. Marco Onado (Università Luigi Bocconi, Milano). It is a part of the subproject "Modelli organizzativi e ruolo delle grandi banche", directed by Prof. Francesco Cesarini (Università Cattolica, Milano).

A compact version of the study was published in May 2002, as a special issue in the Quaderni di Ricerche n°25 of the Ente Luigi Einaudi, and was presented at the SUERF Seminar "Competition and Regulation in European Banking", held at the Associazione bancaria italiana (Altieri Palace) in Rome, on 17th May 2002. Its conclusions were discussed at a seminar meeting of the Ente Einaudi at the Banca d'Italia in Rome on 10th July 2002 and also at the 2002 Annual Meeting of the European Association of University Teachers in Banking and Finance in Siena (September 2002).

The authors hope that this SUERF study will have a longer life than that of a mere occasional paper, because it proposes an approach, a methodology and a technique, which can be applied to other cases. Most of all, they hope for a somewhat longer life, because the study shows what can be done (and what cannot be done), with the help from academia, by the Research & Strategy Department of a financial institution. At the very moment when many banks are downsizing or even suppressing their economic publications and even their own research department in favour of external consultants, it shows that at least preliminary strategy research can be homemade at favourable cost.

The authors beg to thank Francesco Cesarini, Frank Lierman, David Llewellyn, Marco Onado and other participants in the project for their helpful comments and corrections, and for their continuous support. Special gratitude goes to the Ente Luigi Einaudi – particularly its Director Flora Pierelli – and to the SUERF Secretariat – particularly the Executive Secretary Beatrix Krones – for the constructive and stimulating environment, in which the research has been conducted, completed and published. Finally, the authors

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<u>Corresponding author:</u>

Peter Van Dijcke, c/o Dexia Bank, Research Department (GI 12/15) Pachecolaan 44, B-1000, Brussels, Belgium e-mail: peter.vandijcke@dexia.be

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1. Cross-border mergers and acquisitions: Motives, driving forces and discouraging factors

1.1 Introducing the study

As is widely known, the financial sector is undergoing fundamental structural change, particularly in Europe. This change is also transforming the Economics of Banking, which was traditionally based on the analysis of the intermediation process. In the New Economics of Banking, autonomous growth of the banking firm through mergers and acquisitions is paid much attention to.

A vast literature has developed. It comprises, on the one hand, *event studies*, which focus on the M&A experience of specific companies or on specific

M&A transactions, and, on the other hand, analytical studies based on the statistical and econometric treatment of extensive databases of M&A cases. At the beginning, the latter have been elaborated mostly on

"...If we knew what it was we were doing, it would not be called research, would it?..."

(A. Einstein quote with 1,470 www-hits by Google-search)

the basis of US data and they have concentrated on domestic mergers. Now, they increasingly cover cases in various countries of Europe and also include cross-border transactions, with monetary and financial integration acting as a catalyst. Recently (2000–2001), the existing literature and the factual developments have been extensively reviewed, first by the Allan Berger Group at the Federal Reserve and the Wharton Financial Institutions Center in Philadelphia and afterwards in the monumental *Report on Consolidation in the Financial Sector* (January 2001), which covers the experience of 13 countries and has been compiled by a Working Party of the Group of Ten (Central Banks) under the chairmanship of R.W. Ferguson (hence, the current reference to the *Ferguson Report*). A more limited survey, focusing on bank efficiency aspects, is given in the SUERF Colloquium book *Adapting to Financial Globalisation* (Van Dijcke, 2000).

The purpose of the present study is not to provide a 'survey of these surveys', but to take their facts, figures and analytical findings, as well as those of other

sources, as a starting point for a complement from the point of view of bank strategies. From our experience in gathering materials and preparing preliminary studies for strategic plans and policies in a financial institution, we know that, for such a purpose, event studies are often too much concentrated on a specific company or on a specific event. At the other end of the spectrum, the often mixed results of large econometric research are too ambiguous to steer future action in the institution. We have also observed that top executives in financial institutions often fix their objectives and define their policies by comparing their own internal situation with the size and Structure, Conduct and, most of all, Performance (i.e. the SCP approach in banking strategy) of their competitors or, in a more neutral way, of the members of the peer group to which they belong or wish to belong. The headlines of a strategic plan are full of expressions such as: "we want to be among the top 5 of our peer group by the end of the year,...we want to be one of the leading groups in Europe in the field of ..."

In this context, we believe – and this is the main hypothesis of our study – that in the present decade, the Pan-European landscape of the financial sector, not the landscape within a nation or a region, will be determined by what is happening or will happen in a limited number of banks. We have, rather arbitrarily, fixed that number at 100. This sample comprises the 100 largest banks in Europe and is supposed to be composed of subgroups with similar characteristics, which can be discovered, not only by intuition but also by statistical analysis, for which we use the clustering technique. The clusters help identify peer groups. We are particularly interested in the cases where banks, as the main Benelux banks and the Scandinavian banks in the Nineties. want to overcome the constraints of a domestic market, which, in the perspective of the European market, no longer suffices to satisfy their ambitions and/or the competition rules of the national and European authorities. In those cases, the peer group becomes an international group engaged in cross-border autonomous growth, which is usually supported by cross-border mergers and acquisitions. In the same conceptual and statistical framework we will, on the basis of a SCP classification, explore the track record of the main banks of this kind and complement this analysis with focused case studies for three Benelux entities (ABN-AMRO, ING and FORTIS) and a Scandinavian one (NORDEA). Hopefully, this will allow us to draw conclusions about the main trends and factors and give some hints and opinions about future developments.

The presentation just given explains the structure of the study. In the remainder of this chapter we insert the analysis of cross-border M&A activity in the New Economics of Banking. We then discuss the motives, driving forces and discouraging factors of M&A activity, according to a classification derived from the Ferguson Report and, finally, we formulate the basic issue we have to clarify in the study: will, after the present pause, the second round of financial consolidation in Europe be an evolution in Europe or a European revolution?

The following chapters are mainly empirical. They present:

- a factual analysis of the M&A wave of the late Nineties, followed by the inflexion in the first years of the present decade (chapter 2);
- a presentation, via self-organising maps, of a European banking panorama in 2000 and of panorama changes in the period 1995–2000 (chapter 3);
- in the same statistical framework, a discussion of the track record of European banking groups, whether engaged or not in M&A activity (chapter 4) and of selected cases in the Benelux area and in Scandinavia (chapter 5).

The concluding chapter presents a round-up and a look to the future, in order to express an opinion about the basic issue formulated at the end of chapter 1.

1.2 Cross-border M&A in the new economics of banking

The New Economics of Banking (NEB in the following text) very strongly emphasises the pressures exerted on banks by the decline of traditional intermediation and the shift from a mainly bank-oriented towards a more market-oriented financial sector.

In a remarkable essay, Llewellyn assesses this process as follows: "In various ways...the related pressures of competition, deregulation, financial innovation and technology have eroded some of the comparative advantages of banks in their traditional financial intermediation business..." (Llewellyn, 1999, p. 20).

In the NEB much attention is paid to autonomous growth, supported by M&A activity, as a strategic response to these pressures. In most cases, these pressures are a combination of country-specific and global components, the latter presumably becoming more decisive (ibidem, p. 25). Globalisation brings to the fore the *international and the cross-industry* aspects of the process.

Banks react to these pressures by adapting their strategy in various ways. In previous work (Abraham and Lierman, 1990 and Abraham, 1998) the basic distinction is made between two types of strategy: the *accommodating type* aims at adapting the micro-world of the banking firm to often unforeseen developments in the macro-world of the economy and/or in the meso-world of financial markets. The standard examples of such a strategy are cost cutting and internal rationalisation of the firm, to overcome a sudden drop in profitability.

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Figure 1.1: The two dominant trends in banking strategy:

Designing a strategy matrix

Source: D.T. Llewellyn, 'The New Economics of Banking', SUERF Studies No. 5, 1999.

The *autonomous restructuring* (or growth) type is explicitly oriented towards maximising the comparative advantages of the bank and towards minimising its comparative disadvantages in financial markets. It focuses on organic growth and/or external growth by mergers and acquisitions or co-operative arrangements and alliances. The extreme form of organic growth is a standalone policy, the extreme of external growth results in the emergence of megabanks or conglomerates through worldwide mergers or acquisitions. We still cling to that distinction but in the view of developments in the last decade, we add two qualifications:

• Growing interdependence, and also some kind of rational herding, often cause strategies to mix, with variable weights, accommodating and

autonomous ingredients (let's look at what the peer group does and let's work to be among the best, cf. supra). This leads to increased attention on so-called relative X- cost- and profit inefficiencies and it stimulates partly accommodating, partly autonomous catch-up measures by the weaker members of the peer group.

• Accommodating and autonomous strategies may alternate over time. As the 2000-2001 experience shows, unexpected events such as the September 11 catastrophe, occurring in a context of US and worldwide recession, can force a bank to temporarily interrupt a policy of autonomous growth, to face the immediate need of cost cutting in the wake of a sudden drop in revenue. M&A activity appears to be very sensitive to such difficulties. Even in the absence of important unexpected accidents, shifts from autonomous growth to accommodating policies frequently occur when worldwide expanding and fast-growing conglomerates need a period of internal rationalisation, streamlining and cost cutting: in other words a time for digestion, a pause in the process of growth. This is even more the case when the governing objective is, as in many companies listed on the international stock markets, the increase of shareholders' value, controlled in public opinion by the regulatory quarterly publication of results. This procedure introduces the constraint of almost 'instant' profitability and even leads to the practice of early profit warnings.

In the field of M&A activity, as in many other fields, the NEB helps understand the interplay of motives, driving forces and discouraging factors, which influence this activity, and reduces this to its basic elements.

For example, in its 2000 report on mergers and acquisitions, the ECB singles out size, economies of scope and risk and revenue diversification as the main motives for *cross-border M&A* (see table 1.1 in section 1.3).

A standard diagram of the NEB confronts and combines strategies focused on size and those oriented towards diversification (see figure 1.1 reproduced from Llewellyn, 1999, p. 72).

This leads to a discussion of the key objective of each of these strategies and the reservations to be made on their effects. In standard NEB analysis, a strategy of size mainly aims at realising economies of scale. Until recently, most empirical studies concluded that economies of scale only materialise in M&A transactions involving small banks, because the cost function of the banking firm (and also of the banking industry) is U-shaped and engenders diseconomies when size becomes very large. This conclusion is now questioned, particularly in the EMU, where monetary and financial integration is changing the dimension of the 'relevant' market and raises the minimal size to be 'somebody' in that market.

Diversification aims at economies of scope and at spreading risk and revenue. The standard NEB approach focuses on functional diversification (cross-industry), as in bancassurance projects. However, nearly the same arguments can be applied to geographical diversification and/or the cumulation of geographical and functional criteria, as realised in some large international conglomerates. Reservations in this field question the existence and the importance of economies of scope and highlight the difficulties of controlling and developing diversified businesses in different countries and regions without incurring increasing costs. Conflicts arising from different business and national cultures, traditions and working practices may enhance these problems (Llewellyn, p. 75). The diagram suggests that in many cases a balance has to be struck between size and diversification, to avoid the implementation of one strategy from creating diseconomies and problems in the other.

For our study, this type of NEB discussion contributes to a clarification of basic issues by offering a general framework for economic thinking and research. However, it obviously remains too general and too sketchy to provide more than general guidelines for our work. The more detailed discussion of motives and factors in the next section may throw some additional light on the determinants and the present effects of the M&A.

Above all, we expect a more in-depth insight from our quantitative analysis and our case studies in the next chapters.

1.3 Motives, driving forces and discouraging factors

Most analytical studies focus on the *effects* of mergers and concentrate on the efficiency issue, by searching for economies of scale or scope and for reduction of relative X- cost- and profit inefficiencies.

Studying bank strategies, not only in their effects, but also in their initiation and their implementation, we prefer a broader approach, which, besides effects, also includes motivation, driving forces and discouraging factors in mergers and acquisitions. We mention other forms of co-operation, such as co-operative arrangements and alliances, only briefly, because so many of them are temporary and/or disappear rather soon or end up in a merger or an acquisition.

Table 1.1, extracted from a recent ECB report, compares the main motives of cross-border M&A with those of domestic deals. We extend this presentation by putting what we have found in the literature and in current information in a synoptic table, ordering the elements in a classification, inspired by the Ferguson Report and the Berger studies (table 1.2).

Table 1.1 Main motives and possible rationalisations for the four types of M&A

	Within one country	In different countries
Between credit institutions	Domestic bank M&A Economies of scale linked to costs are the main motive. Cutting distribution networks and administrative functions (rationalisation), including information technology and risk management areas.	International bank M&A Size, i.e. the need to be big enough in the market, is the main motive. Matching the size of clients and following up clients. Possible rationalisation within administrative functions.
Across different sectors	Domestic consolidation Economies of scope through cross-selling are the motive. Risk and revenue diversification. Optimum usage of complementary distribution networks. Possible rationalisations within administrative functions may lead to economies of scale linked to costs.	International consolidation Economies of scope through cross-selling together with size are the two main motives. Risk and revenue diversification. The M&A offer few rationalisations because institutions are in different countries and subject to different regulations and practices.

Source: ECB, Mergers and acquisitions involving the EU banking industry, December 2000, p. 20.

On this basis a few general comments can be made:

• Table 1.1 shows a striking difference between motives in domestic and cross-border M&A, at least in banking stricto sensu, less so in consolidation cross-industry. In domestic transactions, cost reductions by economies of scale and rationalisation are the prominent motives; in crossborder activity the size motive prevails, not explicitly for realising economies of scale but for increasing market shares and market power outside the home market, i.e. to be big enough in the market.

Table 1.2: Motives, driving forces and discouraging factors* in financial cross-border consolidation in Europe

FACTORS* Final objective, but contested and controversial effects.
Market inefficiencies Unfavourable environmental Tactors in country of estimation Differences in IT systems High investment and integration costs Market inefficiencies Recent empirical analysis suggests that large economies of scale still exist in Europe, but remain unexploited. Contrary to previous findings, these opportunities also exist in large banks, which favours M&A activity. In cross-border activity, they should not be considered important in retail business. Brighter prospects in wholesale commercial banking, capital markets activity, derivatives and asset management. In general, slower to materialise in large and complex institutions such as international conglomerates.
 Market inefficiencies Differences in business culture of various business lines Differences in Differences in Experiment and integration costs Market inefficiencies In cross-border activity, brighter prospects in wholesale commercial banking of various business lines and capital markets activities. Also in retail business by concentration of support services and spread of knowledge and experience.
Regulatory and cultural The conomies (around 20 %) and relatively similar among commercial banks of different countries. Usually not an initial motive for cross-border consolidation but results afterwards from international competition (the benchmark or best practice syndrome resulting in setting ambitious ratio targets). Becomes dominant motive when strategy is defined by comparison with best practitioners in the international peer group.
Legal and regulatory constraints of size motive is essential in cross-border consolidation, which also enlarges and other unfavourable environment factors in country of destination of destination of destination of market environments and regulatory restraints. • Further European integration (euro, Lamfalussy report) will reduce legal and regulatory restraints.

MOTIVES *	DRIVING FORCES *	DISCOURAGING FACTORS*	SPECIFIC ASPECTS OF CROSS-BORDER IN EUROPE
✓ through product and geographical diversification	Globalisation: • expansion of international capital markets • introduction of the euro • institutionalisation of savings	Legal and regulatory constraints	 Growing importance as banks develop towards financial services conglomerates cross-industry, particularly in bancassurance when concentrated on life insurance and asset management. Risk reduction due to a combination of geographical and product diversification. Officis better service opportunities for client firms, operating in many countries.
☑ through X-profit efficiency	Globalisation: • expansion of international capital markets • introduction of euro • institutionalisation of savings	Clash of international and business cultures	 Many opportunities, because profit X-inefficiencies are larger (on average 40%) and differ more from one country to another. Requires much managerial skill and constancy in action to materialise, particularly in international conglomerates. Hence, in cross-border M&A activity a comparative advantage for large, more profitable banks based in countries with a highly developed banking market.
2. MARKET POWER	Increased competition for market Defensive moves from share competitors and/or auth	Defensive moves from competitors and/or authorities	Essential motive for would-be global players at the world or European level. Struggle for international market shares intensifies when domestic market share of the bank has stabilised and/or when authorities fear too much concentration and market power of national champions in the home market.
3. MANAGERIAL	Survival of the fittest Empire building Personal hubris	Defensive moves from competitors and/or authorities	International ambitions of European top managers are increasing. Concentration on large customers may raise concern about marginalisation of small businesses and financially weaker private customers.
4. GOVERNMENT	Deregulation Privatisations Political, economic and social pressures and lobbying	Institutional rigidities	Still some scope for favouring cross-border consolidation by further deregulations and privatisations in and outside Europe. Defensive measures of national and regional authorities will remain part of the picture; especially in large countries: ✓ protection of national or regional champions; ✓ government ownership; ✓ refusal of cross-border M&A. • But sharper edge of competition policy and growing concern of governments and European authorities for domination of "national champion" in their home market (cf. supra): big banks/(relatively) small countries syndrome even in large countries, which induces banks to expand abroad.

* Classification based on FERGUSON report and various BERGER articles.

This illustrates a current practice in banking: cost cutting begins at home, let's go abroad to search for future revenue enhancement, when we have reached a limit in the home market, because this market is becoming too small or not sufficiently profitable for us, or because the government opposes further concentration.

In this respect, an approach, which exclusively links a size-oriented strategy with economies of scale, is too narrow, although recent literature (e.g. Vander Vennet and al. at the University of Ghent, recently in H.P. Huizinga, J.H.M. Nelissen and R Vander Vennet, June 2001) emphasise that, at least in Europe, economies of scale are not limited to mergers involving small banks, but are also possible in M&A of big banks (which is generally the case in cross-border transactions).

In these cases, attention is primarily paid to economies of scale in wholesale commercial banking, capital market activities, derivatives and asset management, which may partly explain the penetration of American merchant banks in Europe.

In general, however, the accent is put on global market power. In this respect, ambitions of European big bank managers are increasing, especially when, in designing their strategies, they more and more refer to an international peer group (cf. supra).

- Studying M&A activity as a comprehensive process, and not only via its effects on efficiency, highlights the importance of so-called environmental factors in this process. We share the opinion of Hasan, I., Lozano-Vivas, A. and Pastor, J.T. in their 2001 article that 'most cross-country comparisons of bank performance to date, have ignored the existence of unique economic, regulatory, supervisory and demographic (i.e. environmental) conditions in each country in evaluating bank performance (p.159). Unfavourable environmental factors in the country of destination discourage foreigners to penetrate and limit M&A cross-border activity. They increase the home field advantage and protect domestic banks, particularly when these banks are technically efficient. As shown in the synoptic table 1.2, legal and regulatory impediments, defensive moves from authorities and other institutional and cultural rigidities rank high in the list of discouraging factors for cross-border M&A activity.
- In this context, the experience in Europe that cross-border M&A have been relatively less numerous and active, and that they successfully occurred rather by exception, can be explained by the very fact that the impact of the positive driving forces seems to have been rather diffuse, while the influence of institutional impediments and cultural constraints has been overwhelming.

In the interviews for the Ferguson Report, 62% of the responses considered technology, IT and telecommunications as a very important positive factor favouring domestic bank M&A, while the impact of the main discouraging factors, cultural constraints and legal and regulatory impediments, was rather diffuse. The opposite held true in cross-border transactions, with dominant scores for cultural constraints (more than 65%) and legal and regulatory impediments (about 60%).

The present pause in cross-border activity and the way back to accommodating strategies of cost cutting cannot be fully explained within the conceptual framework of this section. It has to be linked with cyclical factors, such as the US and worldwide 2001 recession, and accidents, such as the September 11 events. Nevertheless, it also reflects the fact that, in several cross-border experiments, a large gap had developed between initial motives and plans and their effects through time. This does not necessarily mean that those motives and plans were wrong or have become outdated. It implies that, first, streamlining and cost cutting must fill the gap.

1.4 The basic issue

As we link the present pause with cyclical factors and accidents, the M&A wave of the late Nineties has not, in our opinion, represented the final stage of bank consolidation in Europe. At any rate, a second round will occur.

The basic issue is *how* it will occur. Will it be by an

- "...The rationale for M&A: Too many large national banks, no big European bank...' (J. de Larosière & E. Barthalon; 22nd SUERF Colloquium, April 2000)
- "...Partly thanks to residual protectionism, Europe's banking and insurance have yet to exploit borderless finance. Only when that happens will the revolution truly begin..." (The Economist, April 2001)

evolution, as in the Nineties when the cases of significant cross-border M&A remained limited in number, if not in size, and when going 'crossborder' in M&A activity was still exceptional? In that case, the financial landscape of Europe will be altered only gradually and partially. The mosaic of the financial sector in Europe will then essentially remain composed of national pieces, often dominated by the national champion and his national challengers.

Or will the *true revolution* really begin, maybe through a series of big bangs, which involve, directly or indirectly, most of the present 100 top European banks and drastically change the European financial landscape? In that case, the scene will presumably be dominated by the competition in size and market power in an international group of peers, which will also transform the national settings.

In short, after the present pause, will the second round of financial consolidation in Europe be an evolution in Europe or a European revolution?

2. M&A wave of the late 90s and the millennium turn

2.1 Domestic M&A versus cross-border M&A: The picture of the late 90s

The overall picture of the Nineties is well known and has been recently confirmed and extensively documented by research and official publications (IMF¹, Group of Ten², ECB³ and BIS⁴). The salient features for Europe are (see also figures 2.1 and 2.2):

- An intensified M&A activity in Europe between 1990 and 1999 with 2,736 transactions registered by the Group of Ten for a total value of 572 bn. USD. The last three years (1997–1999) represented 68% of total value and 33% of the number of transactions.
- Cross-border deals were largely overshadowed by *domestic transactions*, both in the number of transactions and in total value. Domestic deals accounted for more than two-thirds of the total value and the number of transactions. This evolution has clearly led to an increased financial concentration within individual European countries. Domestic consolidation was (and still is) based on the conviction that a strong home market is necessary before moving abroad and on fear of the control of banks by foreigners (Boot, 1999). It also shows that the single market programme has initially triggered a strong domestic consolidation process.
- Predominance (81%) of transactions within the same industry, both in cross-border and in domestic deals.
 Predominance (62%) of bank-bank transactions in total domestic activity (within industry and cross-industry) and of

"Over the observed period [1995–1999], there is little evidence of a trend towards cross-border M&A within the European Economic Area, EU or euro area. It seems that in many countries banking groups have first sought to consolidate their position within national borders before making a strategic move to respond to further to the creation of the single market and the introduction of the single currency."

(ECB, December 2000)

¹ "Euro-area banking at the crossroads', IMF, March 2001.

² "Report on consolidation in the financial sector", Group of Ten, January 2001.

 $^{^{\}rm 3}$ "Mergers and acquisitions involving the EU banking industry – Facts and implications", ECB, December 2000.

⁴ "The coming transformation of continental European banking", BIS, June 1998.

insurance-insurance (40%) deals in total cross-border activity (within industry and cross-industry). Noteworthy is that cross-border M&A were more often carried out outside Europe than within. These transactions have been considered as mainly driven by a search for higher margins.

- In *cross-border transactions cross-industry* (international consolidation), predominance of transactions involving banks acquiring non-bank institutions (insurance companies, securities houses and others), at least in the number of deals: the number of cross-border deals bank - non-bank account for 42 % of the total number of transactions, but only for 18% of the total value. Insurance companies with 41% of total value record the most important value in cross-border/cross-industry transactions, with only 18% of the number of transactions.
- Striking differences among the European countries as far as the relative importance of *cross-border* transactions is concerned: high cross-border activity in the Netherlands (65% of total value of transactions, of which more than 2/3 are related to insurance transactions), Germany (50% of which half is related to insurance transactions), Belgium (40%) and Scandinavia (47% for Sweden).

Also to be noted is the low value of *domestic transactions* (within industry) in the already highly consolidated countries as the Netherlands, Belgium and Sweden. More surprising is the relative low value of domestic deals in Germany and the absence of cross-border deals in Spain until 1999. Both countries have recently been quite active in closing this gap (Germany through its insurance 'coup' on banking and Spain through its banking expansion in Latin America).

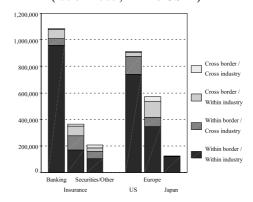


Figure 2.1: Total value of M&A deals by sector and by country $(1990 - 1999, in Mio USD*)^5$

⁵ All figures in this report are in US format.

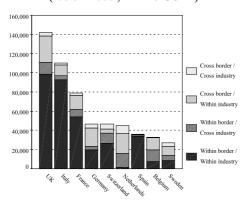
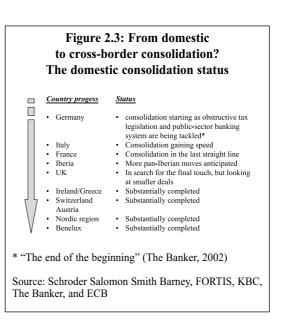


Figure 2.2: Value of European M&A deals by country (1990 - 1999, in Mio USD*)

Source: Group of Ten

- * Data based on 13 reference countries (US, Canada, Japan, Australia, UK, Italy, France, Germany, Switzerland, Netherlands, Spain, Belgium, and Sweden). Total value is based on the acquiring firm.
- Domestic M&A took, in the majority of cases, the form of a merger (although large differences were recorded among European countries), while cross-border deals, within industry or cross-industry, were mainly completed through acquisitions.
- 'Friendly' M&A were far more common than hostile takeovers.

Besides the major impact of EMU, euro,...also several country-specific elements influenced this M&A wave in the 90s.: (i) the early 90s consolidation wave in smaller countries such as the Netherlands, (ii) the banking crisis in the early 90s' in Scandinavia, (iii) the round privatisation of demutualisation in various countries, creating potential targets (Spain, Italy, UK, Ireland, Scandinavia, France, Austria,...), (iv) the growing need of second



home markets and the consequent expansion into emerging markets: Central and Eastern Europe⁶, Latin America, Southeast Asia, (v) the level of public-sector and co-operative banking (Germany, Italy, France).

Following the observation that banks first tend to consolidate domestically, three groups of countries can be identified with regard to the status of domestic consolidation (figure 2.3): (1) a large group of smaller countries, where domestic consolidation has been substantially completed (Belgium, The Netherlands, Scandinavia, Switzerland, Austria, Ireland and Greece), (2) a small group of large countries where domestic consolidation has gained speed in recent years, but is not assumed to be finished (Iberia, UK and France) and finally (3) Germany and Italy, both with a low concentration ratio. However, consolidation in Italy has been gaining speed and has almost reached a concentration ratio that is similar to that in France, while in Germany important remaining domestic consolidation barriers are under review.

In an attempt to avoid some discouraging factors of cross-border M&A, cross-border joint ventures and strategic alliances are often considered as a valid alternative. But research and data on joint ventures and strategic alliances in banking are scarce. This also holds for research on the efficiency impact of these alliances, the comparison

Table 2.1: Number of cross-border M&A versus cross-border joint ventures & strategic alliances* (1990–1999)

	Merger & Acquisitions	Joint ventures & strategic alliances
Europe	778	487
North America	371	420
Pacific Rim	94	301
All	1,243	1,208
7111	1,273	1,200

Source: Group of Ten

* M&A data based on the acquiring firm

with M&A activity and the likelihood as to whether these alliances will possibly lead to cross-border merger operations.

According to the Group of Ten report, 823 joint ventures and strategic alliances⁷ were recorded between 1990 and 1999 in Europe⁸. In contrast with

⁶ See text box at the end of the chapter.

⁷ In the report of The Group of Ten defined as agreements where two or more entities combined resources to form a new, mutually advantageous business arrangement to achieve predetermined objectives.

⁸ Europe includes Germany, France, Italy, Spain, Belgium, Netherlands, UK, Sweden and Switzerland.

the M&A activity, cross-border transactions for joint ventures and strategic alliances were, in the aggregate, more common than domestic joint ventures and strategic alliances (487 cross-border vs 336 within border). But this is no surprise as these alliances are often used when M&A may be difficult, complex and involving several countries. Looking at all the cross-border deals, crossborder joint ventures and strategic alliances almost match the number of crossborder M&A (table 2.1). However, the match was not equal in the three regions considered. Both in the Pacific Rim and in North America, cross-border joint ventures and strategic alliances were more common than cross-border M&A. In Europe, the number of cross-border M&A outnumbered the joint ventures and strategic alliance deals.

A second blind spot in the research literature is the cross-border shareholding of the financial landscape. Again, data are often incomplete, complex (cf. direct and indirect shareholding) and, more important, quite volatile. Also the ultimate goal of the shareholding stake is often very unclear and may vary between an investment opportunity, a strategic option, a preemptive move towards M&A or just 'exchanging business cards'. The little available research points out that size is, of course, a key determinant of the decision to expand abroad, but also that banks with a larger share of noninterest income are more likely to have foreign shareholdings (Focarelli & Pozzolo, 2000). The latter assumes that those banks have a more aggressive strategy in both home and foreign markets. Other findings are in line with the M&A literature, viz. that cross-border shareholding tends to come from efficient banks in their country of origin and is directed towards markets where the banking sector is less efficient and expected profits are higher.

On the whole, the general picture, which has emerged from the M&A wave of the Nineties, still features the heavy dependence of European banks on their home market revenues.

Recent data show that only 30 banks worldwide have more than one-third of their total assets outside their domestic base. The European banks from this limited list are presented in table 2.2. Furthermore, it has been estimated from the regional breakdown of European banks' revenues, that the top 50 European banks generate 67% of their business in their home market, 15% in the rest of Europe and 18% outside Europe⁹. But, within Europe and Euroland, the definition of 'home' market for some pan-regional and

⁹ EU Economic Papers, No. 143, May 2000.

European banks (such as NORDEA, Dexia and FORTIS) is increasingly difficult to define. The notion 'domestic' is changing rapidly in the light of EMU, euro and the consequent consolidation of European stock exchanges. Banks increasingly talk about their second home market and their emerging home market. This evolution is already in full process for the Nordic banks and the Belgian/Dutch banks, where the definition of the home market has been extended towards respectively the whole Nordic region and the Benelux (see Chapter 5). In contrast, Germany, Italy, France and Spain have continued their domestic consolidation since 1999, as they were somewhat lagging behind the other EU-countries in their 'national' consolidation process.

Table 2.2: Ranking of banks according to total assets outside their domestic base*.

	Name	Country	Foreign assets (%)	Foreign Income (%)	Staff abroad (%)
1	UBS	СН	80.5	56.5	58.0
2	Standard Chartered	UK	80.0	90.0	95.0
3	Crédit Suisse Group	CH	78.7	42.9	58.8
4	Deutsche Bank	DE	71.9	57.8	48.5
5	ING Bank	NL	64.1	44.7	61.0
6	ABN Amro Bank	NL	64.0	65.7	66.2
7	BNP Paribas	FR	61.6	37.0	38.8
8	HSBC**	UK	55.6	62.6	56.9
9	KBC Bank	BE	54.7	40.7	42.2
10	Allied Irish Banks	IR	52.9	56.6	68.8
11	SCH	ES	52.7	62.4	66.0
12	RZB Group	AU	47.3	_	77.5
13	Dresdner Bank	DE	43.0	33.2	17.3
14	BBVA	ES	41.4	_	68.8
15	Bank of Ireland	IR	37.9	22.9	_
16	Erste Bank Group	AU	37.7	35.9	71.0
17	Fortis Bank	NL/BE	37.2	56.2	46.5
18	Anglo Irish Banking	IR	36.5	46.7	39.9
19	HypoVereinsbank	DE	34.4	30.0	51.6

^{*} Data for 2000/2001

Source: The Banker, February 2002

^{**} Outside Europe

2.2 Waiting for 'The Big One': The picture of the millennium turn

In 2001, M&A activity in all sectors collapsed across Europe. The banking sector was clearly not immune from this trend. M&A deals remained to a very large extent domestic, while the cross-border deals were mainly characterised by their failure to be completed (see table 2.3). The M&A activity in the last two years can largely be reduced to three forms: (1) a limited number of 'strategic' cross-border M&A, involving at least one large player and aimed at achieving an 'entrance ticket' or strategic positioning within an EMU country, (2) a majority of domestic M&A activity aimed at finalising the domestic consolidation status, reducing local excess retail capacity, consolidation of central functions and resolving bad

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From M&A fatigue at the end of the 90s to
a new momentum?
 ☑ M&A fatigue at the end of the 90s....
 "Do mergers help consumers?"
                               (FT, July 1998)
 "Merger is not the only route"
                      (BSCH, February 2000)
 "Marrying in haste"
                            (WSJ, April 2000)
 "Merger failures put focus on overcrowded
 banking sector"
                              (FT, May 2000)
 "Europe's cooling urge to merge"
                      (The Banker, May 2000)
 ☑ ...but the tone changed again with the new
 millennium
 "More mergers to come"
                         (FT, December 2000)
 "Let the revolution begin"
                  (The Economist, April 2001)
 "Getting ready for a big merger"
                 (European Banker, May 2001)
 "Who will merge next?"
                      (The Banker, June 2001)
 "European investment banks foresee
 consolidation wave"
                             (WSJ, June 2001)
 "Get ready for the universal bank"
                       (E&Y, September 2001)
 "Fusions bancaires à l'horizon"
                   (La Tribune, October 2001)
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debt solvency problems and (3) plenty of M&A rumours linking European banking groups.

Furthermore, table 2.3 also shows the emergence of two important elements: (1) the growing involvement of the authorities both on a national and a European level on the basis of competition policy (e.g. failed M&A such as Lloyds – Abbey National, SEB – Swedbank, Sampo – Storebrand), alongside the implicit regulations by some national banking authorities anxious to get a grip on the restructuring and consolidation of the domestic banking industry (e.g. by blocking potential domestic M&A deals in Italy and by the interference in the BNP-Paribas-Société

Table 2.3: M&A in the European banking landscape in 2001 and 2002 (until February 2002)

Name/Acquirer	Country	Name/Target	Country	Year	M&A?
Domestic M&A					
Dexia	BE/FR	Artesia BC	BE	2001	Acquisition
Banca Intesa	IT	Comit	IT	2001	Acquisition
Bank of Scotland	UK	Halifax	UK	2001	Merger
Unicredito	IT	Rolo Banco 1473	IT	2001	Acquisition announced
Allianz	DE	Dresdner Bank	DE	2001	Acquisition
Munich Re	DE	HVB	DE	2001	25.7% stake
San Paolo IMI	IT	Cardine	IT	2001	Acquisition
Sabadell	ES	Banco Herrero	ES	2001	Acquisition
CDC	FR	CNCE	FR	2001	Merger
BPI-SGPS	PO	Banco Espirito Santo	PO	2001	Merger
Abbey National	UK	Alliance & Leicester	UK	2002	Pending
Banca di Roma	IT	Bipop-Carire	IT	2002	Acquisition
Monte Paschi	IT	Banca Nazionale de Lavoro	IT	2002	Pending
Cross-Border M&A					
Svenska Handelsbanker	n SE	Midtbank	DK	2001	Acquisition
Dexia	BE/FR	Kempen/Labouchere	NL	2001	Acquisition
Deutsche Bank	DE	Zurich Fin. Services Group	CH	2001	Acquisition
Failed M&A					
National Bank of Greece	e GR	Alpha Bank	GR	2001	Merger
Unicredito	IT	Commerzbank	DE	2001	Acquisition
Lloyds TSB	UK	Abbey National	UK	2001	Acquisition
Abbey National	UK	Bank of Scotland	UK	2001	Acquisition
Sampo	FI	Storebrand	NO	2001	Acquisition
SEB	SE	Swedbank	SE	2001	Merger
Deutsche Bank	DE	Commerzbank/Dresdner	DE	2001	Acquisition/merger

Note: The list is not exhaustive Source: Financial Press

> Générale deal, the CDC-CNCE merger and the state shareholding in Crédit Lyonnais in France);

(2) the increasing likelihood of a M&A failure as size of the two banks involved increases (e.g. Unicredito - Commerzbank, Deutsche Bank -Commerzbank – Dresdner Bank, National Bank of Greece – Alpha bank).

Overall the M&A activity in the two last years seems to be an extension of the 90s' wave, be it at a slower pace.

Nevertheless, all the large European banking groups are facing increasing pressure to continue on the acquisition path or to seek a merger of equals if they wish to take a prominent role in the European banking landscape. It is quite clear that the second round of consolidation will have a more prominent cross-border dimension. But the fear of losing its own identity, combined with the burden of cost management, the best-practice syndrome on the cost to income ratio and the bleak economic outlook, temporarily created a pause in the banking cross-border consolidation process. So, it seems that the banking scene may be waiting for 'The Big One' to re-ignite the process.

Box – The 'second home market' and the case of Central and Eastern Europe (CEE)

For European banks, one of the 'natural' second home markets outside the present EU should be Central and Eastern Europe (CEE). CEE has recently been subject to an 'externally driven consolidation process' 10, ignited by a few European banks searching to escape from the home market margin and consolidation pressures, seizing the opportunities provided by the privatisation programmes in various CEE countries, and counting on the economic prospects from the integration process into the EU. The entry of foreign banks in CEE reflects the desire of both large international and regional banks to enter profitable markets, and of the local authorities to improve the efficiency and stability of their financial systems, as well as to help reduce the cost of

Table 2.4: Top 10 foreign banks in CEE (September 2001)

	Regional market share (%)	Total assets in region (\$ bn.)	Region as % of bank's total assets
KBC	11.7	19.2	11
HypoVereinsbank	9.9	16.3	2
Unicredito	7.7	12.7	7
Société Générale	7.7	12.7	3
Citibank	7.6	12.5	1
Erste Bank	7.4	11.5	19
IntesaBci	5.4	8.9	3
ING	4.4	7.2	2
RZB	4.0	6.5	19
Commerzbank	3.8	6.3	1

Source: WSJ, The Banker, and Bank of Austria

¹⁰ Deutsche Bank – EU Enlargement Monitor, August 2001.

recapitalising weak domestic banks11. Actually, more than 50% of the CEE regional banking market is controlled by foreign (European) banks, making it the most open banking system in the world. For countries high on the ranking in the EU accession scenario (Hungary, Poland, Czech Republic, Estonia, Latvia), this figure even increases to more than 70%. Although, bank privatisation programmes are almost completed, the consolidation process is considered to be still far from ended¹².

Most large European banking groups remained at the sideline during the recent CEE consolidation process. Only HVB (due to the acquisition of Bank Austria), Société Générale, IntesaBCI and ING are in the top 10 of foreign banks in CEE, but the impact on their total assets is marginal (table 2.4). Mainly, medium-sized European players (KBC, Unicredito, Erste Bank and RZB) have drawn the CEE card. But the global economic slowdown, hampering domestic cost control management and the time lag of the CEE's return on investment have not facilitated pursuing the strategic vision of their second home market. Furthermore, it seems unlikely that the large European players will remain apathetic for CEE in the course of the EU enlargement scenario. This mix, the dominant presence of medium-sized European players, the absence of large European players and the EU enlargement scenario may spice the cross-border consolidation process in Europe and CEE.

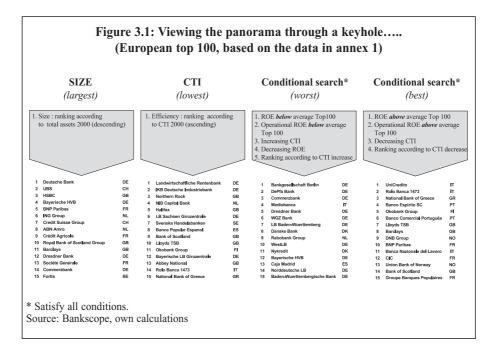
¹¹ BIS Papers, No. 4, 'The banking industry in the emerging market economies: competition, consolidation and system stability – an overview, August 2001.

¹² With the exception of the already highly concentrated Estonian banking sector (from 42 banks in 1992 to 6 banks in 2001). For the other countries, the BIS reckons that the market-driven consolidation has only started, as there are still too many banks.

3 Panorama of the European banking groups

3.1 The road to the panorama: data scope and limitations

The basic financial data of the top 100 European banking groups, ordered according to their total assets in the year 2000 are summarised in the annex of this paper. Looking at these data, one only gets a limited view on the global panorama of European banking (figure 3.1). Therefore the main questions to be answered in this chapter are: How can we regroup the huge amount of data in a comprehensive manner and ultimately in a simple and understandable two-by-two matrix without reducing the essence of the data? How could we visualise the similarities, dissimilarities and evolution among these banking groups? Do nationalities emerge when comparing large European banks? Can strategic conclusions be drawn from clustering large European banks? And most importantly, what can historical data reveal on past and future cross-border M&A activity?



For several years, data mining has steadily been making inroads into financial services institutions. Increasingly financial institutions are using data mining

techniques for different applications: credit scoring, default risk, bankruptcies prediction, CRM (Customer Relationship Management), forecasting, credit and country analysis, customer profiling and scoring, quality control, process engineering, fraud detection, selection of investment opportunities,.... One of the techniques applied in data mining is the use of neural networks, which differs from traditional statistically based programming because they use nonlinear techniques. In the present chapter, neural network (more specific Self-*Organising Maps (SOM)* also called Kohonen network¹³) is used not for credit scoring, but for scoring the European top 100 on a number of ratios. Simply stated, SOM reduces and visualises a high-dimensional data set into a twodimensional map. In order to compare the top 100 European banking groups on a multi-dimensional scale, we have chosen to use this SOM-technique to visualise the high dimensionality of the large input data into such a twodimensional map. The map has been constructed under the underlying assumption that clusters are formed from patterns that share common features. The map attempts to represent all the available observations with optimal

accuracy, using a restricted set of financial institutions (in our case 100 European banking groups). technique arranges financial institutions on the map so that 'similar' banks are close to each other and dissimilar banks far from each other. This results in the creation of clusters containing a number of banks with comparable input data.

"...The use of models is pragmatic and pluralist. In an ever-changing environment, no single model can possibly assimilate a comprehensive way all factors that matter for policy. Forming judgements about those factors, and their implications for policy is not something that can be abdicated to models or even modellers. But models are indispensable tools in that process...'

(Bank of England, 1999)

What are the advantages of using SOM?

- SOM translates multi-dimensional input data into a simple twodimensional map:
- SOM can detect unexpected structures or patterns;
- SOM is a non-parametric method, i.e. no a priori assumptions about the distribution of the data need to be made;
- SOM recognises missing values or invalid entries and treats them appropriately in the analysis;

¹³ Prof. Teuvo Kohonen, Helsinki University of Technology, mathematically defined the underlying algorithm in 1982.

- SOM copes well with 'fuzzy' data or chaotic ones in the mathematical sense;
- It is not required to choose which variables are important, the network does.

What are the limitations of using SOM?

- Evaluation of the map or optimal tuning of the map remains important in the analysis (number of clusters, quality and stability of the clusters, validation,...).
- As most statistical software, a SOM-map by itself cannot be the final outcome. Expertise input and interpretation remain of utmost importance, otherwise neural networks remain very much a 'black box' solution with a focus on the input and the output.
- The production of a result summary, highlighting the differences among the clusters, is recommended.

Table 3.1: Country of origin of the European top 100

	Frequency
DE	21
IT	16
GB	10
FR	10
ES	9
NL	5
PT	4
SE	4
СН	4
BE	3
DK	3
GR	3
FI	2
NO	2
IE	2
AT	2
Total	100

Source: Bankscope, own calculations.

Overall, the chapter is a visual exploration through the European banking landscape, exploration that will raise a number of questions on cross-border consolidation and provide an introduction and a guide to the discussion of the M&A track record of European banking groups in chapter 4 and in the case studies of chapter 5.

The main data source for the input data in the SOM-application has been the FitchIBCA Bankscope database¹⁴. In order to define our sample of the

¹⁴ The use of Bankscope has two important advantages: (1) it provides a large number of standardised ratios and accounting data which make international comparisons possible and (2) the number of available accounting-based source data is substantially higher than in other sources.

100 largest European banking groups, a number of criteria have been set forward to limit the scope of banks included in the analysis:

- (1) country of origin: EU of 15, completed with Norway and Switzerland (table 3.1);
- (2) only the consolidated annual accounts are considered;
- (3) elimination of subsidiaries of the selected European banking groups;
- (4) ranking according to total assets for 2000 (see annex 1 for the key statistics of the European top 100).

Several commercially developed software tools are available on the concept and algorithm of SOM. In this paper, the input data have been translated by Viscovery SOMine¹⁵ Standard Edition 3.0 of Eudaptics GmbH (Austria). More details are given in annex 2.

3.2 The panorama 2000

For the *panorama 2000* a set of variables has been selected and included in the input data of the SOM software tool. Only those variables that were considered meaningful in relation to the performance, efficiency and structure of the various financial groups have been selected. In the initial data set, a total of 65 ratios were available, out of which 18 have been considered relevant to the analysis (table 3.2). A large number of important ratios have not been included because another variable already captured them to a large extent (based on a correlation analysis ¹⁶). The pre-processing of the variables was undertaken as follows:

- (1) The software tool offers the possibility of giving an additional weight to various variables. For the analysis we have opted for total assets and country code *not* being of any influence on the map creation (weight = 0). However, the two variables remained available for the interpretation of the map.
- (2) In order to avoid a "trial-and-error" process, all other variables have been given an equal weight. Obviously, changing the variable priority (i.e. changing the weights) may cause significant changes to the resulting map.

¹⁵ "Viscovery is user-friendly, flexible and powerful. Viscovery builds a bridge between state-of-the-art algorithm and the need for a user friendly, easy-to-use tool" (Software tools for Self-Organizing Maps, G. Deboeck, 2000).

 $^{^{16}}$ For example: total capital ratio (correlation coëfficient with tier 1 = 0.77), return on assets (correlation coëfficient with ROE = 0.84), loan loss reserves/gross loans (correlation coëfficient with non performing loans/gross loans = 0.89), recurring earning power (correlation coëfficient with net interest margin = 0.78), ...

- (3) All variables have been rebased on the basis of variance (i.e. divided by their standard deviation) and transformed applying a sigmoid transformation (i.e. to handle outliers without discarding them).
- (4) The number of each cluster has been adjusted according to the average asset size of the clusters.

Table 3.2: The 18 input variables of the panorama 2000

Criteria	Variable	Priority*
Asset quality	loan loss provisions / net interest revenue	high
Asset quality	non performing loans / gross loans	high
Capital	Tier 1	high
Performance	net interest margin (NIM)	high
Performance	return on equity (ROE)	high
Performance	operational return on equity**	high
Performance	cost to income ratio (CTI)	high
Performance	productivity	
	(total operating income / number of employees)	high
Performance	operational productivity	
	(net operating income / number of employees)***	
Income & cost structure	net interest revenue / total operating income	high
Income & cost structure	commission income / total operating income	high
Income & cost structure	trading income / total operating income	high
Income & cost structure	personnel expenses / overhead	high
Liquidity	net loans / customer and short term funding	high
Balance structure	customer loans / total assets	high
Balance structure	customer deposits / total assets	high
Other	country code	no priority
Other	Total assets	no priority

Source: Bankscope, own calculations

The result is a photograph of the European landscape in 2000, regrouped in 7 clusters. Key cluster statistics are summarised in table 3.3 (based on the cluster average). The name of the individual financial groups in the different clusters and on the map are available in table 3.4. and figure 3.2. It should be clear that the cluster in which an individual bank is positioned is not the only important aspect. The proximity to the adjacent cluster also is.

In the software tool, the priority factor gives additional weight to a variable. High equals a priority factor of 1 (max.), no priority equals a priority factor of 0 (i.e. irrelevant for the analysis).

^{**} net operating income (or profit before taxes excluding other income and loans loss provisions) / equity.

^{***} net operating income (total operating income – overheads) / number of employees.

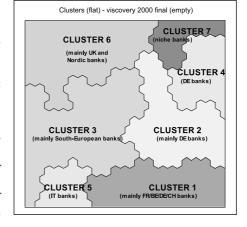
Table 3.3: Key Cluster statistics (based on cluster average)

	CLUSTER 1	CLUSTER 2	CLUSTER 3	CLUSTER 4	CLUSTER 5	CLUSTER 6	CLUSTER 7
Number of banks	16	13	23	6	9	25	5
Size	Top	Large	Large	Mid-sized	Mid-sized	Mid-sized	Bottom ranking
Total assets (mio EUR)	386,138	245,636	167,372	137,842	120,966	111,545	53,162
Capital	high	Low	high	Bottom	Low	high	Top
Tier 1	7.8	5.9	7.7	5.5	5.7	8.0	13.3
Performance D profitability	Low margin high return	Low margin bottom return	Top margin high return	Bottom margin Low return	High margin Return distorted	High margin Top return	Low margin average return
Net interest margin	1.13	1.04	2.65	0.51	2.42	2.32	1.15
ROE	17.6	4.0	15.5	6.9	7.5	18.4	12.1
Operational ROE	21.2	10.6	22.2	13.8	19.6	26.0	13.6
Performance - efficiency	Low	Bottom	Average	High	Low	High	Top
Cost to income ratio	0.69	76.4	62.6	50.3	70.8	55.5	47.6
Productivity (th EUR)	212.3	180.4	144.3	321.6	134.7	181.6	398.8
Operational productivity (the EUR)	70.4	44.5	51.7	179.2	40.5	83.2	220.3
income & cost structure	High focus on commission & trading income	Balanced (but trading important)	Balanced income	High focus on interest income	Balanced income	Balanced income	High focus on interest income
Net interest revenue/total operating income (%)	32.9%	58.5%	29.9%	74.7%	60.5%	61.4%	79.0%
Net commission income/total operating income (%)	35.2%	22.5%	30.0%	12.0%	31.5%	23.0%	9.4%
Net trading income/total operating income (%)	23.6%	13.2%	9.7%	1.0%	4.0%	%6.9	3.3%
Personnel expenses/overhead	%6.95	51.3%	57.7%	56.1%	29.5%	47.1%	50.4%
Liquidity	Top	Average	Average	High	Low	Low	Bottom
Net loans/customer & short term funding	56.8	73.5	78.4	59.7	93.0	95.0	357.7
Balance structure	Average	Average	High transformation	Low transformaiton	High transformation	High transformation	Loan oriented
Customer loans/total assets (%)	37.4%	45.8%	26.0%	35.9%	61.3%	%9:29	%9.69
Customer deposits/total assets (%)	41.2%	36.1%	26.6%	21.0%	43.2%	29.8%	11.8%
Asset quality	Low	Low	High	Average	Bottom	Top	High
Loan loss provision/net interest revenue	16.5	29.1	11.6	27.7	33.5	8.3	15.3
Non performing loans/gross loans	4.5	2.5	2.3	2.4	8.6	1.4	0.8

Source: Dexia Bank, own calculations

Table 3.4: The 7 Clusters

- Cluster 1: Credit Mutuel, BNP Paribas, GB Populaires, FORTIS, Natexis, Crédit Lyonnais, Société Générale, Crédit Agricole, ING, DGZ, Alpha Bank, KBC, UBS, Deutsche Bank, CIC, Credit Suisse
- Cluster 2: Danske Bank, Bankgesellschaft Berlin, Deutsche Postbank, BP di Lodi, WestLB, DG BANK, HVB, Baden-W. Bank, BC Vaudoise, RZB, Commerzbank, Dresdner Bank, CDC
- Cluster 3: Rabobank, BANCAJA, NB of Greece, Banco de Sabadell, LA CAIXA, Caixa Catalunya, CB of Greece, HSBC, BBVA, Caja Madrid, Standard Chartered, Allied



- Irish Banks, SCH, BPI SGPS, Barclays, UniCredito, BP di Milano, SEB, San Paolo IMI, ABN Amro, BP di Verona, Banca Lombarda, BP di Bergamo
- Cluster 4: DePfa, Rentenbank, Bayerische LB, LB Sachsen, HELABA, LB Rheinland-Pfalz, LB Baden-Wuerttemberg, NORD/LB, WGZ Bank
- Cluster 5: BM dei Paschi di Siena, IntesaBci, Banca di Roma, BNL, Banca Antonveneta, BP di Novara
- Cluster 6: Halifax, Northern Rock, Abbey National, BESCL, Bankinter, RBoS, SNS Reaal, Okobank, Dexia, Lloyds TSB, Alliance & Leicester, DNB Group, Bank of Scotland, UB of Norway, Swedbank, SV Raiffeisenbanken, Sampo Bank, Svenska Handelsbanken, Rolo Banca 1473, Bank of Ireland, NORDEA, Jyske Bank, BC Português, BP Espanol, Caixa G. de Depositos

Cluster 7: Mediobanca, IKB D. Industriebank, NIB, Nykredit, BHW

Source: Dexia Bank, own calculations

What do we learn from this panorama 2000?

- Despite the absence of a country variable in processing the map, nationalities do emerge. Italian, German and Nordic banks seem to be concentrated (although sometimes across different clusters) within the map.
- Despite the limited information on the strategic focus or country-specific factors, niche banks and Landesbanken are concentrated in separate clusters and treated appropriately in the analysis.
- Taking into account the data scope and limitations, the map clearly shows that cluster 6 had (and likely still has) a competitive advantage in the European landscape, with cluster 3 as a competitive runner-up. Clusters 1, 2 and 5 all have a cost management problem. Clusters 2, 4 and 5 are clearly the most vulnerable if European competition intensifies.

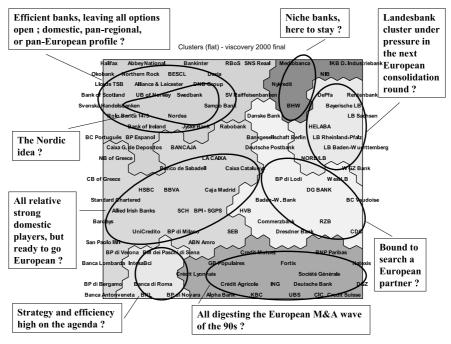


Figure 3.2.: The panorama 2000

Source: Dexia Bank, own calculations

Remarkably, a separation line exists from the bottom-left corner to the upperright one: (i) above the line, mainly Southern-European, UK and Nordic banks (i.e. clusters 3, 5 and 6) and (ii) below the line, mainly French, Benelux, Swiss and German banks (i.e. clusters 1, 2, 4 and 7). Few exceptions can be found on this line of fracture (excluding financial institutions close to this line, Dexia remains the sole exception). Furthermore, overlooking all the variables in the software tool, the net interest margin seems to be the single most powerful variable to explain this distinction.

3.3 The panorama changes 1995–2000

In the panorama changes 1995–2000, we follow a more dynamic approach, as we also include the annual changes between 1995 and 2000 in a number of key variables (table 3.5: ROE, operational ROE, cost to income ratio, total asset and net interest margin). The changes in these key variables function as a proxy for the change in performance and efficiency of the top 100 European financial institutions over the period in question.

The pre-processing of the variables has been as follows:

- (1) The software tool offers the possibility of giving an additional weight to the different variables. As for the panorama 2000, we have opted for the country code *not* being of any influence on the map creation (weight = 0). However, the variable remained available for the interpretation of the map. In contrast with the panorama 2000 analysis, total assets and the change in total assets, as a proxy for growth, have been included in the map creation.
- (2) In order to avoid a "trial-and-error" process, all key variables have been given an equal weight. The annual change between 1995-2000 in these key variables (each key variable is represented by 5 annual change variables) is given a lower priority. The only reason is that the key variables are considered as the final outcome of the change process between 1995 and 2000 and should therefore not be overruled by the annual differences of the key variable itself. Obviously, changing the variable priority (i.e. changing the weights) can cause significant changes to the resulting map.
- (3) All variables have been rebased on the basis of variance (i.e. divided by their standard deviation) and transformed applying a sigmoid transformation (i.e. to handle outliers without discarding them).
- (4) The number of each cluster has been adjusted according to the average asset size of the clusters.

Table 3.5: The 32 input variables of the panorama 1995 – 2000

Criteria	Variable	Number of variables	Priority*
Performance	total assets 2000	1	high
Performance	net interest margin 2000	1	high
Performance	return on equity 2000	1	high
Performance	operational return on equity* 2000	1	high
Performance	cost to income ratio 2000	1	high
Performance change	annual change in total assets 1995 – 2000	5	lower
Performance change	annual change in total operating income 1995 – 2000	5	lower
Performance change	annual change in return on equity 1995 - 2000	5	lower
Performance change	annual change in operational return on equity 1995 - 2000) 5	lower
Performance change	annual change in cost to income ratio 1995 – 2000	5	lower
Performance change	change in net interest margin 1995 – 2000	1	high
Other	Country code	1	no priority

Source: Bankscope, own calculations.

^{*} see table 3.2 (high = 1, lower = 0.9, no priority = 0)

Table 3.6: Key Cluster statistics (based on cluster average)

Number of banks	CLUSTER 1 14	CLUSTER 2 20	CLUSTER 3 13	CLUSTER 4	CLUSTER 5 20	CLUSTER 6	CLUSTER 7 11	CLUSTER 8
Size	Top strong growth	Large strong growth	Large (growth figures distorted by a few banks)	Mid-sized rapid growth	Mid-sized careful growth	Mid-sized careful growth	Small strong growth	Bottom relative strong growth
Total assets 2000 (mio EUR) % change total assets 1995-2000 % change in tot. op. income 1995-2000	533,666 82.5% 75.9%	207,040 71.9% 88.0%	182,221 132.7% 78.0%	127,000 129.7% 89.8%	109,465 38.8% 39.3%	100,803 46.1% 37.4%	69,701 74.7% 82.5%	47,577 115.9% 77.1%
Margin	Bottom and past decline	High and steady	Low and fallen sharply	Average and steady	Low and weakening	Average but under pressure	High and weakening	Top but decreasing fast
Net interest margin 2000 Change in NIM 1995 - 2000	1.04	2.42	1.44	1.67	1.23	1.79	2.29	2.67
ROE	Average but strong improvement	Top and directed upwards	Average and steady	Average but strong improvement	Bottom and weak	high and directed upwareds	Top and strong improvement	Average and steady
ROE 2000 Change in ROE 1995 - 2000	14.2	19.2	12.4	15.6	3.5	17.5 3.9	19.9	13.6
Operational ROE	Average but weakening	Top and directed upwards	Bottom and sharp deline	Average and directed upwards	Bottom but steady	High and slightly under pressure	Top and steady	High and steady
Operational ROE 2000 Change in operational ROE 1995 - 2000	17.7	3.7	13.6	18.2	13.3	22.6 -1.2	28.3	21.6
Cost to income ratio	Top and weakening	Low and improving	High and under strong pressure	low and decreasing rapidly	Average and improving	High but steady	Bottom but volatile	Average but improving rapidly
Cost to income ratio 2000 Change in CTI 1995 - 2000	3.5	56.2 -7.9	66.7	59.7	63.6	64.8	52.2 -2.0	61.9

Source: Dexia Bank, own calculations

The result is a dynamic picture of the European landscape between 1995 and 2000, regrouped in 8 clusters. Key cluster statistics are summarised in table 3.6 (based on the cluster average). The name of the individual financial groups in the different clusters and on the map are mentioned in table 3.7. and figure 3.3. As already mentioned for the panorama 2000, the cluster in which an individual bank is positioned is not the only important aspect. The proximity to the adjacent cluster also is.

Table 3.7: The 8 Clusters

Cluster 1: UBS, Deutsche Bank, Société Générale, Credit Suisse, ABN Amro, BNP Paribas, Dexia, Crédit Agricole, Commerzbank, Dresdner Bank, WestLB, FORTIS, DG BANK, HVB

Cluster 2: NB of Greece, UniCredito, Lloyds TSB, CB of Greece, Alliance & Leicester, Barclays, BP Espanol, Bank of Scotland, Abbey National, HSBC, Halifax, SCH, Populaires, RZB, BBVA, Standard Chartered, BPI - SGPS, KBC, San Paolo IMI, CDC

Cluster 3: RBoS, ING, Alpha Bank, Danske Bank, Rabobank, SNS Reaal, WGZ Bank, Caixa Catalunya, BHW, LB Rheinland-Pfalz, Mediobanca, DePfa, BRED

CLUSTER 4 CLUSTER 3 **CLUSTER 2 CLUSTER 1** CLUSTER 7 CLUSTER 8 **CLUSTER 5 CLUSTER 6**

Cluster 4: DNB Group, NORDEA, Natexis

Cluster 5: LA CAIXA, LB Baden-Wuerttemberg, SV Raiffeisenbanken, Rentenbank, Credit Mutuel, Nykredit, BC Vaudoise, Crédit Lyonnais, IKB D. Industriebank, Bankinter, LB Sachsen, Banca di Roma, Baden-W. Bank, BP di Novara, HELABA, Bankgesellschaft Berlin, Sampo Bank, Deutsche Postbank, NORD/LB, Bayerische LB

Cluster 6: CIC, Svenska Handelsbanken, BP di Milano, Erste Bank, Swedbank, BNL, SEB

Cluster 7: UB of Norway, IntesaBci, BC Português, BESCL, Caixa G. de Depositos, Northern Rock, DGZ, Okobank, Banca Lombarda, Cardine, NIB

Cluster 8: Banco de Sabadell, BP di Bergamo, Bank of Ireland, Caja Madrid, Allied Irish Banks, BP di Lodi, Banca Antonveneta, BANCAJA, BP di Verona, BM dei Paschi di Siena, Rolo Banca 1473, Jyske Bank

Source: Dexia Bank, own calculations.

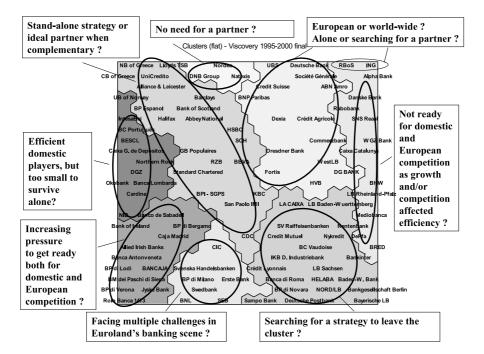


Figure 3.3: The panorama changes 1995–2000

What do we learn from the panorama changes 1995–2000?

- To a lesser extent than in the panorama 2000, nationalities emerge. Again, the fracture line is present (as it is in the panorama 2000) between, on the one hand, mainly Southern-European, UK and Nordic banks and, on the other hand, mainly French, Benelux, Swiss and German banks.
- Since total assets and the change in total assets are included, as a proxy for size and growth in the map creation, larger banks are concentrated on the map. Still, the other variables remain active as cluster differentiators.
- Taking into account the scope and limitations of the data, the map clearly shows the (domestic) competitive advantage built up by clusters 2, 4 and 7 within the European landscape over the period considered (1995–2000). For cluster 1 (which includes mainly the large European players) and partly cluster 3 (ING and RBOS), the cost and competition burden emerges again. The efficiency and performance evolution of the financial institutions in clusters 6, 8 and partly 3 makes them particularly vulnerable for a second round of pan-European and European consolidation. For cluster 5 (which mainly contains the German Landesbanken), all key variables are, on average, signalling that a strategy on performance and efficiency should be high on the agenda and that action is required.

Comparing the panorama 2000 with the panorama changes 1995–2000 sometimes alters the interpretation of the strategic positioning of individual banks. The former is a 'photograph' of the key variables of the individual bank's state in 2000 (balance structure, performance, asset quality, ...). The latter is a performance-growth overview of these individual banks over the period 1995–2000. Based on the combination of both panoramas, four options can be identified:

- 1. a favourable positioning in 2000 combined with a good performance evolution 1995-2000: a logical combination at first sight. From the data analysis it emerges that a relative high net interest margin has been a precondition for this combination (typical examples are the UK banks, Scandinavian banks and certain Southern-European banks). However, European integration, competition and consolidation are expected to erode this factor.
- 2. a favourable positioning in 2000 despite a weak performance evolution 1995–2000: this combination can be explained by the fact that these individual banks had already a strong track record in the reference year 1995, making the performance report look bleak (typical examples are Scandinavian banks and niche banks). A second option is that some banks have been confronted with a M&A process, which again makes the performance report 1995-2000 look rather bleak, without fundamentally affecting the global outlook picture in 2000 (typical examples are Dexia and RBoS).
- 3. a weak positioning in 2000 but a good performance evolution 1995–2000: few banks fall under this combination, presumably because several banks which could fall under this combination have been taken over or have merged during their transformation from laggard to target. Remarkable is that a number of banks are at the border of this combination, viz. banks which concentrate mainly on banking markets outside Europe. These banks show a relatively strong 1995-2000 track record, but score average in the 2000 picture (examples are KBC, Unicredito, Standard Chartered, Barclays, RZB, HSBC, SCH, BBVA). However, if the past track record evolves in the same positive direction in the coming years, their strategy may be an important asset in the European consolidation process.
- 4. a weak positioning in 2000 and a weak performance evolution 1995–2000: again a logical combination in which often country-specific conditions prevent the European consolidation process from playing its full role. As these country-specific conditions are expected to erode over the next years, the vicious circle trend will have to be tackled rapidly (examples are a number of Landesbanken or cooperative banks).

We are fully aware that the mapping raises more questions than we can possibly answer within the context of the present chapter, especially as far as the positioning of individual banks is concerned.

However, when 'reading' the two maps a number of elements should be taken into account:

- Both maps are complementary and should therefore be treated appropriately. Nevertheless, each map is the optimal outcome of its underlying variables. A clear understanding of these variables is therefore of the utmost importance.
- Not only the membership of a specific cluster is important, but also the proximity to the adjacent cluster is a significant factor (cfr supra).
- New financial data (for 2001), M&A activity, changes in country-specific factors, etc. may alter the positioning of individual banks. Nevertheless the overall pictures of the maps are judged to be quite robust. A comparison of the panorama 1999 with the panorama 2000 and of the panorama changes 1995–1999 with the panorama changes 1995–2000 confirms this observation. Furthermore, banks do not switch from laggard to best practice overnight (or vice versa).
- The maps mostly abstract from the various business lines of the individual banks, except for those banks where the business lines have a significant impact on the financial ratios. This should be taken into account when comparing individual banks.
- As already stressed, the ultimate goal of the mapping is to provide a global picture of the European banking landscape (represented by the European top 100) and to raise number of questions on the domestic and cross-border consolidation in the coming years. Who is ready to go beyond the domestic market (alone or with a partner)? Who are the efficient home market players? Who can cope with a stand-alone strategy? Who is most likely to go pan-European or even worldwide? Who will most likely undergo the next domestic and cross-border wave? Who are the laggards and what is the best practice on a European scale? To answer such questions, mapping exercises only provide hints.

4 M&A track record for European banking groups

4.1 Defining the reference groups

Most research focuses on a cross-country comparison when looking at banking efficiency and performance or compares foreign-owned and domestically-owned banks in several countries. In the answer to the question "who are Europe's efficient bankers?" a country ranking is presented in most cases. Secondly, research papers often take a long and winding road before being published. Consequently, the underlying data rarely take into account

the M&A wave of the late 90s. Thirdly, a review of the literature on the value effects of bank mergers and acquisitions suggests that no broad pattern exists. This puts a case-by-case approach in the spotlight.

The M&A track record of European banks described in this chapter does not have all the necessary technicalities to be defined as fundamental research. Still, it has the merit of being relatively upto-date (data until the year 2000) and of giving some further clues on the impact of the M&A strategy and the global picture (structure, conduct and performance) of three reference banking

"...Domestic banks have both higher cost efficiency and higher profit efficiency than foreign banks operating in that country, a result that is consistent with most of the findings in the extant literature, where it has been interpreted as supporting the home field advantage hypothesis...Barriers to cross-border operating efficiency offset most of any potential efficiency gains from cross-border consolidation...These results, should they continue to hold in the future, suggest that the remaining barriers to efficient cross-border consolidation may make it difficult to achieve anything close to a continent-wide or EU-wide consolidation into a single market for banking services..." (Berger, 2000)18

"...Adverse (advantageous) environmental condition could be a good (bad) competitive factor for the home banking industry... but being technically efficient and having increased national market integration seem to be an effective strategy to defer foreign competition..." (Hasan, Lozano-Vita & Pastor, 2001)

¹⁷ Wagenvoort & Schure, EIB Papers, Volume 4, No. 1.

¹⁸ For disaggregated data, Berger makes the exception that "domestic banks may be more efficient than foreign banks from *most* foreign countries, may be equally efficient from *some* foreign countries, but may be less efficient than foreign banks from *one* (US) of the foreign countries". Focarelli & Pozzolo (2000) indicate that banks' foreign investments are generally directed towards markets where the banking sector is less efficient.

groups. The three reference groups are defined as: (i) banks expanding through cross-border M&A, (ii) banks characterised by a significant and recent domestic M&A activity, (iii) banks which can be described as 'steadystate' banks, i.e. banks that have not been involved in a recent and significant M&A deal, implicitly leading to a lower growth rate of total assets. Further in this paper, these three reference groups are used in the case studies of chapter 5 in order to compare the banks under discussion not only with the European top 100, but also with banks that are assumed to have similar M&A paths.

Empirical evidence in the literature finds that, on average, foreign banks are less efficient than domestic ones. This results from the fact that barriers to cross-border operating efficiency offset most of any potential efficiency gains from cross-border consolidation. These barriers are defined as difficulties of managing and monitoring foreign branches, differences in language, culture, currency and regulatory/supervisory structures and local competition policy (cf. the discouraging factors, Chapter 1).

Secondly, in-market consolidation tends to generate the largest cost savings in headcount, branch reduction and system and operating costs. When looking at the track record of European banking groups over the last 5 years, our first hypothesis consequently is the so-called 'home field advantage' (Berger, 2000), namely that banks involved in domestic M&A should be, on average, more efficient than banks involved in cross-border M&A.

Research also shows that efficient financial institutions tend to take over smaller, less efficient ones and improve both cost and profit efficiency of the acquired bank (defined as the so-called "wake up" of inefficient management). This implies the assumption that efficient financial institutions spread their unique expertise, management skills and operating procedures domestically and internationally. This results in our second hypothesis, viz. that domestic and cross-border M&A activity should be more efficient than the so-called steadystate financial institutions. Taking the hypothesis further, it would suggest that inefficient steady-state banks have an increased profile as potential targets.

In order to check our two hypotheses empirically, on the base of the 1995–2000 data, the peer group of the 100 largest European banking groups has been scaled down through a top-down approach (starting with Deutsche Bank) to 29 banking groups. A summary of the key information regarding the selection process is presented in tables 4.1, 4.2 and 4.3, together with the cluster number of the mapping analysis. It should be clear that sometimes the complex M&A path of banks (combining domestic M&A and cross-border M&A) offers no clear-cut differentiation between a domestic M&A bank and a cross-border one.

The cross-border M&A reference group comprises 10 financial institutions (table 4.1). These banks, often with a strong home market base, are mainly characterised by a significant and recent cross-border merger or by an active cross-border acquisition policy resulting in a strong international profile.

Table 4.1: The cross-border M&A group (10 financial institutions)

Name	Cluster 1995 – 2000	Cross-border M&A?
Deutsche Bank	Cluster 1	62% of total assets outside home country
UBS	Cluster 1	57% of headcount outside home country
HSBC	Cluster 2	56% of total assets outside Europe
ING	Cluster 3	86% of insurance premium income outside home country
		46% of banking result outside home country
Crédit Suisse	Cluster 1	65% of headcount outside home country
ABN Amro	Cluster 1	50% of headcount outside home country
Barclays	Cluster 2	31% of total assets outside home country
FORTIS	Cluster 1	Established in 1990, following the merger between the Dutch combination AMEV/VSB and Belgium's largest insurer AG. In 1998, FORTIS completes the merger with Generale Bank in Belgium, which merges with ASLK-CGER. In 2000, FORTIS absorbed Banque Générale du Luxembourg.
Dexia	Cluster 1	In 1996, Crédit Communal de Belgique (BE) and Crédit Local de France (FR) merged to form the Dexia group. In 2000 and 2001, Dexia absorbed Artesia Banking Corporation (BE), Kempen (NL) and Labouchère (NL).
NORDEA	Cluster 1	Established in 1999 as a result of a cross-border merger between MeritaNordbanken (SW/FI), Unidanmark (DK) and Christiana Bank (NW).

Source: Bankscope, Press reviews, bank websites

The domestic M&A reference group comprises 11 financial institutions (table 4.2) that were recently subject to a large domestic M&A or that historically originated from a number of domestic M&A. This assumes that the domestic M&A must have had a significant impact on the profile of the group. The proximity in time of a significant domestic merger explains why banks such as BNP Paribas, SCH and BBVA (despite their expansion outside the home country) are included in this reference group.

Table 4.2: The domestic M&A group (11 financial institutions)

Name	Cluster 1995 – 2000	Cross-border M&A?
HypoVereinsbank	Cluster 1	Established in 1998 through the domestic merger between Bayerische Hypotheken- und Wechsel-Bank AG and Bayerische Vereinsbank AG.
BNP Paribas	Cluster 1	In 1993, BNP was privatised. In 1997, absorbed Banque Nationale de Paris Norge A/S. In May 2000, BNP absorbed BNP Finance and Paribas SA and changed its name into BNP Paribas.
RB of Scotland	Cluster 3	March 2000, acquisition of NatWest.
SCH	Cluster 2	Established in 1999 as the result of the domestic merger between Banco Santander SA and Banco Central Hispanoamericano – BSCH. In 2001, it changed its name to SCH.
BBVA	Cluster 2	Established in 1988 following the domestic merger of Banco de Bilbao and Banco de Vizcaya SA. On January 1, 2000 absorbed Banca Catalana SA and Argentaria, Caja Postal y Banco Hipotecario SA and changed its name to Banco Bilbao Vizcaya Argentaria – BBVA.
IntesaBci	Cluster 7	Established in 1998 when Banco Ambrosiano Veneto SpA and Cassa di Risparmio delle Provincie Lombarde SpA – CARIPLO transferred the banking business to Banca Intesa. In 2000, absorbed Mediocredito Lombardo SpA and in 2001 Banca Commerciale Italiana SpA, COMIT and changed its name to IntesaBci SpA.
Abbey National	Cluster 2	Established in 1944, as The Abbey National Building through the merger of Abbey Road Building Society and The National Building Society. In 1996, absorbed National & Provincial Building Society.
Lloyds TSB	Cluster 2	Established in November 1995 as the result of the merger between TSB and Lloyds Bank and later the acquired Abbey Life and Cheltenham & Gloucester.
Unicredito	Cluster 2	Established in 1998 through the domestic merger of Credito Italiano and Unicredito SpA. In 1999, UniCredito Italiano SpA absorbed Banca Popolare di Rieti SpA.
KBC	Cluster 2	Established in 1998 following the merger of Kredietbank and Cera.
San Paolo IMI	Cluster 2	Established in 1998, following the domestic merger between Istituto Bancario San Paolo di Torino SpA and Istituto Mobiliare Italiano SpA – IMI.

Source : Bankscope, Financial Press, Bank Websites

The steady-state reference group is composed of 8 financial institutions (table 4.3) which have recently not been involved in a cross-border or domestic M&A and/or whose total asset growth has been substantially lower than the asset growth of the cross-border and domestic M&A reference groups.

Table 4.3: The steady-state group (8 financial institutions)

	Total growth rate of total assets between 1995 and 2000
	2011/0011 2//0 11111 2000
Cross-border M&A	81.4%
Domestic M&A	99.2%
Steady state	54.4%
Crédit Agricole	Cluster 1
Dresdner	Cluster 1
Société Générale	Cluster 1
Commerzbank	Cluster 1
Westdeutsche LB	Cluster 1
Rabobank	Cluster 3
Crédit Lyonnais	Cluster 5
Banca di Roma	Cluster 5
Top 100	84.7%

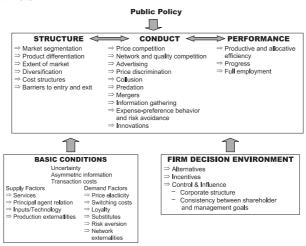
Source: Bankscope

4.2 The track record

The analysis of the track record of the selected financial institutions has been grafted on the structure-conduct-performance framework (figure 4.1). Furthermore, only bank accounting data have been used (source: Bankscope), thus making abstraction of the bank's basic and environmental conditions which are not reflected in its accounting framework.

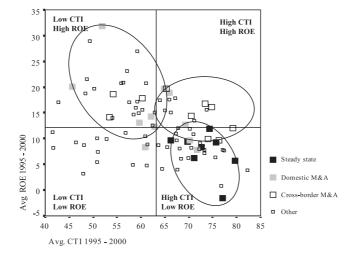
The SCP framework for the cross-border M&A, domestic M&A and the steady state reference groups is presented in table 4.4. On average, clear differences emerge between the three reference groups. The most important elements are discussed below (figure 4.2 comparing the average ROE and the average cost to income ratio for the European top 100 over the period 1995-2000).

Figure 4.1: Revised Structure-Conduct-Performance framework for banking markets



Source: D. Neuberger, 1997

Figure 4.2: The European top 100 compared on average ROE (1995–2000) and average CTI (1995–2000)



Source: Bankscope, own calculations

The *domestic M&A reference group* largely corresponds with cluster 2 of the panorama changes 1995–2000. The average size of the banks included in this group is comparable to the average size of the steady state group, but lower than the cross-border group.

The most eye-catching differentiator for this group is the cost to income ratio:

- banks from this reference group tend to have, on average, a lower cost to income ratio (61%), which decreased significantly in recent years (-1.3 per Α simple year). explanation is that the average annual growth in overhead costs (+19.5%) was, in contrast to the two other groups, lower than average annual increase in operating income (+21.0%);
- the soundness, the balance sheet and income

- "...increasingly it has looked as though the best way forward for financial services groups in Europe is through the creation of bancassurance groups...such deals have been made necessary by the growing power of bank distribution compared with traditional sales forces... ' (Financial Times, 2001)
- "... Key challenge is revenue growth....the cost game is very limited in time as you can cut costs once, but your revenue can grow into infinity, if you get the right mix" (CEO Abbey National, 2001)
- "Costs tend to creep back elsewhere in the organisation... optimisation-based initiatives have frequently tended to weaken organisations functionally rather than strengthen them financially' (The Banker, 2001)
- structure are quite comparable with the European top 100 average; compared with the other two reference groups, there is a large focus on interest income (53.8%) and a low dependence on trading income (7.4%). Since 1995, the dependence on interest income has been decreasing rapidly (share of interest income in total operating income decreasing by 3% per year) in favour of the share of commission income in total operating income ($\pm 1.2\%$ per year) and trading income ($\pm 1\%$ per year);
- the groups rank amongst the best on profitability (average operational ROE of 24.4% and ROA of 0.91% in 2000);
- the lower productivity (likely to be a result of the large domestic branch network), compared to the cross-border M&A reference group and the European average, is largely compensated for by the lower share of personnel cost in the overhead;
- the group enjoys a substantial higher net interest margin (2.2%) compared to all other categories (European average 1.83).

The Cross-border M&A reference group generally corresponds with cluster 1 of the panorama changes 1995–2000 (with exception of the two UK banks and ING).

Table 4.4: SCP Framework & the M&A track record for European banking groups

		Cuosa bondon	Domoctio	Ctoods	Lunonoun
Criteria	ratio	M&A	M&A	State	European Top 100
Number of selected European bank groups	ink groups	10	11	∞	100
STRUCTURE					
Average country bank ranking (se	ranking (source: The banker)	1	2	4	6
Average European bank ranking (source: The banker)	(source: The banker)	13	17	20	ı
Average world bank ranking (source: The banker)	rrce: The banker)	24	33	39	183
Size	total assets (mio EUR, 2000)	558,786	362,366	373,098	190,438
Soundness	capital/assets, % 2000	4.5	5.3	4.0	5.1
	capital adequacy ratio, % 2000	11.7	10.0	10.6	10.7
Balance structure	customer loans/total assets, % 2000	43.0%	52.1%	47.1%	54.3%
	customer deposits/total assets, % 2000	56.3%	50.1%	41.9%	47.5%
Income structure	net interest revenue, % 2000	41.1%	53.8%	47.5%	57.1%
	commission & fee income, % 2000	34.0%	29.8%	31.3%	26.5%
	trading income, % 2000	14.6%	7.4%	15.1%	9.4%
	Other operating income, % 2000	6.3%	%9.6	9.5%	10.6%
Transformation function	net loans/customer & ST funding, % 2000	62.0	74.3	71.4	91.9
Cost structure	personnel cost / overhead, % 2000	56.3%	52.1%	58.3%	53.1%
Net interest margin	% 2000	1.50	2.23	1.26	1.83
CONDUCT					
Growth rate total assets	average annual % change 2000-1995	19.4%	21.0%	10.4%	17.1%
Growth rate operating income	average annual % change 2000-1995	18.6%	21.3%	8.6%	15.1%
Growth overhead	average annual % change 2000-1995	19.6%	19.5%	8.8%	14.6%
Growth personnel cost/overhead	Growth personnel cost/overhead average annual change 2000-1995 (median)	-0.17	-1.00	-0.33	-0.25

net interest income (%)	average annual change 2000-1995	-2.43	-3.04	-3.69	-2.52
commission & fee income (%)	average annual change 2000-1995	0.56	1.20	1.11	1.11
trading income (%)	average annual change 2000-1995	1.58	86.0	1.83	0.87
Other operating income (%)	average annual change 2000-1995	-0.32	0.67	0.64	0.52
NIM	average annual change 2000-1995 (median)	-0.06	0.01	-0.12	-0.08
Risk coverage	loan loss provision/net interest margin, % 2000	7.2	15.1	20.9	15.5
	average annual change 2000-1995	-1.5	-0.3	-1.3	-0.5
PERFORMANCE					
ROE	average 2000	19.9	17.6	10.6	14.4
	average annual change 2000-1995 (median)	0.79	98.0	1.62	69.0
Operational ROE	average 2000	20.4	24.4	15.8	20.4
	average annual change 2000-1995	-0.43	0.48	-0.26	-0.18
ROA	average 2000	0.91	0.91	0.40	0.74
	average annual change 2000-1995	60.0	80.0	90.0	0.07
Cost to income ratio	average 2000	68.5	61.1	74.1	61.7
	average annual change 2000-1995 (median)	80.0	-1.31	-0.07	-0.50
Productivity	total operating income/employees (2000, th EUR)	225.6	149.6	181.2	197.9
	avg. annual change in productivity (2000-1995, th EUR, median)	8.8	4.3	7.7	7.6
	net operating income/employees (2000, th EUR)	62.5	57.9	45.2	9.99
	avg. annual change in net productivity (2000-1995, th EUR, median)	1.8	4.3	2.4	3.2

Source: Bankscope based on the available annual accounts, own calculations.

Note: If the std. Deviation for the annual % change ratio's is larger than the mean for 3 out of 4 cases,
the mean is replaced by the median in order to eliminate the effect of outlayers.

Cross-Border M&A: Deutsche Bank, UBS, HSBC, ING, CSG, ABN Anno, Barclays, Fortis, Dexia, Nordea
Domestic Mergers: Hypo-Vereinsbank, BNP Paribas, RB of Scotland, BSCH, BBVA, IntesaBci, Abbey National, Lloyds TSB, Unicredito, KBC, San Paolo IMI
Steady State: Crédit Agricole, Dresdner, SG, Commerzbank, Westdeutsche LB, Rabobank, Crédit Lyonnais, Banca di Roma
Top 100: based on the available 2000 data in Bankscope

The most striking element is the combination of a relatively high CTI with a strong ROE (see also figure 4.1):

- the cost to income ratio (68.5%) is substantially higher than the European average and came under pressure between 1995 and 2000, again a logical result of the fact that average annual growth in net operating income (+18.6%) has been lower than average annual growth in overhead (+19.6%);
- the low and shrinking net interest margin (1.50) is largely compensated for by the search for commission and fee income (34%) and trading income (15%) in the total operating income. The already high percentage of commission income makes its growth potential lower than the European average (annual share increase of 0.6% in total operating income). The growth in trading income in the share of total operating income was almost two times higher than the European average;
- the balance structure on the asset side indicates a shift to short term liquid financial market products and interbank operations (which is a lowmargin, but also a low-cost, business¹⁹);
- the major shift away from traditional intermediation in towards fee-based activities superficially increased overall productivity but had a negative impact on the cost control. Corrected for overhead, operational productivity was almost comparable to the domestic M&A group.

As the search for other non-interest income will be maintained in the years to come, these banks will likely continue to expand their geographical differentiation and diversification (cf. M&A activity of European banking groups in the US, Latin America and Eastern Europe), as competition with the efficient domestic strongholders is fierce. Also risk diversification and market power will play a prominent role in the future M&A strategy.

Steady state banks seem to emerge at the lower end of the spectrum of European banking efficiency:

- the cost to income ratio (74.1%), profitability (average ROE of 10.6% and ROA of 0.4% in 2000) and productivity diverge substantially from the two other reference groups and from the European average;
- a large shift to commission income (share of 31.3% in total operating income) and trading income (15.1%) cannot prevent the cost to income ratio from still being at a non-competitive level;

¹⁹ Hurst, Perée & Fischback, EIB Papers, Volume 4, No 1, 1999

- intense competition and consolidation seem to put the net interest margin (1.26) under continued pressure;
- the need for risk coverage (loan loss provision divided by the net interest margin) by the steady-state group is substantially higher. This indicates that the risk is not being properly remunerated by margins, but it also has a signalling function on the average credit quality of the asset base.

Following the literature which indicates that on average more efficient firms acquire less efficient firms (Calomiris 1999, Rhoades 1998, Berger 1998), it is likely that inefficient steady-state banks will not play a leading role in the European consolidation process, unless as a potential target. In the course of 2001, several banks from this group were involved in acquisition deals/talks or indicated that they are searching for a partner.

Because of the relatively limited number of observations, the results do not permit statistically valid generalisation. They should therefore be interpreted with caution, as they imply a number of caveats:

- recent cross-border M&A may have as a disadvantage that the efficiency gains emerge only slowly. (cf. although the FORTIS merger dates from 1998, only recently has surplus capacity been tackled);
- the full impact of the introduction of the euro has not yet been captured by the data;
- new technology may change cross-border delivery channels as it allows banks to side-step

"...The usual measure for bank efficiency is the cost-to- income ratio... Adverse economic conditions affect the cost to income ratio in the sense that banks do not have total control over their income streams whilst labour laws in many continental European countries hinder staff reductions and productivity improvement on the cost side. In addition, M&A activity can add to costs in the short term before all the efficiency savings or/and increased revenue streams are worked through. In addition various income sources, such as those from trading activities are also notoriously volatile. Thus, recent increase in the cost to income ratio are just as likely to reflect trends in earnings rather than costs... (Casu & Molyneux, 2000)

regulations. But new technology also lowers the cost of obtaining and processing information as well as allowing non-banks to provide banking services;

transfer pricing related to foreign branches and capital gains from shareholding and insurance activities may artificially improve the result for the cross-border group;

- potential domestic M&A cost savings could be cannibalised by shrinking interest margins, lower fee and service charges as a result of intense competition;
- merger success or failure may also partly be determined, as the SCP framework suggests, by local regulatory and business factors.

5 Case studies from the Benelux countries and Scandinavia

5.1 Four significant cases: ABN-AMRO, ING, FORTIS, NORDEA.

From the intense M&A activity, both domestic and cross-border, that occurred in the Benelux area and in Scandinavia in the Nineties, finally four top financial conglomerates have emerged: ING (Group and Bank, including the Belgian BBL), ABN-AMRO, FORTIS (Group and Bank) and NORDEA.

The present chapter is devoted to a more detailed analysis of these cases. For this analysis, we use the same conceptual and statistical framework as in the analysis of the 100 top European banks²⁰. In the clustering exercise about the track record of these banks, our four cases belong to the cluster of important banks featured by *cross-border M&A* (see table 4.4).

In our opinion these cases are quite relevant for the overall analysis in our study:

- They deal with important financial groups at the European and even at the world level. In the bank ranking of *The Banker* for the year 2000, ABN-AMRO and FORTIS are #1 in their own country and ING is #2; in the European ranking they score respectively 8, 21 and 11 (ING Group) and in the world banking ranking, respectively 17, 39 and 24. NORDEA, although smaller (26th in the European and 48th in the world ranking) is in banking #1 in Finland, #2 in Denmark and Norway, #2–3 in Sweden.
- Their banking experience is highly representative of the problems of big banks in small countries with mature domestic markets (the *big banks/small country syndrome*). As domestic consolidation goes on and the average size of banks increases, more and more banks will have to face that challenge, the more so because national and European authorities have become more wary about domestic market dominance by some large entities (cf. the discussion in the U.K. about the planned purchase of Abbey National by LloydsTSB).
- Comparing the four cases highlights diverging cross-border strategies:
 - ABN-AMRO: cross-border activity by acquisitions within industry (banking with emphasis on wholesale transactions: corporate finance, capital market operations and asset management).

²⁰ For this reason our figures, based on the Bankscope database, may show slight differences with those presented in the publications of the companies themselves.

Table 5.1: SCP Framework for ING, ABN-AMRO, FORTIS and NORDEA

CRITERIA	RATIO		ING		ABN- AMRO	FOR	FORTIS	NORDEA	Reference Group (average data)	e Group e data)
		ING Groep	ING Bank	BBL		Fortis Groep	Fortis Banking		Steady State	European Top 100
STRUCTURE		-								
Country bank ranking (source: The banker)	banker)	2	ı	1	1	-	ı	1	4	6
European bank ranking (source: The banker)	e banker)	11	ı	ı	∞	21	I	56	I	I
World bank ranking (source: The banker)	anker)	24	ı	1	17	39	ı	48	29	183
Size	total assets (mio EUR, 2000)	650,172	406,393 124,120	124,120	543,169	432,447	337,071	337,071 226,064	373,098	190,438
Employment	2000	92,650	59,860	15,302	113,392	62,881	1	32,218	ı	ı
Equity	mio EUR, 2000	28,981	17,158	3,870	19,129	18,843	11,562	11,508	1	1
Soundness	capital/assets, % 2000	4.5	4.2	3.1	3.5	4.4	3.4	5.1	4.0	5.1
	capital adequacy ratio, % 2000	n.a.	10.8	12.1	10.4	n.a.	11.8	9.4	10.6	10.7
Balance structure	customer loans/total assets, % 2000	37.96%	%6.09	44.0%	28.8%	37.5%	4445%	57.2%	47.1%	54.3%
	customer deposits/total assets, % 2000		45.8%	50.2%	56.3%		53.6%	46.6%	41.9%	47.5%
Income structure	net interest revenue, % 2000	29.5%	53.1%	50.1%	52.2%	47.3%	52.3%	63.6%	47.5%	57.1%
	commission & fee income, % 2000	n.a.	33.0%	28.1%	32.6%	n.a.	26.7%	27.8%	31.3%	26.5%
	trading income, % 2000	n.a.	13.9%	12.0%	8.7%	n.a.	13.9%	7.3%	15.1%	9.4%
	Other operating income, % 2000	n.a.	n.a.	10.1%	6.5%	n.a.	7.1%	3.7%	9.5%	10.6%
Transformation function	net loans/customer & ST funding, % 2000	71.0	88.1	50.0	78.4	57.1	54.5	96.4	71.4	91.9
Cost structure	personnel cost / overhead, % 2000	n.a.	55.6%	46.8%	56.7%	n.a.	53.6%	53.6%	58.3%	53.1%
Net interest margin	% 2000	1.00	1.65	1.47	2.00	1.64	1.38	2.27	1.26	1.83
CONDUCT										
Growth rate total assets	average annual % change 2000-1995	31.3%	27.5%	12.2%	16.2%	13.3%	11.0%	n.a.	10.4%	17.1%
Growth rate operating income	average annual % change 2000-1995	18.0%	21.2%	10.0%	18.0%	12.7%	8.0%	n.a.	%9.8	15.1%
Growth overhead	average annual % change 2000-1995	18.5%	23.8%	9.5%	19.3%	11.7%	6.3%	n.a.	8.8%	14.6%
Growth personnel cost/overhead	average annual change 2000-1995	n.a.	1.50	-2.50	-0.20	n.a.	-0.70	n.a.	-0.33	-0.25

CRITERIA	RATIO		ING		ABN- AMRO	FOF	FORTIS	NORDEA	Reference (averag	Reference Group (average data)
		ING	ING	BBL		Fortis	Fortis		Steady	European
		Oroep	Бапк			uroep	Banking		State	10p 100
net interest income (%)	average annual change 2000-1995	-2.0	-4.2	-2.5	-2.3	-4.3	-2.0	n.a.	-3.69	-2.52
commission & fee income (%)	average annual change 2000-1995	n.a.	2.5	2.0	1.3	n.a.	2.0	n.a.	1.11	1.11
trading income (%)	average annual change 2000-1995	n.a.	2.2	0.0	0.7	n.a.	0.0	n.a.	1.83	0.87
Other operating income (%)	average annual change 2000-1995	n.a.	-0.8	0.7	0.7	n.a.	0.7	n.a.	0.64	0.52
NIM	average annual change 2000-1995	-0.17	-0.24	-0.08	-0.01	-0.13	-0.10	n.a.	-0.12	-0.08
Risk coverage	loan loss provision/net interest margin, % 2000	7.9	6.9	9.3	9.9	4.9	7.2	2.1	20.9	15.5
	average annual change 2000-1995	-1.9	-1.6	-0.5	-1.5	-1.7	-2.5	n.a.	-1.3	-0.5
PERFORMANCE										
ROE	average 2000	37.3	12.5	21.6	14.9	17.4	15.8	18.4	10.6	14.4
	average annual change 2000-1995	7.07	0.29	1.79	0.53	1.43	0.53	n.a.	1.62	69.0
Operational ROE	average 2000	13.9	12.5	22.9	25.4	18.0	24.0	17.7	15.8	20.4
	average annual change 2000-1995	0.11	-1.83	-0.38	0.44	-0.09	-1.28	n.a.	-0.26	-0.18
ROA	average 2000	2.12	0.52	89.0	0.55	0.75	0.54	0.95	0.40	0.74
	average annual change 2000-1995	0.36	0.01	90.0	0.01	0.08	0.04	n.a.	90.0	0.07
Cost to income ratio	average 2000	9:9/	80.5	72.0	73.0	74.6	65.8	58.2	74.1	61.7
	average annual change 2000-1995	0.42	1.47	-0.48	0.81	-0.69	-1.10	n.a.	-0.07	-0.50
Productivity	total operating income/employees (2000, th EUR)	185.5	183.8	206.7	158.9	212.4	n.a.	151.8	181.2	197.9
	average annual change in productivity (2000-1995, th EUR)	4.7	7.7	13.6	8.8	16.9	11.4	n.a.	7.7	7.6
	net operating income/employees (2000, th EUR)	43.4	35.8	58.0	42.9	53.9	n.a.	63.4	45.2	9.99
	average annual change in net productivity (2000-1995, th EUR)	-0.9	-0.7	3.6	1.3	3.8	5.7	n.a.	2.4	3.2

Source: Bankscope, The Banker, annual reports, own calculations.
Cross-Border M&A: Deutsche Bank, UBS, HSBC, ING, CSG, ABN Amro, Barclays, Fortis, Dexia, Nordea
Top 100: based on the available 2000 data in Bankscope
Note: All data based on the available consolidated data in Bankscope.

- ING: Cross-border activity mainly by acquisitions cross-industry (insurance/banks).
- FORTIS: Cross-border activity through mergers cross-industry (insurance/banks).
- NORDEA: a mixture of cross-border mergers and acquisitions within and cross-industry (banks/insurance).

In this chapter, we first analyse each of the four cases separately from (i) the historical background and more specifically their cross-border activity in the Nineties and in the first years of the present decade, and (ii) their present profile and their strategy for the near future, taking also in consideration the 2001 results. Afterwards, we make an attempt to draw conclusions and to derive lessons from these cases by comparing and evaluating them, in the light of prospective developments at the European level.

5.2 A closer look at ABN-AMRO

☑ Historical background and the developments up to the first years of the present decade.

The present ABN-AMRO was formally set up in 1991 by the merger of ABN Bank and AMRO Bank. However, as emphasised by De Leeuw (1996), both components have been involved in a "continuous process of mergers and acquisitions", which spread over more than 300 years. After World War II the main events have been (Abraham, 1998 and 1999):

- In 1964, the merger of the Nederlandsche Handelsmaatschappij (1824) with the Twentsche Bank (1861) to constitute the Algemene Bank *Nederland* (ABN).
- Also in 1964, the merger of the Amsterdamsche Bank (1871) and the Rotterdamsche Bank (1863) to become the AMRO Bank.
- As mentioned above, in 1991, the merger between AMRO and ABN, which took place after an unsuccessful attempt of AMRO to merge with the #1 in Belgium: the Generale Bank.

According to J. Kalff, at that time Chief Executive of ABN-AMRO (interview in Euromoney, 1997), the merger was "a marriage of necessity". The dominant idea was that the growth potential of a Dutch bank was rather limited by its mature domestic market and that it had to be found outside the Netherlands. So, the combined number of branches in the home country has been progressively reduced by more than one half, from 1429 in 1992 to 703 at the end of 2001.

On the international front, a strong worldwide penetration has been based on autonomous growth, reinforced by cross-border acquisitions and joint ventures.21

Up to the record year 2000, the ABN-AMRO strategy and developments can be summarised as follows:

- As a matter of principle, no significant involvement in bancassurance,
- Universal banking, retail and wholesale, with a growing emphasis on wholesale banking, particularly outside the 'home markets',
- Worldwide expansion, but with variable success. In Europe, ABN-AMRO has not succeeded in acquiring significant market shares outside Italy. The attempts to capture a strong position in France (bid for CIC) and in Belgium (Generale Bank) were complete failures. In the latter case (1998), the failure of the ABN- AMRO bid, in spite of a favourable attitude of the management of the Generale Bank, was due partly to the resistance of Belgian financial and political circles against the quite undiplomatic and
 - ²¹ The main transactions which have shaped the present profile of ABN-AMRO are:
 - 1979: Acquisition by AMRO of the LaSalle Group, which is now the second banking group in the Chicago area. This acquisition has been the starting point for building an ABN-AMRO network in the US, mainly in the Midwest. This network has been substantially strengthened by the 1997 acquisition of the Standard Federal Bancorporation, which owns the Standard Federal Bank and by the 2000 acquisition of the Michigan National Corporation. This bank, the largest savings bank in its state, has been merged with the Standard Federal Bank. On the contrary, to partly finance this acquisition and that of the Alleghany Investment bank, ABN-AMRO sold its European American Bank, mainly active in the NewYork area, to Citibank (2001).
 - 1996: A joint venture with Rothschild for primary market equity business.
 - Also in 1996, acquisition of an 8,76% stake in the Banca di Roma (#4 in Italy), which has been progressively increased to 10.2 %. This penetration into Italy has been reinforced by the 2001 acquisition of a stake, up to 13%, in Banca Antonveneta (#8). Previously ABN-AMRO had contributed to finance the acquisition by Antonveneta of the Banca Nazionale dell'Agricoltura and had engaged in a 50-50% joint venture with Antonveneta in the field of asset management. This slow and careful penetration in Italy is expected to turn this country into the fourth 'home' market of ABN-AMRO, after the Netherlands, the US Midwest and Brazil.
 - Late in 1998, acquisition of the Banco Real in Brazil, a transaction which provided ABN-AMRO with 5% of the Brazilian retail banking market. In this way Brazil became the third homemarket of ABN-AMRO.
 - Early in 2001, acquisition of an important part of the activities of ING Barings in New York. This proved to be a major mishap when in March 2002 ABN-AMRO decided to close its activities on American domestic equities and on domestic M&A in the US.
 - Meanwhile a network has been set up, with variable success, in the Asia/Pacific region (purchase of the Bank of Asia in Thailand (1998) and of consumer banking interests in India, Singapore and Taiwan (1999). But activities had to be scaled down in Japan, particularly in the securities business. This restructuring met with considerable local protest.
 - Other disinvestments have been planned in countries outside the home markets with unfavourable profits and weak prospects of acquiring a significant position and a significant market share.

- aggressive "Anglo-Saxon" style of the ABN-AMRO intervention. Taught by that experience, penetration into Italy proceeds more smoothly²².
- Strong Dutch predominance in leadership and organisation, even after employment and revenue from abroad had become larger than that of the Netherlands division.
- Strong impact of leading persons, especially of the successive Presidents (R. J. Nelissen, P. J. Kalff and now, in a more aggressive style, R. W. J. Groenink). Differences in character and outlook have had a significant impact on the overall ABN-AMRO policy.

Because of its worldwide consolidation (including volatile markets and countries) and, even more, by its concentration on wholesale banking, ABN-AMRO was badly hit by the 2000–2001 economic and financial downturn, which was reinforced by the aftermath of the September 11 events. In October 2001, it had to issue a profit warning about the prospective 2001 results. The effective results, published in February 2002, showed a reduction by 23.5% of the operating profit before taxes and of 23.7% of net profit²³, mainly due to huge provisioning for loan losses and rising expenses in a year of stagnating revenues. A restructuring plan was set up in the Netherlands, with a cut of 6,250 jobs and, in order to reduce risks, the securitisation of about 30,000 loans, mainly to small and midsized Dutch businesses. Abroad, ABN-AMRO is withdrawing from about 11 countries and is discontinuing parts of its operations (mainly retail) in a number of other countries. For the US, where ABN-AMRO is the largest foreign bank according to total assets, it announced, in March 2002, a substantial restructuring of its wholesale banking business: activity in US domestic cash equities and in US domestic M&A is being closed, leading to a loss of approx. 550 jobs.

☑ Present profile and strategy for the near future.

Table 5.1 highlights some of the typical features of ABN-AMRO in the record year 2000, as compared with the average of the 100 top European banks and with the average of the Cross-Border Group, which can be considered as a peer group:

²² On the occasion of the acquisition of a significant stake in Antonveneta (2001), J.M. De Jong, Executive Director of ABN-AMRO, did not deny that they had learnt from the 'Belgian lesson' and that, when taking steps in Italy, they care to have the assent of everybody of importance in the country, inclusive the Italian government.

²³ Net profit excluding some extraordinary results.

- Largest Benelux financial enterprise of banking stricto sensu in employment (> 110,000) as well as total assets (543 bn. EUR) and equity (19 bn. EUR),
- Average capital adequacy ratio (10.4%), similar to the average of the top 100 but lower than the peer group average,
- Credit-oriented institution: balance sheet structure characterised by much higher proportion (59%) of customer loans in total assets than the peer group and the top 100 average,
- Hence, importance of intermediation: higher proportion (52%) of net interest revenue in total operating income than the peer group, but less than the top 100 average. This is strengthened by a favourable net interest margin (2%),
- Rapid growth (18% a year) of operating income in the period 1995–2000, but even faster (19%) increase of overhead costs,
- Hence, unfavourable cost to income ratio (73%), even compared with the high peer group average, which reflects a low productivity per employee,
- As a final result, lower Return on Equity (14.9%) than the peer group, although similar to the 100 top average.

In view of this mixed position, a new strategy was designed in 2000 and was initiated from January 1, 2001 onwards, under the strong impulse of the new President Groenink. It aimed at reducing, if not eliminating, universal banking (doing everything everywhere) in favour of more focused activities, mainly wholesale banking and asset management, which were deemed to offer brighter prospects in the light of the new governing objective: maximising shareholders' value.

The existing semi-geographical, semi-functional organisation in four divisions (The Netherlands, Foreign, Investment Banking, Resource Management) has been replaced by a structure of three largely autonomous, customer-oriented and globally-organised Strategic Business Units (Wholesale Clients, Consumer & Commercial Clients, Private Clients & Asset Management). This strategy was set up in a perspective of focused profitable growth, organised on a worldwide basis, with a reinforced emphasis on wholesale, and accelerated expansion in the home markets. In Europe, penetration by significant crossborder mergers or acquisitions was even explicitly suggested.

The performance was to be measured by the total return to shareholders, as compared to the corresponding value of a peer group of 20 competitors (see table 5.2), the target for ABN-AMRO being to belong to the top 5 of this peer group by the end of 2004.

Table 5.2: The ABN-AMRO share and its peer group

12 June 2002

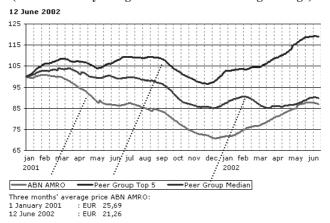
1	Barclays	126,2
2	BNP Paribas	125,2
3	Spcoete Generale	123,8
4	Bank One	121,1
5	Lloyda TSB	119,0
6	Wells Fargo	111,1
7	Fleet Boston	103,4
8	UBS	99,1
9	Citigrout	91,8
10	BSCH	90,3
11	JP Morgan Chase	89,5

12	HSBC	88,6
13	BBVA	86,6
14	Nordea	84,5
15	Deutsche Bank	82,7
16	Credit Suisse	76,0
17	ING	74,5
18	Merrill Lynch	73,9
19	Morgan Stanley	70,0
20	HypoVereinsbank	65,9
	ABN AMRO (13)	87,0

Average of three months previous to 1 January 2001 = 100.

Source: ABN-AMRO website

Figure 5.1. ABN-AMRO peer group TRS tracker (measured daily using a three months' moving average)



Source: ABN-AMRO website

Unfortunately, this strategy had to be initiated in a climate, not of regular and sustained growth but of US and worldwide recession, and of international political instability after the September 11 events. The bad luck was that these unfavourable developments just hit what the new strategy considered the most promising activities and markets: wholesale banking and home markets outside the Netherlands. As mentioned above, considerable loan loss provisions had to be made. The index of the ABN-AMRO share, instead of rising gradually to the top 5 of the peer group, did not only lag considerably behind the top but, for several months after the September 11 events, also behind the median of the peer group. It started to recover at the end of 2001. However, from the second quarter 2002 on, the improvement first slowed down

and was afterwards stopped by deteriorating business and stock markets conditions, culminating in the July-August stock exchange crisis.

In these conditions, the emphasis had to be shifted to cost cutting, to compensate for the stagnation of revenue and for loan losses. This cost cutting also had to be applied to activities, which resisted to the downturn much better than the glamorous new strategy operations. Hence a climate of internal uncertainty developed, which probably stimulated many staff members to react positively to the opportunity and the financial incentives of the programme of early voluntary retirement.²⁴

This experience shows how unexpected developments and events can impair a long-term strategy that focuses too much on activities with an outspoken cyclical profile. The trade-off between efficiency and stability also exists in this field. Mutual compensation between activities of different profile and profitability is unavoidable in difficult times and limits the alleged autonomy of the various strategic units. It should even be deemed a comparative advantage of a well-balanced conglomerate that it has relatively more scope for such compensations. No wonder that ABN-AMRO is actually softening its profile by stressing asset gathering, among others by cooperation between SBU Consumer & Commercial Clients and SBU Private Clients & Asset Management.

All this has also to be applied to merger and acquisitions activity. At first sight, the large and diversified base of a big financial institution allows it to continue with such activity, even in difficult times, when new opportunities may appear²⁵. However, this demands robustness and constancy of action.

5.3 A closer look at ING

If Historical background and developments up to the first years of the present decade.

The ING Group also originates from a domestic merger. In 1991, shortly after the regulatory interdiction of conglomeration between banks and insurance

²⁴ As announced on January 16 2002, the day after the expiration date for reacting, 6,673 persons expressed their intent to make use of this programme. This means that the targeted cut of 6,250 jobs will be most probably reached without major social difficulties. Additional recruitments had to be organised temporarily to fill some vacancies.

²⁵ According to a rather cynical saying attributed to Ad Jacobs, former President of ING: one has to shoot the birds when they are flying low'.

companies had been lifted in the Netherlands, the leading insurance company Nationale-Nederlanden and the NMB Postbank Group merged to become the Internationale Nederlanden Groep (ING). Both partners were themselves products of previous mergers²⁶.

In a recent interview the present President of the Group (Ewald Kist, 2001) recalled that the main rationale for this deal had been that the insurer had substantial money but insufficient distribution channels, while the bank had distribution facilities and many plans, including expansion abroad, but ... no money. In that respect the merger was bancassurance from the outset: the basic consensus was that the insurer's money could and should be used for expansion on a worldwide basis and not only for the small and mature Dutch market.

In the Nineties, a worldwide expansion occurred, not only in industrialised countries, but also in a number of emerging countries in Latin America, Asia and Central Europe. Many acquisitions took place as an accelerating support of autonomous growth.²⁷

²⁶ Nationale-Nederlanden originated in 1963 from the merger between the Nationale Levenverzekering-Bank (1863) and the insurance company De Nederlanden (1845). The NMB Postbank Group originated in 1989 from the merger of the Nederlandsche Middenstandsbank, which was primarily oriented towards small businesses and the Postbank, whose roots were in the state postal and postcheque service. These origins from outside wholesale and corporate banking - and quite different from ABN-AMRO's - still have their impact on the tradition and the present strategy of the ING Group.

²⁷ Among the more important acquisitions one may list:

^{• 1995:} acquisition of Barings Brothers and Co, the U.K. merchant bank, which had run into difficulties after a trader's scandal on its premises in Singapore. The acquisition by ING did not put an end to Barings problems, with the ultimate result that the activities of Barings had to be scaled down: in 2000 the US activities were sold and the remainder has been integrated into the wholesale activities of ING Europe.

^{• 1997:} after years of Belgian resistance, acquisition of Banque Bruxelles Lambert (BBL), the #3 bank in Belgium, with a network of about 950 (now about 1000) branches in Belgium and extensive international operations. By this acquisition Belgium has become the second home market for ING, BBL keeping its legal status, its own brands and most of its administrative organisation. As ING did not have an extensive network in Belgium before the acquisition, no drastic reduction of the retail network had to be organised. From 2000 on, ING activities in the Netherlands and in Belgium have been integrated into ING Europe, BBL heading the group of South Western Europe.

^{• 1999:} acquisition of BHF-Bank in Germany.

^{• 2000:} acquisition of the American insurance companies ReliaStar, Aetna Financial Services and Aetna International. However, in France, the ING takeover bid for Credit Commercial de France (CCF) was unsuccessful.

^{• 2001:} acquisition of the Bank Slaski in Poland and of the Mexican insurer Seguros Comercial America.

As a result of all these operations, ING has evolved, in ten years, from a domestic bancassurance scheme into an international financial services conglomerate, characterised by:

- A combination of banking, insurance and asset management ("We are *not* a bank!", E. Kist, 2001),
- A rather loosely knit, but worldwide network, with accents differing from one region to another: much banking in Western Europe, much (life) insurance in the Americas etc,
- A 'multi-national' approach with much adjustment to local, regional and national conditions, much responsibility entrusted to local directors, and integration of foreign leading professionals in the top of the organisation,
- A multi-channel approach: bank branches, insurance agents and also successful Direct Banking,
- A strong involvement in ethical and societal issues; ING definitely holds the stakeholders' view in corporate governance,
- As a consequence of its presence in many emerging markets and of some unfortunate episodes, such as Barings, some reputation of 'appetite for risk'.

The 2000-2001 downturn also badly hit the ING Group, not only on the banking but, unexpectedly, also on the insurance side, which used to be and still is the stabilising component of the conglomerate. It was bad luck that the recently acquired ReliaStar insurance company was rather heavily involved in insurance and reassurance of risks related to the World Trade Center in New York. The September 11 events led the ING Group to have about 600 million EUR of claims which will end up in an after tax loss of about 100 million EUR. In October 2001, a warning that the ambitious medium term target of an increase of 12% a year in net profit per share would not be reached in 2001, was unfavourably received on the stock markets. The effective results, published end February 2002 show a quasi-stabilisation of the operational profit before taxation, insurance operations compensating, in spite of the 11 September losses, for the decline in banking business. Yet the overall net profit fell by more than 60%, because of the quasi-total disappearance of net extraordinary results, which were considerable the year before (cfr infra).

These developments have intensified the need for streamlining the organisation and for cutting costs. In the US the announced programme provides, besides non-salary cost cutting, a reduction of 1,600 job positions, i.e. about 15% of the ING workforce in the US.

☑ Present profile and strategy for the near future.

In the record year 2000, as compared to the reference groups of the 100 top European banks and of its peer group of the Cross-Border M&A Group, the ING Group stood out as (see table 5.1):

- A typical financial services conglomerate with a lower (38%) customer loans/total assets ratio and a much smaller proportion (30%) of net interest revenue in total operating income. But in banking activity alone these ratios do not differ much from those of ABN-AMRO, although the net interest margin of ING (1%) is only half that of ABN-AMRO. The combination of banking and insurance accounts for the difference at the Group level.
- An exceptionally fast grower as far as total assets are concerned (31%) a year in the period 1995-2000). This is presumably due to the importance of acquisitions. Indeed, operating income growth (18% a year) was similar to the average of the peer group and of ABN-AMRO.
- A high-cost conglomerate with much higher cost to income ratio (77%) than in either reference group. This is even more evident in the specific banking activity, also in Belgium (72% at BBL).
- An excellent provider of return to shareholders (ROE of 37%), at least in the record year 2000. This was due to capital gains by the sale of the CCF stake and in the insurance activity. Indeed, the operational ROE is much lower (14%) than in either reference group, especially in banking (but except for BBL).

In view of these features the ING strategy and organisation have been reviewed in the beginning of the new millennium but before the September 11 events, and reoriented in the following directions:

More ambitious profitability targets: an operational net return on shareholders' equity of at least 18% and an annual organic growth rate of at least 12% of the net operational profit per share. Unfortunately, the latter growth rate was impossible to reach in the year 2001 (effective increase of 5.3%). Additionally, the US Securities and Exchange Commission requested to book some unrealised losses on equities in the income statement, which, according to US accounting standards, reduced the 2001 profit by 630 million EUR.

The improvement in the first months of 2002 allowed anticipating that the first objective would be met for the full year, but that the second one won't. 2002 results will be bolstered by the realisation of capital gains, e.g. the sale of the (remaining) ING's participation of 2.7% in FORTIS, which, rather surprisingly, will be booked as ordinary operational profit. However, just as

- in the ABN-AMRO case, prospects darkened from Q2 2002 on, under the impact of deteriorating business and stock markets conditions.
- Streamlining: a search for more homogeneity and synergies: progressive introduction of a worldwide ING brand instead of the once 100 different brands in the Group, synergies in specific domains: integration of the Dutch business units of the Group into one customer-focused organisation with four divisions (retail, wholesale, intermediary and operations/IT), centralisation of investment management (creation of ING Investing Management Europe), reorganisation of the regional structure into three regions: ING Europe, ING Americas and ING Asia/Pacific; merger of several subsidiaries operating in the same domain (e.g. the merger of all subsidiaries of insurance in Belgium); last but not least, reduction and rationalisation of several ICT centres and platforms.
- Cost cutting: besides the recent US reduction programme, cost cutting is mainly pursued through disinvestments in non strategic and unprofitable entities, particularly in the Third World, and in Europe through synergies and regional restructuring.

For M&A activity, this reorientation puts less emphasis on acquisitions. One observes a 'digesting pause' but not a standstill of M&A. For example in January 2002, ING acquired the asset management activities of Deutsche Bank in France. Penetration into Latin America is being continued, despite the unstable political and economic situation in several countries. Developments in 2002 include the acquisition of a 49% interest in the Brazilian Insurance company Sul America and the acquisition of a 19.2% stake in *Banco Bital*, a leading retail bank in Mexico.

The overall experience of the ING Group is interesting in many respects:

• It highlights the complementary function of banking and insurance: its virtues and its limits. Conventional wisdom says that banking provides the driving force and the networks, whereas insurance brings the funds, the long-term view, the embedded value and the stabilising force. The domestic merger, which was the starting point of the worldwide expansion and of the fast growth of the ING Group, was based on that conventional wisdom, and on the whole it was successful (E. Kist in his 2001 interview²⁸).

Eventually, banking and insurance remain two different métiers, which puts a brake on integration and synergies. As FORTIS CEO Van Rossum put it in his Message on the 2001 results of his Group: "Integration of the banking

²⁸ "Our merger has been ten years of 'downs and up again'. The business cultures have frequently clashed. Only the bottom line of all these ups and downs has been very decent."

and insurance activities is a Herculean task". It is in life insurance that they are really part of the same family. In other domains of insurance they are subject to unexpected risks, which cannot be hedged on the basis of pure actuarial analysis. As the aftermath of the September 11 events has shown in the ING case, destabilising effects can also occur in insurance.

- It shows the vulnerability of fast growers to financial and environmental accidents. This fragility exists in most big financial institutions but it increases when too many acquisitions, in too many domains, in too many countries, weaken the control from top to bottom and prevent early and decisive intervention when, somewhere in the worldwide organisation, things are going wrong.
- It illustrates the dilemma which each conglomeration experiment has to face, particularly when this consolidation occurs on a cross-border basis: The conglomerate adjusts to local conditions, to national or local brands, which is certainly customer-friendly, but puts a brake on homogenisation and rationalisation, on economies of scale and scope and on synergies in general. Or it centralises and decides to act worldwide or per region, as one single homogeneous entity, which increases efficiency and lowers unit costs, maybe at the price of less customer-friendliness, lower quality of service, and lower motivation of local, regional or national professionals. The present structure of the ING Group, more so than ABN-AMRO's, is a compromise between the two approaches: three regional groups (in Europe, with subgroups) and one centralised asset management and private banking.
- Finally, ING shows how one of the most frequent flaws in cross-border consolidations, particularly when the conglomerate is led and dominated by a 'national champion', can be reduced, if not eliminated. After a M&A deal, directors and professionals from the periphery are often transformed into mere subordinates, barely good enough to transmit and execute the instructions and the orders of the head office. On the contrary, the ING Group succeeds in providing enlarged career opportunities to professionals from the periphery and has even opened the access to the top of the conglomerate to foreign (i.e. non-Dutch) nationals. At BBL in Belgium, there seem to be fewer complaints of demotivation than in other acquired subsidiaries of foreign financial institutions in Belgium, and even fewer than in the merger between equals in the FORTIS Group²⁹.

²⁹ In this respect, the 2000 and 2001 BBL reports were eloquent: they highlighted the enlarged career opportunities offered by the integration of BBL in the ING worldwide organisation and (of course) applauded the appointment of former BBL CEO, Michel Tilmant, as co-Chairman of ING Europe and Vice President of the whole ING Group.

5.4 A closer look at FORTIS

☑ Historical background and developments up to the first years of the present decade.

As in the ING case and in the same period, the FORTIS Group started, in 1990, with a merger between a Dutch insurer, AMEV, and a Dutch bank, VSB. However, the Belgian insurer AG joined the club very soon after. In this way, the FORTIS conglomeration project stands out as an experiment, which from the very beginning, had to face two challenges at the same time:

- The challenge of a cross-border Benelux merger between equals, combining at least two national cultures,
- The challenge of a *merger*, -not an acquisition where there is one company which takes over and the other which is taken over-, cross-industry, combining banking, insurance and related services, with their respective business cultures.

For a decade and up to December 2001, the strict 'bi-national' and 'egalitarian' principle has remained the basic principle underlying the legal structure, the corporate governance and much of the formal organisation of the Group:

- Two listed companies, one in the Netherlands (FORTIS NL) and one in Belgium (FORTIS B), mutually sharing, on a 50-50% basis, their respective equity, but represented on their respective exchanges, Amsterdam and Brussels, by separate, though economically linked, shares.
- Two distinctive Boards, but, at the end of the period under review, with the same composition,
- Two headquarters: Utrecht and Brussels,
- Two distinctive operating entities: FORTIS Bank, under Belgian law and FORTIS Insurance under Dutch law.
- And ... four main supervising authorities: two (banking and insurance separately) in each country.

Even in this intricate framework, internal and external growth has materialised. It occurred mainly through autonomous growth, supported and enlarged by basic strategic acquisitions in the Benelux countries and more niche acquisitions outside, both followed by strenuous integration of all related entities and activities.30

In an overview and an analysis of these developments, four features of the FORTIS experience until recently, stand out quite clearly:

- The FORTIS Group has remained a conglomerate more limited in size and geographical coverage than ABN-AMRO and ING. But it is more focused, both geographically (Benelux area) and functionally (bancassurance).
- In the period under review it has mainly concentrated on overcoming the limitations of two separate markets of small countries, by acquiring a strategic position in the whole Benelux area, by enlarging the concept of the home market³¹, and by trying to become the *Benelux champion*, or at least the Benelux reference. Whereas ABN-AMRO and (less so) ING already had a strong domestic base before starting cross-border expansion,

- 1993: in the framework of the privatisation of the most important bancassurance institution in Belgium, ASLK-CGER (Algemene Spaar- en Lijfrentekas- Caisse Générale d'Epargne et de Retraite), acquisition of a controlling interest, followed by the acquisition of the remainder in 1997 and 1999,
- 1995: acquisition, through ASLK- CGER, of the privatised SNCI-NMKN (Nationale Maatschappij van Krediet aan de Nijverheid- Société Nationale de Crédit à l'Industrie),
- 1997: acquisition of the Dutch merchant bank MeesPierson,
- 1998: acquisition of the #1 bank in Belgium, the Generale Bank-Générale de Banque, after a bitter contest of takeover bids with ABN-AMRO and in spite of the resistance of the management of the Generale Bank (cf. supra for more details, Abraham 1998 and 1999).
- 1999–2000: merger of the five banks of the FORTIS Group and introduction of the single denomination FORTIS Bank, replacing the own brands of Generale Bank, ASLK and VSR
- Insurance in the Benelux area:
 - 1991: acquisition of the Dutch insurer Interlloyd,
 - 2000: acquisition of ASR Verzekeringsgroep (Stad Rotterdam Verzekeringsgroep) and merger between ASR and AMEV, to acquire a leading position in Dutch insurance.
- Main transactions outside the Benelux area:
 - 1992: in Spain, joint venture with 'La Caixa' and acquisition of an important stake in two
 insurance subsidiaries of that joint venture: SegurCaixa (non-life) and VidaCaixa (life).
 Penetration into Spain has been extended by the progressive acquisition of the bank Beta
 Capital, which was completed in 2000,
 - 1996-2001: a series of acquisitions but also disinvestments of insurance interests in specific market segments in the US and the U.K. (in particular, the takeover of the American Bankers Insurance Corporation (ABI), completed in 1999, and the merger of this insurance company with the American Security Group to become Assurant, the biggest business unit of FORTIS in the US,
 - 2001: penetration in Asia: A joint venture with Maybank in Malaysia, a life insurance partnership with the China Insurance Group and a strategic alliance with Haitong Securities in Shanghai.

³⁰ As far as M&A activity is concerned, the main transactions can be summarised as follows:

[•] Banking in the Benelux area:

³¹ In the introduction of the 2001 Report: Benelux, our home market...

FORTIS had to build that base by a series of difficult acquisitions and afterwards by much effort at integration and streamlining.

- Expansion outside the Benelux area has remained limited but well focused as far as countries and activities are concerned: insurance in the US and the UK, a mix of banking and insurance in selected countries of Western Europe (Spain, France...).
- Throughout the whole period, FORTIS has remained a 'bi-national' merger between equals, with the permanent concern of maintaining equilibrium between the two partners. This equilibrium has been fostered by the co-operation and the co-chairmanship of two outstanding leaders: the Dutchman Hans Bartelds and the Belgian Maurice Lippens. As the former retired from February 1 2002 on, the question rises whether the merger-between-equals principle will and should survive its initiators. Already now, FORTIS is being more and more organised and run as a single company with a single CEO (Anton Van Rossum), a single Executive Committee, and six businesses, set up on a functional crossborder basis, except for insurance³².

Thanks to its concentration on Benelux, FORTIS has initially been hit less by the US recession and the aftermath of the September 11 events. But it could not escape the impact of the Enron disaster. In December 2001, the Group announced that the target rate of at least 15% on ROE would be reached, also for 2001, but that the increase in the net profit per share would be much lower than the *target* rate of 12%. The effective results, published in March 2002, show, accordingly to the announcement, a ROE of 17.9% but a decrease by 10% of the net profit per share. The operating result before taxation dropped both in insurance (-6%) and in banking (-4%). Overall net profit diminished by 6%.

The situation improved quite substantially in the first months of 2002. In the first quarter net profit rose by 7%, as compared to the corresponding quarter of 2001. This was mainly due to the banking business where integration and restructuring efforts started to pay off. This induced the CEO to declare that "barring unforeseen circumstances, FORTIS is expected to meet its financial target of an increase in net operating profit per share of at least 12%...". This hope vanished in the wake of business and stock markets developments from

³² The six businesses are: Network Banking, Merchant Banking, Private Banking / Asset Management, Insurance Belgium and International, Insurance Netherlands, Insurance United States.

Q2 2002 on. In July 2002, Fortis had to issue a profit warning mentioning that "for the first time in FORTIS' history, the market value of the equity portfolio has fallen below purchase value and unrealised losses had to be charged to operation profit".

☑ Present profile and strategy for the near future.

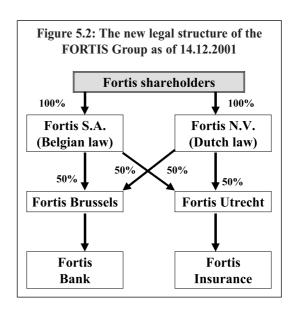
Again we try to derive from the 2000 data in table 5.1 the profile of the FORTIS Group as compared to the average of the 100 top European Banks, to the peer group 'Cross-border M&A', but also to its immediate competitors ABN-AMRO and ING:

- Although much smaller than ABN-AMRO and ING, FORTIS belongs in our classification to the same peer group, but with significantly lower total assets than the average of this peer group. Nevertheless, these total assets are more than double the average of the 100 European Banks. It follows that also the FORTIS experience has more than a regional significance.
- As with ING, FORTIS displays the typical profile of a financial services conglomerate (banking, insurance, asset management and related services) with a lower (38%, exactly the same as ING) customer loans/total assets ratio than the peer group. But the proportion of net interest revenue in the total operating income (47%) is higher than the average of the peer group and much higher than in the ING Group. This is presumably due to a higher importance of banking than in ING, which in turn reflects the impact of the big bank takeovers in Belgium during the Nineties. It does not seem a coincidence that many ratios of FORTIS banking are quite similar to those of BBL in the ING Group, which illustrates the general banking conditions in Belgium (much intermediation, low interest margins) in the period under review.
- With the concentration of its assets and its activities in the mature economies of the Benelux area, FORTIS as a Group and particularly in banking has, in the period 1995–2000, grown more slowly in total assets (13% a year) and in operating income (idem) than its peer group and the average of the 100 European top banks, and much more slowly than its competitors ING and ABN-AMRO. But in contrast to these competitors, the growth of overheads (12% a year, 6% in banking) has been slower than that of operating income.
- In spite of a significant reduction in 1995–2000, the cost to income ratio was still very high (75% in the Group, 66% in FORTIS banking). As with its competitors, FORTIS was in 2000 a high-cost conglomerate, which is an issue of major concern, the more so as growth is relatively slow. The counterpart, however, is that its risk management is prudent and relatively

risk-averse, as illustrated by a remarkably low loan loss provision/net interest margin ratio (4.9% for the Group, 7.2% in banking), which significantly declined in the 1995–2000 period.

• Finally, its ROE in 2000, both total (17%) and operational (18%) was lower than its peer group and ING, but higher than that of ABN-AMRO and the average of the 100 European top banks.

Both structure and strategy were under review 2000-2001. In order to promote the image FORTIS among the financial investors and on the stock markets the two existing FORTIS shares were unified in December 2001, which required an impressive and complex legal reshufflement, wherein the duo FORTIS (NL) and FORTIS (B) has disappeared, to be replaced by an even intricate dualistic structure, imposed diverging corporate law and taxation in the two countries



concerned (see the figure 5.2 which presents the new legal structure). This could and should not be the end of the simplification and clarification process of the formal structure of the Group.

The official FORTIS strategy for the near future, as announced at the end of the year 2000, links up with current practice. It is far from revolutionary. It puts autonomous growth as a priority and sketches different approaches for three zones: the home market Benelux, Europe outside Benelux, the world outside Europe.

For Benelux, it favours a customer-oriented approach on the one side and internal streamlining ('synergies') on the other. For FORTIS Bank the streamlining aims at reducing the cost-income ratio from 65% in 2000 to 55% at the end of 2003 by an accelerated downsizing of the network which, in comparison with the late Nineties, will reduce the number of jobs by almost 4,000 and shrinking the number of branches from approximately 2380 (of which 2110 in Belgium) at the end of 1998 to approximately 1520 (of which approx. 1330 in Belgium) at the end of 2003.³³

A major event in the streamlining was, in September 2001, the migration to a single network IT platform in a unique Big Bang weekend operation.

In Europe outside Benelux, FORTIS seeks to penetrate into promising segments of banking and insurance, which would potentially contribute to fostering FORTIS market leadership in Europe. As in many cross-border business plans, private banking, asset management next to employee benefits and bancassurance are quoted.

Outside Europe, FORTIS will continue to search for niches where it can acquire a leading position. Existing participations, which do not correspond to these criteria, have been or will be sold (e.g. FORTIS Australia in 2001). The basic underlying question is whether this programme can be implemented by mere autonomous growth. Size has become a critical issue, also for FORTIS. In this respect, the new CEO attracted widespread attention when, in June 2001, he mentioned in an interview that in the next three years the FORTIS Group had, for a merger between equals, to find a partner with a strong presence in large markets in Europe, preferably Spain, France and Germany. Afterwards, this intention has been repeated several times. Now, however, its realisation seems to be made more dependent on better business conditions and on progress in internal integration and restructuring at FORTIS itself.

5.5 A closer look at NORDEA

☑ Historical background and developments up to the first years of the present decade: the Scandinavian banking crisis generates the Nordic idea.

In contrast with what we noticed in the three previous cases, where the driving force was the need to overcome the limitations of a national domestic market in a perspective of growth, the formation of NORDEA was indissolubly linked with crisis conditions, more specifically the Scandinavian banking crisis of the early Nineties.

³³ At the end of March 2002, the network still comprised 2102 branches (of which 1880 in Belgium), which means that much work has still to be done to reach the target.

Driven by the deregulation of the financial markets in the '80s and by favourable macroeconomic developments, a majority of the Scandinavian banks took an increased risk and lending profile to cope with the new competitive environment. This ultimately resulted in a negative outcome and an

Table 5.3: Numbe countri	er of banlies (1985		Nordic
	1985	2000	% change
Finland	654	347	-47%
Denmark	166	102	-39%
Norway	150	99	-34%
Sweden	543	117	-78%
Nordic countries	1513	665	-56%

extensive banking crisis in 1991-1993. Banks in Finland, Norway and Sweden (to a lesser extent in Denmark) recorded substantial credit losses. After large public support, issuing general guarantees and even bailing out some of the banks, the banking industry in the Nordic region was bound to restructure (Lindblom, 2001/Koskenkylä, 2001).

After the banking crisis in the Nordic countries, the domestic banking concentration rocketed as it was marked by many banking M&As. Several analysts argue that from this banking crisis and the consequent early necessity for a domestic consolidation process, restructuring, cost cutting, capacity reductions and the introduction of new technologies, a competitive advantage emerged for the Nordic banks. This process, combined with the fact that the whole Nordic region was increasingly considered as the home market, more than halved the number of banks in the Nordic countries from 1,513 in 1985 to 665 in 2000 (see table 5.3).

The formation of NORDEA³⁴. a four-nation universal bank and bankinsurer, has been the exponent of this rapid and successful pace of domestic and cross-border consolidation (see figure 5.4 for a brief history). The idea of a pan-Nordic bank was ignited formation the MeritaNordbanken, a merger between Merita (Finland) and

(Schroder Salomon Smith Barney, 2001)

(NORDEA annual report, 2000)

[&]quot;...the focus of the group has now switched to integration and execution... and will be searching for signs of greater cost consistency and synergies to demonstrate that the 'Nordic idea' really is a good idea...

[&]quot;NORDEA shall have a cost efficiency ranking among the best European listed financial services companies. The objective for cost/income ratio in banking has been sharpened and shall not exceed

³⁴ Nordea stands for Nordic Ideas (annual report, 2000).

Nordbanken (Sweden) in 1997. Nordbanken spanned over 170 years of Swedish banking history and consisted of some 80 banks combined into one. Nordbanken finished its consolidation process in 1993 with the acquisition of GotaBank. But also merger partner Merita featured a large number of Finnish banking mergers, by which small independent banks consolidated into a larger banking entity leading to the creation of Merita in 1995. The MeritaNordbanken deal was formed through a so-called 'economic merger' that was based on equilibrium in ownership and management responsibilities. This initially resulted in a complex group structure, which took the form of a holding company (Nordic Baltic Holding, later renamed NORDEA). In the meantime, the Danish merger bank Unidanmark gradually recovered from the 1992 crisis, which hit the entire Nordic region. Only in 1999 did Unidanmark elaborate its activities towards a bankinsurance group with the acquisition of the insurance companies Vesta (Norway) and Try-Baltica (Denmark). The cross-border consolidation of, on the one side, MeritaNordbanken and, on the other side, Unidanmark (Denmark) and the acquisition of Christiana Bank (Norway 2000) and of Postgirotbank (Sweden 2001) completed NORDEA's supra-regional M&A strategy in the Nordic region. In a second phase, the group adopted a more simplified structure to streamline managerial procedures and eliminate the effect of market inefficiencies on the stock price (a similar simplified structure was also seen in cross-border banking groups such as FORTIS and DEXIA). Simultaneously, the legal structure too has been aligned with the business structure. The banking and insurance supervisors in all four Nordic countries have agreed on a special Memorandum of Understanding on the supervision of NORDEA and its banking and insurance activities.

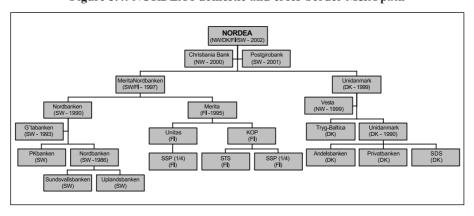
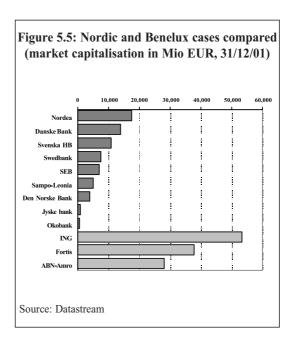


Figure 5.4: NORDEA's domestic and cross-border M&A path

Source: NORDEA, Bankscope, Financial press

Few banks in the world can claim that they have captured a top market share in four different countries (estimated banking market share of 40% in Finland, 25% in Denmark, 20% in Sweden 15% in Norway). However, on a worldwide and European scale, NORDEA remains a relatively mediumsized bank (ranking approximately at the 48th position world-wide and the 26th position in Europe, according to The Banker classification). This relatively limited scale at a European level applies to all Nordic



banking groups. When comparing for example the market capitalisation of the Nordic banks with the Belgium/Netherlands leading banks (see also chapter 4.1.), nearly all listed Nordic banks would almost fit into the market value of ING (see figure 5.5). Although the size of the home markets is quite comparable (26 million inhabitants in Belgium/Netherlands versus 24 million inhabitants in the Nordic countries), the huge difference in market capitalisation can be explained by the cross-border, European or worldwide, M&A expansion, outside the natural home market, of the Belgium/Netherlands leading banks. Still, despite the absence of critical mass and consequently the small likelihood that NORDEA will significantly influence the European banking landscape or the cross-border process, this case acquires its value due to its early moves on cross-border consolidation and e-banking. On both tracks and despite recent difficulties, NORDEA is a successful experiment, giving it a unique positioning in the Nordic region and in European banking.

☑ Mapping confirms strategic track record.

In the panorama and track record analysis (see sections 3.2 and 4.1.) NORDEA ranks amongst the best performing banking groups. In the 2000 panorama, most Nordic banks even form a specific cluster within a broader European cluster (see figure 3.2 in chapter 3). Some cluster characteristics are:

• Panorama 2000:

Cluster 6; i.e. mid-sized banks, high capital ratio, high interest margin, top return, balanced income structure, low liquidity, high transformation function, high efficiency and performance and top asset quality. This cluster also includes other Nordic banking groups: Svenska HB, Swedbank, Sampo-Leonia, Den Norske Bank, Union Bank of Norway, Jyske Bank and Okobank.

• Panorama changes 1995–2000:

Cluster 4; i.e. mid-sized banks characterised by rapid growth, average and steady interest margin, average ROE and operational ROE (but with a strong improvement in recent years) and a low cost to income ratio (which rapidly decreased in recent years). This cluster includes also Den Norske Bank (i.e. Norway's largest commercial bank and often cited as "Norway's financial champion").

SCP framework:

Within the cross-border M&A reference group, NORDEA clearly stands out in several respects (see table 5.1):

- > <u>Structure</u>: size and capital ratios are very similar to the European average peer group and, to a lesser extent, to the crossborder M&A reference group;
 - credit-oriented bank: with a balance sheet structure again much more similar to the European top 100 average than to the cross-border M&A peer group;
 - strong focus on intermediation with a high proportion of interest revenue in the total operating income (64%) and a limited call on other income (trading income and other
 - a favourable net interest margin and low need for risk coverage, both contribute to a consistent revenue flow.
- > Conduct: the merger and acquisition path of NORDEA makes an historical comparison with its peer group quite difficult. Only the last two years (1999 and 2000) are more or less comparable within our database. Nevertheless, the latest financial data show that the M&A integration process seems to evolve successfully.
- Performance: although the balance sheet and income structure are more comparable to the European top 100 average than to the cross-border peer group, both the performance of the ROE and the cost to income ratio are situated at the better end of the European spectrum.

☑ Present profile and strategy for the future.

The organisational business structure of the group now includes four business areas: retail banking, corporate & institutional banking, asset management & life insurance, and finally general insurance. In the record year 2000, 60 % of the operating profit came from retail banking, 20 % from corporate and institutional banking, 8% from asset management, life insurance and pensions, 2% from general insurance, the remaining 10% representing primarily group treasury operations. In the difficult year 2001, when total operating profit dropped by 21%, retail banking was resilient; its contribution even rose to 89%.

Looking at the financial and business objectives one can only conclude that they are comparable with objectives of other European banking groups (table 5.4). In the year 2000 most ratios complied with the targets, except the costto- income relation. In 2001 financial results were unsatisfactory, mainly because of income reduction outside retail banking and increased credit losses. The cost- to income- ratio in banking rose from 55% to 58%, instead of approaching the target of 50% set for 2004.

Table 5.4: NORDEA's financial and business objectives

Ratio	2000	2001	Target
☑ Total shareholder return	46.5%	- 19.8%	in line with the best among European listed financial services
			companies
☑ Return on equity	16.1%	13.8%	≥ Euro risk free rate + 8%
☑ Tier 1 capital ratio	6.8%	6.9%	≥ 6.5%
☑ Dividend payment	40%	44%	\geq 40% of net profit
☑ Cost to income ratio(banking)	55%	58%	≤ 50%
☑ Merger synergies (EURm)	23	168	annually 360
☑ Average loan losses and	0.08%	0,29%	≤ 0.4% of loans and guarantees
provisions			

Source: NORDEA Annual report, 2001

One particular characteristic of the Nordic region is that it has the world's largest penetration of online customer services. The density of internet users, the penetration of mobile phones and the combination of internet-mobile phone are by far the highest in the Nordic region, leaving both the rest of Europe and the US behind. The early introduction of electronic and automated distribution networks, forced by the banking crisis, has led to a surge in the number of e-banking customers (actually estimated at more than 3 million for NORDEA). Consequently, NORDEA also has the highest number of log-ins in the world.

The broad and successful usage of e-services has resulted in a second year running global award for "Best Online Business Strategy" (The Banker³⁵), in addition to awards as the "Best Multi Channel Banking Team" (Banking Technology) and "Best Internet Bank" (Euromoney).

Still, after years of restructuring, integration and focusing on new information technologies, the branch network has not lost its importance (1245 branches by the end of 2001)³⁶. Although e-banking has been growing rapidly in the Nordic countries, it has not fully replaced the branch network. In recent years, the (firmly reduced) branch network has recaptured its place in the crossselling banking strategy. In the NORDEA strategy, branches are central in the online banking strategy, which is often in contrast with other banking examples. This implies that a multichannel approach (PC, phone, wap phone, TV and mobile phones) to access e-services, combined with one service agreement for all channels is integrated into the branch-related sales activities. This strategy is based on the philosophy, again in contrast with other European practices, that internet banking at NORDEA is not free³⁷.

As for the other banking groups in our case studies, the combination between a merger integration process and a global economic slowdown weighted on the income figures in 2001. Also in the Nordic region, priorities have clearly switched to improving lending margins, monitoring credit losses and cutting costs. The result is that even a well-positioned bank as NORDEA changed its focus, in line with other European banking groups, to cost cutting. Following the results of the third quarter of 2001, CEO T. Krarup announced "a substantial cost reduction programme until 2004 to achieve our ambitious long term cost/income goal...". Some disinvestments have also be decided such as the resale of the general insurance unit *Tryg* to its former owner *Tryg* i Denmark (June 2002), the proceeds of this sale contributing to finance a buyback of about 5% of Nordea's own shares.

³⁵ The Banker's jury regards Nordea as the pathfinder in e-banking.

³⁶ Nordea does not believe that internet banking as a separate business would be successful, but only a combination between the use of technical development and the local bank officer is. "We are not taking away the old channels, we are just providing more choices" (Head of

^{37 &}quot;...we believe that the ones who are using it should pay for it, and not the other customers..." (Head of e-banking).

However the ambition to be among the best, if not the biggest, still remains. As far as financial targets are concerned "NORDEA aims at creating value for shareholders in the top five of the peer group of European listed financial services companies" (Annual Report 2001 p.25). Very dedicated to benchmarking, it distinguishes as peer groups (i) the Nordic peers, (ii) the most comparable European banks and (iii) the group with significant capital market exposure (table 5.5).

Table 5.5: NORDEA's peer group

Peer group		
Nordic peers	Most comparable European banks	Capital markets exposure
Danske bank	Abbey National	ABN AMRO
Den norske Bank	Alllied Irish Bank	Barclays
Sampo	Bank of Ireland	BNP Paribas
SEB	HBOS	Dexia
SHB	Commerzbank	Société Générale
Swedbank	HypoVereinsbank	
	KBC	
	Lloyds TSB	
	Royal Bank of Scotland	

Source: Annual Report 2001

The potential for further mergers and acquisitions in the region is quite limited. Recent important merger initiatives such Sampo – Storebrand and SEB – Swedbank were blocked by respectively the Norwegian authorities and the European Commission, which could imply that the region's consolidation may be close to its saturation point. This leads to the dilemma that further domestic consolidation in the Nordic region will attract the attention of competition authorities while, for cross-border acquisitions, besides the traditionally discouraging factors, Nordic banks also lack the necessary scale for a European breakthrough. In the course of 2001 only a few M&A deals were recorded: viz NORDEA purchase of Postgirot Bank (Sweden) for 0.45 billion EUR and Den Norske Bank (Norway) purchase of Skandia Asset Management (Sweden) for 0.35 billion EUR. Still, NORDEA's proven record of M&A success, the internet banking skills and the high efficiency rate should permit it to address the growing scale of European financial services markets. The main remaining dangers are the increasing price competition from small local players and potential integration setbacks. As well as the fact that NORDEA is not the only one to follow the Nordic path, and increasingly feels the competition pressure from Danske Bank (which has acquired Real Danmark), Svenska Handelsbanken, SEB, Swedbank and the merger Sampo-Leonia.

Besides in its Nordic home market, NORDEA primarily search seems to a strengthened position in the so-called 'emerging home market' (Baltic Sea region and Poland). For the future, in the short run, NORDEA is not expected to grow outside this Nordic and emerging home market as burden of discouraging M&A factors

"...Despite low survival rates for individual foreign banks [in the Nordic countries], on balance the foreign bank sector gained market share over time,... but foreign banks bought entry by accepting worse lending risks and owe much to the acquisition of small local firms. [Overall] the foreign bank sector has not carved out a large role in any of the four Nordic countries. This result is consistent with what we would expect for mature, concentrated markets... '

(Engwall, Marquardt, Pedersen & Tschoegl, 2001)

is too high and its scale too small. At the same time, the high domestic consolidation and the limited scope of the Nordic markets hamper, for the time being, the penetration of large foreign players.

However, in the longer run, the potential for one large pan-regional M&A deal in the Nordic countries may still remain in place.

5.6 A round-up: are these cases 'unique'?

When comparing the four case studies in this chapter, one is struck by the very fact that a common basic motivation of overcoming the constraints and the limitations of the domestic market in small mature economies, has induced such a diversity of (i) M&A formulas, (ii) financial institutions that differ from each other by size, functional and geographical coverage and (iii) 'life stories': expected and unexpected measures and developments, accidents, successes, failures. This may suggest that each of these cases is 'unique' and therefore rather anecdotal and uninspiring, either for scientific research or for decision- and policy-making. This is not our view. Without denying obvious aspects of 'uniqueness', we think that this very diversity contributes to clarifying at least five issues:

The impact of history:

Their origin clearly differentiates the three Benelux cases (ABN-AMRO, ING, FORTIS) from the Scandinavian one (NORDEA). The former originated as initiatives to overcome, in a perspective of growth, the limitations of the national domestic market in small, mature and...overbanked economies. At ABN-AMRO and ING, less so at FORTIS, cross-border consolidation occurred after domestic mergers, which, at the same time, were exhausting the opportunities of expansion at home but building a solid operational and financial basis for 'going abroad', and even for enlarging or duplicating the home market.

On the contrary, NORDEA has been formed after a banking crisis which had forced Scandinavian banks into a drastic restructuring process, with cost cutting, reductions of capacity, mergers and introduction of new technologies. The outcome has not only been a spectacular reduction of the number of banks, but also the emergence of a competitive advantage for Nordic banks. NORDEA can be seen as a formula for exploiting this competitive edge on a four-country basis and for trying to become a pan-Scandinavian champion, able to compete successfully in all the Scandinavian countries and, in a limited way, on the international scene. It follows, not only that developments of ABN-AMRO, ING and FORTIS cannot be analysed without reference to the financial landscape of the Benelux countries in the Nineties, the same applying to NORDEA with reference to the Scandinavian landscape. These developments are themselves significant parts of the financial history of those countries and illustrate many aspects of that history. In this respect, these cases are not isolated, 'unique' ones, but throw much light on overall financial developments in North-Western Europe and in Scandinavia.

It is all the more interesting that, although referring to different origins and different financial environments, these cases bring common issues to the fore, such as the trade-off between fostering the domestic base or promoting growth abroad, the issue of integrating, in an optimal way, different components into one single organisation, the cost- to- income relation in cross-border activity, etc. This also reinforces the representativeness of our case studies. More issues of that kind will be discussed in the following paragraphs.

The specific nature of various M&A transactions:

It is no coincidence that faster growth has been registered in cases where M&A activity has been conducted on the basis of acquisitions (ABN-AMRO and even more ING) than in the case of mergers among equals (FORTIS). In the former case, the national and business culture of the acquirer predominates; in the latter, a balance has constantly to be maintained and compromises have to be found between partners with their own national and business culture.

This statement should, however, be qualified in two respects:

- The fast growth of ABN-AMRO and of ING had been preceded by a domestic merger, which provided a solid base for fast expansion through acquisitions abroad. This base did not exist at FORTIS and had to be created, on a profitable basis, constraining expansion outside the Benelux area. NORDEA, being a mixture of mergers and acquisitions seems to stand midway between the two extremes. Its record is shorter but marked by outspoken progress, followed by a more cautious approach. These different strategies illustrate the respective characteristics of 'serial' cross-border expansion after domestic consolidation and a 'simultaneous' process, which includes, at the same time, domestic and cross-border M&A activity. In our opinion, much depends on the specific conditions and circumstances of the case: the competition among national rivals, the policy and attitude of the authorities, etc.

- As already mentioned in the ING case, in cases of fast expansion by means of cross-border acquisitions, an international conglomerate has to strike a precarious balance between adjusting to local conditions in various countries, which is usually more customer-friendly, and promoting centralisation, which usually increases efficiency and lowers costs, frequently at the price of customer-friendliness.

• Functional coverage:

The main distinction here is between conglomeration and focus. Conglomeration, either domestic or cross-border, transforms a bank or an insurance company into a financial services institution with activities beyond its original purpose ('cross-industry'). Focus, on the contrary, sharpens the original profile. A conglomerate offers, within the institution, a large array of channels and products to various groups of customers and, internally, promotes synergies and compensations among activities with a different economic and cyclical profile. Functional focus favours the glamour of professional expertise.

In our four cases, in the period under review, the factual experience has not been as sharp as the theoretical distinction suggests. ABN-AMRO, which stresses its own specific banking profile, has started its international expansion as a universal bank, which it still is in its home markets, particularly in the Netherlands. In such a context, there remains scope for compensation between activities with different cyclical profile and profitability. ABN-AMRO has sharpened its profile as a wholesale and corporate banker, a business line with more cyclical variability, but seems already to soften or, at least, to qualify this position by favouring cooperation between its various business units. Asset gathering now seems high on the much fluctuating strategic agenda of ABN-AMRO.

On the other hand, ING and FORTIS follow the conglomeration path, mainly through bancassurance. In fact, however, in countries such as Belgium, banking prevails, while insurance prevails in the Netherlands and in the US. This is not to deny, but to qualify the general complementarity of banking and (life) insurance. Anyway, the existence of an important insurance component contributes to financing the expansion and promotes the long-term view in these conglomerates, the aftermath of the September 11 events being the exception that should not impair the rule, at least as long as the insurer acts as an insurer and not as an asset manager relying (too much) on equities.

NORDEA seems to be such an exception. Although NORDEA represents 35% of life insurance in Finland, 10% in Denmark and 6% in Sweden, together with 22% of General Insurance in Denmark and 19% in Norway, the contribution of insurance activities to the overall operating profit is minimal, if not negative. This explains the present predominance of banking, and particularly of retail banking, in the activities and the overall results of the NORDEA Group, and also the planned disinvestments of general insurance, which is at the same time the most distant from NORDEA's core business and one of the least profitable activities.

Geographical coverage:

Obviously, the main feature is the contrast between the worldwide approach of ABN-AMRO and ING, on the one hand, and the Beneluxcentred policy of FORTIS and the Nordic-oriented policy of NORDEA on the other one. As mentioned above, this difference derives from the preexisting home base in the first two cases and the imperative to build one – a Benelux one or a Scandinavian one – in the last two ones.

Some other features should not be neglected:

- In all Benelux cases, a significant presence in the US has been considered an indispensable pillar of the institution. ABN-AMRO has turned the US Midwest into its second most important 'home' market. NORDEA seems to be less explicit in this respect.
- In none of the Benelux cases, has high priority been given to an expansion in Central, Baltic and Eastern Europe, although ING represents almost 5% of the regional market share in Central and Eastern Europe. German and Austrian banks but also the Belgian KBC and the Italian Unicredito are relatively much more active in this area (see table 2.4). On the contrary, NORDEA considers the Baltic Region and Poland as its emerging home market.

Finally, it should be noticed that, besides the basic orientations, the geographical coverage in each of the cases has been influenced and even determined by specific factors and events. If, in 1998, ABN-AMRO and not FORTIS, had won the takeover-bid contest for the Generale Bank in Belgium, Brussels would have become the seat of its European division, from where penetration into Southern Europe would have been launched and managed. In this respect, its actual slow penetration in Italy may be considered a late and partial substitute for the 1998 failure. Likewise the developments in FORTIS would have been different. The Belgian component in assets, employment, revenue and policy would have been much smaller. Good or bad luck remains a significant factor in financial life.

• *Policy and performance:*

Although the domestic branch network has been substantially reduced at ABN-AMRO, market share and market power in various countries outside the Netherlands seem to have been, overall, more important motives than short-term profitability, rationalisation and cost-cutting at ING and, less so, at ABN-AMRO. However, in the less glamorous economic and financial climate of the first years of the present decade and in view of the unfavourable cost to income ratio, policy attention has gradually, but surely, shifted towards more immediate profitability, which explains the present 'streamlining' drive. At ABN-AMRO this profitability aspect has even been integrated within an overall objective of increasing shareholders value. In FORTIS, rationalisation and cost cutting were central from the outset, because several acquired banks, especially in Belgium, had overlapping networks of branches and redundant supporting services. This situation will continue to have a strong impact on the overall policy of FORTIS, certainly until the end of 2003, when the present multi-year programme is due to be completely implemented. At NORDEA, the aftermath of the Scandinavian bank crisis and the introduction of new technologies made for a start of the new conglomerate at a much more favourable cost to income ratio than in the Benelux cases. This advantage has been progressively eroded by the integration of newly acquired components and even more so in the 2001 developments with their stagnation of income, their credit losses and their still increasing expenses.

The striking feature in all four cases is that, at present, although coming from different origins, motivations and policies, they all converge on the imperative of improving their cost to income ratio. Will these developments put a permanent brake on the M&A activity of the four institutions? Probably not, because the three Benelux institutions are involved in a leadership contest in Europe and because all four institutions we studied, work intensely to assert their presence among the top European banks and conglomerates by policy and performance, if not by size.

6 Concluding the study: a tentative response to the basic issue

6.1 Our contribution to the debate

In chapter 1 we stated that the basic issue to be discussed was not *whether* or *when* a new cross-border financial consolidation will occur, but *how* it will occur. In this concluding chapter we try to gather some elements of response to that question.

Our analysis was based on the belief, which was also our main hypothesis, that in the present decade, the Pan-European landscape of the financial sector in Europe will be determined by what is happening or will happen in a limited number of banks. Our sample comprised the 100 largest banks in Europe and was supposed to be composed of subgroups with similar characteristics, which could be discovered and quantified by statistical analysis, for which we used the clustering technique.

The clusters helped identify peer groups. We were, of course, particularly interested in the cases where banks, as the main banks in the Benelux area and in Scandinavia in the Nineties, wanted to overcome the constraints of their home market and to play an international role. In these cases, the peer group becomes an international group engaged in cross-border autonomous growth, which is usually supported by cross-border mergers and acquisitions.

This approach has been implemented in a series of steps from 'top to bottom', using the same conceptual and statistical framework.

Having conducted this detailed theoretical and empirical analysis, one should ask what does emerge from this work.

• The clusters in the panorama 2000 and, to a certain degree, in the panorama changes 1995–2000, feature at the same time national and comparative advantage aspects: in the cluster of high efficiency, British and Nordic Banks predominate. In the cluster of most vulnerable banks, German and some Italian banks are prominent. In the clusters with large international players, the cost and competition burden emerges. However, this profile is subject to change, as suggested by some results in the panorama changes 1995–2000.

- The mapping exercise raised a number of questions and also gave some preliminary hints on the domestic and cross-border consolidation in the coming years. Who is ready to go beyond the domestic market, alone or with a partner? Who are the efficient home market players? Who can cope with a stand-alone strategy? Who is most likely to go pan-European or even worldwide? Who will most likely undergo the next domestic and cross-border wave? Who are the laggards and what are the best practices on a European scale?
- In the track record analysis, the most eye-catching differentiator in the domestic M&A reference group (11 banking groups) was the cost to income ratio (CTI) which was, on the average, lower than in the other groups and which also decreased significantly in recent years. For the cross-border M&A Reference Group (10 banking groups), the most striking element was the combination of a relatively high CTI with a strong Return on Equity (ROE), which reflects the major shift in this group from traditional intermediation in favour of fee-based activities. This shift superficially increased productivity, but had a negative impact on cost control. The steady-state banks (8 banking groups) seemed to emerge at the lower end of the spectrum of European banking efficiency.
- In the comparison of the three Benelux cases and the Scandinavian one, the striking aspect was that a common basic motivation of overcoming the constraints and the limitations of the domestic market in small mature economies, has induced a wide diversity of M&A formulas, of financial institutions that differ from each other by size, functional and geographical coverage, of very different life stories, expected and unexpected measures and developments, accidents, successes, failures. This does not preclude some generalisations.

Faster growth was registered where M&A activity had been conducted on the basis of acquisitions (ABN-AMRO and even more ING) than in the case of merger among equals (FORTIS).

Conglomeration (ING and FORTIS) transforms a bank or an insurance company into a financial services institution with activities beyond its original purpose, offering a large array of channels and products to various groups of customers. Focus, such as in ABN-AMRO, favours the glamour of professional expertise by sharpening the original profile.

Geographically, ABN-AMRO and ING chose a worldwide strategy while FORTIS remained more Benelux-centred and NORDEA Scandinaviacentred. But in all Benelux cases a significant presence in the US has been deemed to be an indispensable pillar of the institution. At the other extreme, in none of these three cases has high priority been given to an expansion in Central and Eastern Europe while, on the contrary, NORDEA is building an emerging home market in the Baltic region and in Poland.

In the beginning, market share and market power in various countries outside the Netherlands seem to have been more important motives than short term profitability, rationalisation and cost cutting, at ING and less at ABN-AMRO. In the last two years, however, the less glamorous economic and financial climate forced both groups into intensive streamlining and cost cutting. FORTIS had to face this problem from the outset, because of overlapping networks of branches and redundant supporting services. Finally, in the aftermath of the Scandinavian banking crisis, NORDEA started with a very competitive cost-to-income structure which was (partly) eroded afterwards, compelling it to resort to the same streamlining and cost cutting as the three other ones. General convergence in streamlining and cost cutting is certainly the most striking feature of the present situation.

The overall impression is that cross-border M&A activity strongly stimulates growth in assets and market shares but that revenue enhancement is slower to materialise than expected in many business plans, while the cost increase has frequently been understated. This seems to be less the case in domestic M&A, where rationalisation and cost cutting are mostly high on the immediate agenda. However, the case studies show the diversity of size, structure and performance which may develop, even when the projects start from a common motivation of overcoming the limitations of the domestic market.

6.2 Looking ahead

At the closing date of the present study, all 100 top European banks have published their results for the year 2001, be it in a not always harmonised way. The banks included in our case studies have already done so in February-March. In general, these results were unsatisfactory, in some cases even very bad. Nevertheless, we believe that they will not invert the fundamental trend towards cross-border consolidation in the European financial sector. As stressed by CEO Van Rossum (see box), cyclical business conditions and the search for consolidation synergies are two different things. But the strength of the recessionary forces may of course, have an impact on the timing and on some other aspects of the second M&A wave. If, for a long time, banks have

to compensate a fall in revenue and huge credit losses by 'living on their (hidden) reserves', they lose ammunition for consolidation deals. Even worse, very bad results can transform a potential acquirer into a target and start a 'survival of the fittest' process. When some birds are flying low, they become new shooting targets for robust hunters. The survival of the fittest hypothesis is, in present conditions, even after the stock markets crisis of July-August 2002, not the most plausible or probable one. It remains a worstcase hypothesis, which may alter the timing and the climate, but not the occurrence of the consolidation wave.

Our main interest still concerns the way in which this next wave will occur: short, evolution or revolution?

It is quite easy to elaborate two scenarios on the basis of that distinction and to list under each of them their determinants main and aspects.

In the 'evolution' scenario, cross- border M&A activity remains an enlargement and complement of domestic market activity but with an increasing weight of cross-border deals, when large banks become more sensitive to the limitations of their home market, even in large European countries. Europe gradually and partly becomes the enlarged home market of the national champions and their

"...In a declining cycle you must, as a matter of fact, sail a bit closer to the wind. But cyclical business conditions and the search for consolidation synergies are two different things...'

(Anton Van Rossum, CEO of FORTIS, in a January 2002 interview, published in Revue Bancaire et Financière/Bank- en Financiewezen Brussels, March-April 2002, our translation from Dutch).

"...The impulse behind the mergers – the advent of the euro, the move towards a single market in financial services in the European Union and flattening growth in domestic markets - will not go away. Unquantifiable factors, such as the chemistry between the heads of financial institutions, are also set to play a major role. In this case, it could be the clincher....' (The Banker, June 2001)

".. The financial sector is not quietly rippling water. On the contrary, it is very tough business. If you want to be pro-active in the consolidation game, you must fix at this time which way to go when choices are to be made. You should know now, whether you jump on the train or not. Otherwise, it is too late...

(Anton van Rossum, same interview)

challengers. The European market place remains a mosaic of national clusters, be it with growing interdependence through competition.

The following factors and aspects fit into this scenario:

- The present structure of the European market place, as shown by the convergence of national and competitive advantage aspects in the clustering exercise of chapter 3.
- The present strong emphasis on rationalisation and cost cutting, which favours a home market approach. This is only progressively extended by 'going abroad', because much is still to be done on the original domestic market to reduce the branch networks and the redundant supporting services (see chapter 4 and 5).
- The still existing cultural differences and legal and regulatory impediments inhibiting cross-border deals, as revealed by the Lamfalussy Report and the slow pace at which its recommendations are implemented (see also chapter 1).
- The impact of the countervailing power of national and regional authorities, of vested business interests and of trade unions, against a fast penetration of foreign interests (see chapter 2).
- The very nature of M&A deals, where "it takes two to tango" (Maurice Lippens, co-President of FORTIS), the (would-be) partners having different interests, and different national and business cultures (see the numerous recent failures of M&A negotiations, particularly when they involve large banks, chapter 2).

In the 'revolution' hypothesis, the European market place is no longer a mosaic of enlarged national home markets, where foreigners can penetrate only gradually, but a playing field on its own, where a selected international group of peer institutions compete in size and market power. This competition may induce a series of big bangs of consolidation, which would also transform the national settings. Under this scenario we can classify the following factors and aspects:

- a radical change in business expectations in the context of a new economic boom in Europe;
- a new successful stage in European integration (a new Maastricht);
- strong implementation of competition rules by national and European authorities, against quasi-monopolistic dominance of relevant national and international markets;
- empire building by some banking groups, followed by rational herding among the competitors (let's jump on the train before it is too late, see box);
- new opportunities for robust hunters to acquire low flying birds (cf.
- personal hubris of some Big Brothers (see chapter 1).

In our opinion, scenario 1 is by far the most realistic and most probable one, because it fits the existing framework of the European financial sector and European environmental conditions. In this respect, we also attribute much weight to the fact that, on average, the banks of the domestic M&A Reference Group are in better shape to enter the European market place than their colleagues of the Cross-Border Reference Group. It seems improbable that they will use the comparative advantage gained by their efforts on their original home market to revolutionise the European market place, where they are just entering the international peer group. Another consideration is that, even if the motive of being big enough on the European market place is a strong one, particularly as soon as the U.K. joins Euroland, other areas for expansion abroad also exist (cf. the presence in the US of our three Benelux cases in Chapter 5, the penetration of medium-sized Western European banks in Central and Eastern Europe, the now strained relations of the Spanish banks with Latin America). In other words, globalisation of banking is certainly not limited to the European market place.

All this induces us to consider the 'revolution' scenario merely as an exceptional case, occurring almost by accident, by some mysterious chemistry between the heads of financial institutions. And even if this chemistry occurs, its implementation may be neutralised or reduced by the countervailing actions of authorities, competitors or vested interests.

This is our tentative response to the basic issue formulated at the beginning of our study.

Brussels-Leuven, 30th June 2002

ANNEX 1

Key figures of the top 100 European banking groups in 2000 and over the period 1995–2000 (Ranking according to total assets 2000).

Rank	к Nате	Country	Available years in Bankscope (1995-1999) (ulable years Total Assets, 1 Bankscope 2000 (1995–1999) (in EUR mio)	Total Assets, Growth total Growth total 2000 assets assets assets in EUR mio) (1995–2000, (1995–2000) in EUR mio) in %)		Cost to Income Ratio, 2000	Avg. annual change in CTI (1995–2000)**	ROE, 2000	Operational ROE, 2000	Avg. annual change in ROE (1995-2000)**	Avg. annual change in operational ROE (1995–2000)**
_	Deutsche Bank	DE	9	900,141	544,465	153%	80.8	1.67	17.5	16.4	1.90	-0.55
7	UBS	СН	4	721,247	82,861	13%	75.4	-0.15	20.0	17.9	7.40	-0.71
3	HSBC	GB	9	714,509	417,065	140%	57.3	0.64	16.8	20.1	-0.61	-1.18
4	Bayerische HVB	DE	4	694,267	278,357	%29	63.0	1.60	6.1	12.9	-0.60	-4.14
5	BNP Paribas	FR	9	693,775	450,832	186%	65.0	-2.17	18.6	22.6	3.03	1.48
9	ING Group	NF	5	650,172	429,432	195%	9.9/	0.42	37.3	13.9	7.07	0.11
7	Credit Suisse Group	СН	5	649,338	253,091	64%	74.2	0.08	19.7	26.4	5.00	1.47
∞	ABN Amro	NF	9	543,169	295,166	119%	73.0	0.91	14.9	25.4	0.41	0.45
6	Crédit Agricole	FR	9	535,661	247,034	%98	65.6	0.13	11.6	18.6	0.73	-0.58
10	Royal Bank of Scotland Group) GB	9	495,982	427,598	625%	8.79	0.77	12.9	16.9	-1.32	-3.08
Ξ	Barclays	GB	9	493,046	274,926	126%	57.2	·	21.6	27.8	0.26	-0.46
12	Dresdner Bank	DE	4	482,574	141,002	41%	83.7	4.29	12.9	11.3	2.31	-3.01
13	Société Générale	FR	9	455,881	212,332	%48	71.1	-1.14	19.5	24.6	2.36	1.71
14	Commerzbank	DE	4	454,451	184,448	%89	77.1	5.81	11.5	12.3	1.36	-4.04
15	Fortis	BE	4	432,447	133,805	45%	74.6	-0.69	17.4	18.0	1.43	-0.09
16	WestLB	DE	9	390,632	179,398	85%	77.0	1.79	5.6	10.3	-0.02	-0.83
17	Santander Central Hispano	ES	9	347,288	181,500	109%	64.3	-2.01	14.6	17.5	1.12	-0.15
18	Rabobank Group	N	9	342,920	209,728	157%	78.0	2.11	8.7	9.8	90.0	-1.34
19	IntesaBci SpA	П	5	331,364	201,954	156%	67.7	-2.15	11.9	25.9	3.07	-0.56
20	Banco Bilbao Vizcaya Argentaria	ıria ES	9	297,149	134,435	83%	61.9	-0.48	16.8	20.8	0.82	0.32
21	Abbey National	GB	9	297,148	167,467	129%	49.5	0.97	20.9	27.9	09.0	0.01
22	Bayerische											
	Landesbank Girozentrale	DE	9	291,519	140,218	93%	49.4	0.10	7.2	14.3	0.05	-0.02
23	Landesbank Baden-Wuerttemberg	erg DE	4	280,917	73,770	36%	52.5	2.25	7.8	16.6	-0.41	-4.46
24	Groupe Caisse des Dépôts	FR	9	269,908	137,854	104%	58.6	-4.39	15.8	17.3	2.37	2.86
25	Lloyds TSB	GB	9	268,240	93,276	23%	46.2	-2.90	28.8	43.5	1.56	-2.35
26	Deutsche Genossenschaftsbank	k DE	4	260,027	74,735	40%	73.1	0.49	9.7	11.2	0.55	-1.37
27	Dexia	BE	4	257,726	71,423	38%	57.6	5.59	15.4	20.4	-0.30	-0.62

Rank	Name	Country	Available years Total Assets, in Bankscope 2000 (1995–1999) (in EUR mio)	Total Assets, 2000 in EUR mio)	Growth total assets (1995–2000, in EUR mio)	Growth total Growth total Cost to assets assets Income (1995-2000, (1995-2000, Ratio, in EUR mio) in %) 2000	Cost to Income Ratio, 2000	Avg. annual change in CTI (1995–2000)**	ROE, 2000	Operational ROE, 2000	Avg. annual change in ROE (1995–2000)**	Avg. annual change in operational ROE (1995–2000)**
28	Halifax	GB	3	243,061	64,195	36%	42.2	-0.39	18.7	28.3	1.16	1.56
29	Nordea	SE	2	226,064	122,329	118%	58.2	-4.06	18.4	17.8	1.05	-1.40
30	Credit Mutuel Centre Est Europe	FR	3	206,273	36,572	22%	689	-2.19	12.8	18.3	3.58	0.51
31	Bankgesellschaft Berlin	DE	9	203,534	65,342	47%	118.7	10.33	-54.5	-10.4	-12.05	-5.95
32	UniCredito	П	4	202,649	56,186	38%	53.9	-5.65	18.4	34.5	3.56	5.72
33	Groupe Banques Populaires	FR	2	195,499	8,157	4%	62.1	-1.63	16.6	25.3	2.89	-2.07
34	Crédit Lyonnais	FR	9	188,006	-65,521	-26%	73.7	-2.95	9.6	20.3	1.40	1.78
35	KBC Bank and Insurance	BE	4	187,658	36,984	25%	68.4	0.86	25.1	18.6	2.91	-0.37
36	Danske Bank	DK	9	184,096	123,871	206%	75.5	2.20	11.6	8.0	-1.07	-1.45
37	Norddeutsche											
	Landesbank Girozentrale	DE	9	176,844	75,658	75%	61.8	1.15	3.7	12.2	-0.01	-0.73
38	San Paolo	П	4	171,073	-7,484	-4%	65.3	-0.63	18.6	26.5	4.45	3.53
39	DePfa Deutsche Pfandbrief Bank	DE	3	156,446	35,841	30%	51.6	6.43	8.6	15.1	-0.33	-4.51
40	Crédit Industriel et Commercial	FR	9	143,635	59,320	%02	71.2	-1.85	15.3	23.0	1.97	0.71
41	Bank of Scotland	GB	9	134,830	76,886	133%	45.7	-1.67	16.6	30.6	-0.64	-0.91
42	Banca di Roma	П	9	134,659	25,232	23%	9.99	-5.12	5.2	20.2	0.86	3.28
43	Deutsche Postbank	DE	2	133,516	-12,765	%6-	83.7	-2.11	3.4	7.6	2.57	69.0
4	Skandinaviska Enskilda Banken	SE	9	127,887	61,125	95%	75.7	3.85	16.2	17.0	1.18	-1.94
45	BHW Holdings	DE	9	121,154	102,589	253%	57.8	-2.37	7.8	16.9	0.21	0.75
46	HELABA	DE	9	120,424	47,552	%59	9.09	-1.12	4.6	11.1	-0.08	-1.17
47	Svenska Handelsbanken	SE	9	116,217	51,009	78%	44.7	-0.48	21.7	28.0	0.97	-0.51
48	Natexis Banques Populaires	FR	9	113,131	11,404	11%	59.6	-1.45	10.8	16.1	1.74	1.38
49	Standard Chartered	GB	9	110,001	58,277	113%	58.6	-0.15	17.3	24.1	-1.76	-2.43
50	Banca Monte dei Paschi di Siena	П	9	108,033	37,659	54%	65.1	-3.84	11.9	23.8	1.73	2.44
51	Foerenings sparbanken-Swedbank	SE	9	100,861	38,980	93%	62.8	1.03	19.8	22.6	0.35	-1.49
52	Banca Nazionale del Lavoro	П	9	87,940	-321	%0	68.1	-2.00	18.2	22.9	2.80	1.42
53	LA CAIXA	ES	9	85,181	29,844	24%	72.0	-0.43	13.6	8.6	-0.26	-1.43
54	Allied Irish Banks	Ξ	9	77,370	47,469	159%	58.6	-1.21	19.0	29.6	0.10	-0.28

Rank	k Name	Country	Available years Total Assets, in Bankscope 2000 (1995–1999) (in EUR mio)	ilable years Total Assets, Bankscope 2000 (1995–1999) (in EUR mio)	Growth total Growth total assets assets (1995–2000, in EUR mio) in %0		Cost to Income Ratio, 2000	Avg. annual change in CTI (1995–2000)**	ROE, 2000	Operational ROE, 2000	Avg. annual change in ROE (1995–2000)**	Avg. annual change in operational ROE (1995-2000)**
55	DekaBank											
	Deutsche Kommunalbank	DE	9	75,171	27,149	21%	57.5	6.22	15.0	33.3	2.19	09.0
99	Bank of Ireland	E	9	73,859	47,986	185%	54.6	-1.34	19.6	25.9	0.14	-1.09
57	Nykredit	DK	2	68,842	5,504	%6	51.7	1.65	5.9	6.7	1.14	-1.16
58	Caja Madrid	ES	9	63,117	33,270	111%	59.4	1.17	11.3	16.4	0.00	-2.91
59	Caixa Geral de Depositos	PT	9	62,572	28,165	82%	53.5	0.03	19.1	28.6	0.49	-0.87
09	Banco Comercial Português	PT	9	61,979	35,022	130%	53.5	-3.04	22.6	38.3	1.49	4.02
61	Landesbank											
	Rheinland-Pfalz Girozentrale	DE	9	966'09	27,481	82%	54.0	-0.51	8.1	17.9	-0.25	-1.03
62	Alliance & Leicester	GB	5	55,057	20,110	28%	58.8	-1.52	20.1	30.2	2.04	1.48
63	Erste Bank*	AT	S	52,443	4,445	%6	0.69	-0.06	11.4	20.4	0.90	-1.85
49	WGZ Bank	DE	9	51,270	24,477	91%	57.8	4.03	7.6	12.3	-0.01	-3.18
65	Landwirtschaftliche Rentenbank	k DE	9	51,225	21,591	73%	21.1	-0.28	8.7	10.6	-0.76	-0.60
99	Union Suisse											
	des Banques Raiffeisen	СН	9	51,160	12,337	32%	63.0	0.37	10.4	15.9	0.38	-0.11
29	Landesbank Sachsen Girozentrale	ale DE	33	50,943	18,939	26%	4.4	-3.08	3.8	13.8	0.10	0.23
89	National Bank of Greece	GR	9	47,763	17,270	21%	50.2	-5.16	31.3	44.2	1.95	4.16
69	Rolo Banca 1473	П	9	47,044	17,266	28%	49.7	-5.59	17.8	32.5	2.78	3.61
70	Banca Antonveneta	П	9	42,843	32,091	298%	68.7	-0.87	9.1	18.2	0.26	0.54
71	DNB Group	NO	33	41,805	14,114	51%	61.4	-2.18	17.6	20.9	6.05	2.53
72	SNS Reaal Groep	Z	S	40,879	19,912	%56	94.4	-0.43	11.1	7.5	0.15	0.12
73	BP di Bergamo - Credito Varesino	ino IT	9	37,579	22,407	148%	61.7	-1.95	11.2	22.4	0.37	0.51
74	Raiffeisen Zentralbank Oesterreich	eich AT	9	36,553	18,805	106%	60.2	2.85	11.6	19.8	0.79	0.26
75	Northern Rock	GB	5	36,137	16,173	81%	34.8	0.42	20.4	29.8	1.00	0.11
9/	Banca Popolare di Lodi	II	9	34,233	28,883	540%	8.98	-1.04	6.9	6.7	0.65	0.36
77	Banco Espirito Santo											
	e Comercial de Lisboa	PT	9	33,862	19,267	132%	51.6	-3.38	16.1	32.2	0.36	2.26
78	IKB Deutsche Industriebank	DE	9	32,359	9,478	41%	34.0	0.03	9.9	26.1	-0.09	0.64
79	Banco Popular Espanol	ES	9	31,288	11,628	29%	45.4	-0.67	23.7	38.2	0.76	0.70

Rank	Name	Country	Available years Total Assets, Growth total Growth total in Bankscope 2000 assets assets (1995–1999) (in EUR mio) (1995–2000, (1995–2000) in EUR mio) in %)	ulable years Total Assets, 1 Bankscope 2000 (1995-1999) (in EUR mio)	Growth total assets (1995–2000, in EUR mio)	Growth total assets (1995–2000, in %)	total Cost to assets Income 2000, Ratio, in %) 2000	Avg. annual change in CTI (1995–2000)**	ROE, 2000	Operational ROE, 2000	Avg. annual change in ROE (1995–2000)**	Avg. annual change in operational ROE (1995-2000)**
80	Alpha Bank	GR	9	30,183	23,755	370%	59.5	1.93	14.5	25.7	-3.43	-3.89
81	Banca Popolare di Milano	П	9	28,282	8,397	45%	66.3	-1.06	13.8	22.0	1.21	-0.14
82	BP di Verona - Banco S. Gemi	Geminiano IT	9	27,633	14,539	111%	60.2	-2.27	11.9	24.8	1.01	2.21
83	Okobank Group	FI	5	27,086	3,294	14%	47.3	-3.16	24.9	32.5	4.32	-2.18
84	Banca Lombarda e Piemontese	II	4	26,447	10,236	63%	9.09	-0.77	13.1	24.8	0.86	-0.82
85	Caixa Catalunya	ES	9	26,371	13,473	104%	72.7	0.17	10.5	13.7	-0.79	-2.20
98	BRED Banque Populaire*	FR	9	26,370	7,600	40%	70.3	-1.27	12.4	28.6	2.50	0.48
87	Mediobanca	II	9	26,195	9,877	61%	55.5	4.49	7.5	6.5	0.72	86.0-
88	Banque Cantonale Vaudoise	СН	9	25,176	1,342	%9	62.2	-4.16	4.6	14.3	-0.17	2.07
68	Union Bank of Norway	NO	9	25,131	11,361	83%	56.4	-1.73	23.5	25.6	0.52	0.04
90	Sampo Bank	Ħ	9	24,369	4,940	25%	64.8	-6.13	6.6	16.6	4.74	2.66
91	Baden-Wuerttembergische Bank	k DE	9	24,302	11,194	85%	73.6	1.06	8.9	16.5	0.36	-0.48
92	Caja de Ahorros											
	de Valencia Castellon	ES	9	23,542	11,997	104%	54.8	-1.63	12.7	21.2	-0.35	-2.87
93	BPI – SGPS	PT	9	21,906	14,981	216%	66.3	-0.79	17.2	21.0	0.74	1.06
94	Banca Popolare di Novara	II	9	20,959	-2,137	%6-	88.7	-2.83	-11.3	6.9	1.40	1.77
95	Bankinter	ES	9	19,100	9,138	%26	59.9	69.0	9.6	19.2	-1.03	-0.65
96	Banco de Sabadell	ES	9	18,486	9,131	%86	59.0	0.92	12.4	17.0	-0.51	-3.20
26	Cardine Banca*	II	9	18,051	5,881	48%	86.2	1.17	5.0	5.6	0.01	0.01
N 86	98 NIB Capital Bank	NF	9	17,263	9,061	110%	39.1	1.03	32.6	12.0	4.10	-1.02
66	Jyske Bank	DK	9	17,191	9,296	118%	64.5	0.29	19.8	20.6	-0.45	-0.47
100	100 Commercial Bank of Greece	GR	9	16,194	3,238	25%	52.7	5.87	14.3	22.8	-1.97	0.25
Average	že		5.4	183,388	79,489	%96	62.7	-0.27	13.4	20.0	96.0	-0.23
Median	u		0.9	104,447	30,967	74%	61.8	-0.46	13.3	19.9	0.74	-0.22
Standa	Standard deviation		1.1	202,328	113,198	105%	13.5	2.79	8.6	8.7	2.22	2.03

Source: Bankscope * 1999 data ** Average of the annual change in the variable between 1995 and 2000 and based on the available numbers of years in Bankscope

ANNEX 2: Self-Organising Maps (SOM)

1. Self-Organising maps (SOM)

A self-organising map (SOM), also called a Kohonen network, is feedward **neural network** that uses an **unsupervised training algorithm**, and through a process of self-organisation, configures the output units into a topological representation of the original data (Deboeck & Kohonen, 1998).

- Neural networks are, roughly and with a slight exaggeration, simulations of brain functioning. Within neural networks, so-called neurons are linked to each other by connections with a certain connection strength. Through this non-linear regression technique a model can be trained (the process of determining an appropriate set of weights between all neurons). The purpose is to find a relationship between the input and the output variables or to organise data so as to disclose unknown patterns or structures.
- <u>Unsupervised</u> means that the network builds its own representation of the data purely on the basis of the input variables and the feedward information flow.

Simply stated, SOM reduces and visualises the dimensionality of a large multi-input data to a two-dimensional map on the assumption that similar data (or cluster data) are formed from patterns that share common features.

The technique has a number of advantages:

- It enables us to visualise a high dimensional data set into a twodimensional map,
- It has the strong capability for generalising: the network can recognise or characterise inputs it has never encountered before,
- it copes well with input units with missing data or fuzzy ones,
- it copes well with data where patterns are subtle or hidden.
 - ➡ Training algorithm: SOM has only two layers: an input layer and an output layer where each output node is connected to all the inputs, which is represented by the connection weight. Before training starts, these weights are set to initial values. Now, when an input pattern is presented to the network, the output layer units compete with each other until the unit is found that most resembles the input pattern. This unit then has its weights altered to make it more like the input pattern. In order to group similar patterns, also a neighbourhood of units around

the winning unit is altered to be more like the input pattern. As the training continues, the size of this neighbourhood around the winning unit decreases. At the end of this ongoing process and after a number of passes of the data set, only the winning unit is adjusted. As a result different areas of the map have responded to different types of inputs and a high-dimensional input data set is reduced to a two-dimensional map.

When presenting an input pattern X_p , composed of input elements x_0 , x_1 , x_2 , ... x_{n-1} , to a Kohonen network with n input nodes, the weight between an input **i** and a node **j** is given by w_{ii} .

- 1. Initialise the weights between inputs and the nodes.
- 2. Present an input \mathbf{x}_0 , \mathbf{x}_1 , \mathbf{x}_2 , ... \mathbf{x}_{n-1} .
- 3. Compute the error measurement between the input and the weights, in this case using the Euclidean distance

$$d_j = \sum_{i=0}^{n-1} (x_i - w_{ij})^2$$

- 4. Select the node j^* that has the minimum value of d_i .
- 5. Update the weights for node j^* and its neighbours to be $w_{ij}^* = w_{ij} + \vartheta(x_i w_{ij})$ where ϑ is the learning rate of the Kohonen layer, which typically decays over time. The neighbourhood size is defined before the model is built, and again typically decays over time.
- 6. Repeat steps 2 to 4 until the weights have stabilised.

2. Software tool

A number of software tools for applying SOM is available on the market. The analysis in this study is based on Viscovery SOMine (version 3.0), a product of Eudaptics GmbH . Viscovery is based on the SOM concept and algorithm, and is considered a powerful, flexible, user-friendly tool that can be applied in various financial, economic and marketing applications. Viscovery SOMine Standard edition is limited to 50 variables and 50,000 data records. Data records with missing values will be recognised by Viscovery and treated appropriately in the analysis (for more information see www.eudaptics.com).

As SOM is an unsupervised training algorithm, i.e. the map is organized purely on the input stimuli the network receives, an evaluation tool for the map is essential. Viscovery provides a number of map evaluation tools for pre-processing variables and optimal clustering of the map.

☑ Variable processing

A number of variable processing tools are available in Viscovery: data scaling, variable priority, data modification and data transformations. In our panorama application only the use of variable priority and data transformations has been applied. In the data transformations, a sigmoid transformation was used in order to handle outliers without discarding them.

☑ Optimal clustering

② <u>*U-Matrix*</u>

The U-matrix window colours each node depending on the median distance to its neighbours. Nodes that are far away from each other will have a dark colour. Nodes that belong to a 'dense' region of the map will have a bright one. Thus, the darker the colour, the higher the distance to the neighbours. Strings of dark coloured nodes indicate a gap in the map.

⊃ *Curvature window*

As SOM reduces a high dimensional data set into a two-dimensional surface, the distribution cannot be a plane but has to bend through the data space, thereby forming curves, saddles, etc. The curvature window displays how much the map is bent at each node. A map is well adapted if most areas have little curvature. High curvature should only appear locally around the cluster boundaries. In some cases it may be useful to have a map with mainly high curvatures when the map displays the data distribution quite accurately.

⇒ Frequency window

The frequency window indicates how many data records from the source data have matched each node. Nodes that have not matched any data record are white. Nodes that have matched at least one data record are displayed in shades of red. The darker the node, the higher the frequency of matches.

A map is well adapted if the frequencies are equally distributed.

2 *Quantisation error window*

The quantisation error window measures how good the source data are matched by a specific node. The quantisation error is necessarily zero (white) at nodes where no data records have matched. Non-zero quantisation errors are displayed in shades. The darker the node, the higher the error. A map is well adapted if the quantisation errors are very small and equally distributed over the map.

Fig. A: U-matric panorama 1995–2000 U-Matrix – Viscovery 1995-2000 final

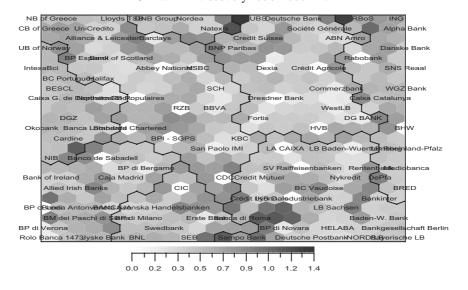


Fig. B: Curvature window panorama 1995–2000Curvature – Viscovery 1995-2000 final

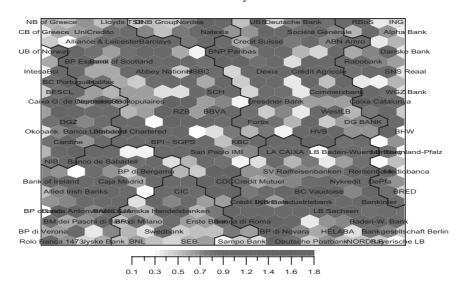


Fig. C: Frequency window panorama 1995–2000

Frequency - Viscovery 1995-2000 final

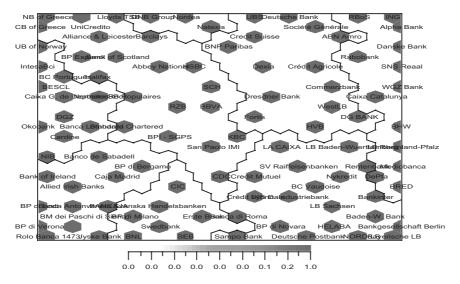
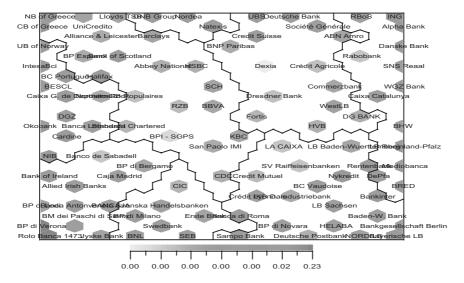


Fig. D: Quantization error panorama 1995–2000

Quantization Error - Viscovery 1995-2000 final



Sources:

Deboeck G. & Kohonen T. (Eds), Visual Exploration in Finance with Self-Organizing Maps, Springer Finance, 1998.

Viscovery, SOMine, User's Manual, Edaptics software gmbh, 1999.

Guillemyn A., A Research on Prediction Modelling applying Pattern Recognition, Rule-based systems and Neural Network Implementations, Newport University, 1999.

References

- Abraham, J.P. and Lierman, F. (1990). "European Banking Strategies in the Nineties". *Revue de la Banque/Bank- en Financiewezen*, 1990 n° 8–9 pp. 415–436, also published in IEF Research Papers 1991/8.
- Abraham, J.P. (1998). "Le Strategie delle Banche in Eurolandia, con particolare riferimento all' Area del Benelux", in J.P. Abraham, J.R. Incarte, U. Schroeder "Le Strategie dei Principali Sistemi Bancari Europei nella Prospettiva della Moneta Unica", Milano, pp.3–24, enlarged in "Bank Strategies in Euroland, with special reference to the Benelux Area", *Discussion Paper Series DPS 99.05, Center for Economic Studies*, Leuven, 1999, 34 pp.
- Abraham, J.P. (1998). "De euro en de bankherstructureringen in het Benelux Gebied". Revue de la *Banque/Bank- en Financiewezen*, No 9, pp.505–509.
- Bank of England (1999), "Economic models at the Bank of England". 156 pp.
- Belaisch, A., Kodres, L., Levy, J. and Ubide, A. (2001). "Euro-Area Banking at the Crossroads". *IMF Working Paper*, WP/01/28, March, 74 pp.
- Berger, A.N. (1998). "The efficiency effects of bank mergers and acquisitions: A preliminary look at the 1999s data". *Bank mergers and acquisitions (Kluwer Academic Publisher)*, pp. 79–111.
- Berger, A.N., Demsetz, R.S. and Strahan, P. (1999). "The Consolidation of the Financial Services Industry: Causes, Consequences and Implications for the Future". *Journal of Banking and Finance*, Volume 23.
- Berger, A.N., DeYoung, R. and Udell, G.F. (2000). "Efficiency Barriers to the Consolidation of the European Financial Services Industry". *European Financial Management*, 6.
- Berger, A.N., DeYoung, R., Genay, H. and Udell, G.F. (2000). "Globalisation of Financial Institutions: Evidence from Cross-Border Banking Performance". *Brookings-Wharton Paper of Financial Services*, vol. 3.
- BIS (1998). "The coming transformation of continental European banking". Working Paper No. 54, June 1998, 37pp.
- BIS (1999). "Restructuring in the global banking industry". BIS Quarterly Review, August.
- BIS Papers (2001). "The banking industry in the emerging market economies: competition, consolidation and system stability an overview", August, No. 4, 122 pp.
- Boot, A.W.A. (1999). "European lessons on consolidation in banking". *Journal of Banking & Finance*, 23, pp. 609–613.
- Calomiris, C.W. (1999). "Gauging the efficiency of bank consolidation during a merger wave". *Journal of Banking & Finance*, 23, pp. 615–621.
- Casu , B. and Molyneux P. (2000), "Efficiency & structural issues in European Banking". *Revue de la Banque*, 6/00, pp. 370–380.

- De Larosière, J. and Barthalon, E. (2001). "Banking Consolidation in Europe". *Adapting to Financial Globalisation*, Routledge, pp. 15–26.
- De Leeuw, J. (1996). "Financiële Conglomeraten in Nederland". Series Bank- en Effectenbedrijf, Nr. 38, 200 pp.
- Dermine, J. (1999). "The case for a European-wide strategy". *EIB Papers*, Volume 4, No 1, pp. 137–143.
- Deutsche Bank EU Enlargment Monitor (2001). August, No. 5, 32 pp.
- Engwall, L., Marquardt, R., Pedersen T. and Tschoegl, A.E. (2001). "Foreign banks penetration of newly opened markets in the Nordic Countries", *Journal of International Financial Markets, Institutions and Money*, 11, pp. 53–63.
- EU Economic Papers (2000). "Report on financial stability". No143, May 2000, 32 pp.
- European Central Bank (1999). "Possible effects of EMU on the EU banking systems in the medium to long term". February, 27 pp.
- European Central Bank (1999). "Banking in the euro area: structural features and trends". *ECB Monthly Bulletin*, April, pp. 41–53.
- European Central Bank (2000). "Mergers and acquisitions involving the EU banking industry Facts and implications". December, 46 p.
- Focarelli, D. and Pozzolo, A.F. (2000). "The Determinants of Cross-Border Bank Shareholdings: an Analysis with Bank-Level Data from OECD Countries". *Banca d'Italia*, No 381.
- Group of Ten (2001). "Report on consolidation in the financial sector". January, 459 pp.
- Hasan, I., Lozano-Vivas, A and Pastor, J.T. (2001). "European Bank Performance Beyond Country Borders: What Really Matters?". European Finance Review 5 (Kluwer Academic Publishers), pp. 141–165.
- Huizinga, H.P., Nelissen, J.H.M. and Vander Vennet, R. (2001). "Efficiency Effects of Bank Mergers and Acquisitions in Europe". *Universiteit Gent, Working Paper*, 106, June, 25 p.
- Hurst, C., Perée E. & Fischback, M. (1999). "On the road to wonderland? Bank restructuring after EMU". EIB Papers, Volume 4, No. 1, 1999.
- IMF (2001). "Euro-area banking at the Crossroads". IMF Working Paper, WP/01/28, 74 pp.
- Kalff, J. (1997). "The Kalff Interview". Euromoney, October, pp. 40–51.
- Kist, E. (2001). "We zijn géén bank". Interview in *Bank- en Effectenbedrijf*, December, pp. 4–10.
- Koskenkylä, H. (2001). "Opportunities and Threats of European Banks". *SUERF Conference Paper*, October.
- Lindblom, T. (2001). "Return and risks in Scandinavian banks". European Association of University Teachers of Banking and Finance, 2001.
- Llewellyn, D.T. (1999). "The New Economics of Banking". SUERF Studies, No 5, 96 pp.
- Maudos, J., Pastor, J., Péres, F. and Quesada, J. (2002). "Cost and Profit Efficiency in European banks". *Journal of International Financial Markets, Institutions & Money*, Volume 12, nº 1, February 2002.

- Nederlands Economisch Instituut (2000). "Fusies en overnames in het Nederlandse bankwezen, Een instrument voor de Nederlandse Mededingingsautoriteit". 133 pp., Juli 2000.
- Piloff, S.J. and Santomero, A.M. (1998). "The value effects of bank mergers and acquisitions". *Bank mergers and acquisitions (Kluwer Academic Publishers)*, pp. 59–78.
- Rhoades, S.A. (1997). "The efficiency effects of bank mergers: An overview of case studies on nine mergers. *Journal of Banking & Finance*, 22, pp. 273–291.
- Smith, C. and Walter, I. (1998). "Global patterns of mergers and acquisitions activity in the financial service industry". *Bank mergers and acquisitions (Kluwer Academic Publishers)*, pp. 21–36.
- Vander Vennet, R. (1996). "The effect of mergers and acquisitions on the efficiency and profitability of EC credit institutions". *Journal of Banking & Finance*, 20, pp. 1531–1558.
- Vander Vennet, R. (2002). "Cross-border mergers in European banking and bank efficiency". Ghent University, mimeo, 30 pp.
- Van Dijcke, P. (2000). "Impact of globalization on efficiency in the European banking industries: What can we learn from the cost to income ratio". *Adapting to Financial Globalization*, Routledge, 2000, pp. 295–335.
- Van Rossum, A. (2002). "Financiële sector is geen rustig kabbelend beekje". *Revue Bancaire et Financière, Bank-e nFinanciewezen*, 2–3, pp.75–78.
- Wagenvoort, R. and Schure, P. (1999). "Who are Europe's efficient bankers?". *EIB Papers*, Volume 4, No. 1, pp. 105–126.
- White, W. R. (1998). "The coming transformation of Continental European banking?". BIS Working Papers, No 54, June, 37 pp.
- Annual Reports, Fitch Ibca Documentation, Website information and Press Releases of and on ABN-AMRO, ING & BBL, FORTIS.
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