



UvA-DARE (Digital Academic Repository)

Consolidation and Strategic Positioning in Banking with Implications for Europe

Boot, A.W.A.

Publication date
2003

Published in
Brookings-Wharton Papers on financial services

[Link to publication](#)

Citation for published version (APA):

Boot, A. W. A. (2003). Consolidation and Strategic Positioning in Banking with Implications for Europe. In *Brookings-Wharton Papers on financial services* (pp. 37-83). Brookings Institution Press.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Consolidation and Strategic Positioning in Banking with Implications for Europe

ARNOUD W. A. BOOT

THE UNPRECEDENTED RESTRUCTURING and consolidation that are occurring around the globe are probably best characterized as a financial services sector in flux. Transactions are particularly numerous and breathtaking in the United States and Western Europe, but restructuring is also occurring in Asia. Most striking is the escalating scale of mergers in banking. In just the last few years, in the United States mergers have led to a consolidation of money center banks (for example, the Chase Manhattan and Chemical Bank merger, prior to their subsequent merger with J. P. Morgan) and the emergence of regional powerhouses (for example, the expansion strategies of BankOne and Nationsbank and their mergers with, respectively, First Chicago/NBD and BankAmerica). In Europe mergers have also been prominent. Although cross-border mergers are relatively infrequent—with exceptions in Scandinavia and the acquisitions across the Dutch-Belgian border,¹ such as the acquisition of the Belgian Bank BBL by the Dutch financial conglomerate ING—domestic mergers typically involve large universal banks and are often spectacular. Noteworthy examples include the marriage of the Union

The comments of Dick Herring, Bob Litan, Stijn Claessens, David Voute, Tineke Bahlmann, and other participants are gratefully acknowledged.

1. A noteworthy cross-border merger that goes beyond these culturally aligned regions is HSBC's purchase of Credit Commercial de France.

Bank of Switzerland with Swiss Bank Corporation and the acquisition of Paribas by Banque National de Paris. In Japan spectacular mega-mergers have put the Japanese banks among the largest banks in the world ranked by book value of assets.

A parallel phenomenon is the continued broad, if not broadening, scope of many banks. Even banks that traditionally followed well-motivated, focused strategies have given in to this trend. For example, Bankers Trust, with its activities aimed at the corporate market, has put itself in the arms of a scope-expanding universal bank (Deutsche Bank). Scope expansion also originates from investment banks. Major investment banks are redefining their domain by offering traditional commercial banking products like commercial and industrial loans and by moving into retail brokerage. The union of Salomon Brothers (investment bank) and Smith Barney (brokerage) within Travelers underscores the scope expansion in the industry. Similarly, Credit Suisse bought the U.S. stockbroker DLJ, and UBS bought Paine-Webber. The spectacular cross-industry merger by Citicorp and Travelers also brings insurance activities together with bank-oriented financial services. This concept is not really new, however. Some European banks—for example, ING in the Netherlands and the Belgian-Dutch conglomerate Fortis—already engage in *bancassurance*—that is, the combination of banking and insurance activities. Similarly, Credit Suisse expanded into insurance by acquiring the insurance corporation Winterthur. But in the United States, until passage of the Gramm-Leach-Bliley Act of 1999 many restrictions remained on combining banking, securities underwriting, and insurance.

One question is then immediate. Why are banks consolidating so much and expanding scope? The popular financial press points to the increasingly competitive environment of banking as the culprit. As commercial banking becomes more competitive, banks need to examine all possible ways to wring inefficiencies out of their cost structures. One way to do this is to merge with other banks and to realize efficiencies of scale through elimination of redundant branches and back-office consolidation. Moreover, the diminishing margins in commercial banking invite banks to look outside their traditional domain. Some nonbanking activities may offer higher margins and make scope expansion attractive.

However, these popular explanations are inadequate. The empirical evidence on scale and scope economies in banking is far from conclusive. It is questionable whether these economies are large enough to jus-

tify consolidation and scope expansion on the scale that we have observed.² Moreover, ample research in corporate finance points to the existence of a “diversification discount.” On average, diversification seems to destroy value. There is substantial evidence that firms that have refocused have experienced improvements in operating performance and stock returns.³ Therefore, the important question is why so many mergers and acquisitions are taking place in the industry. This question becomes even more relevant considering the media and analyst reports that increasingly challenge the broad focus of most financial institutions.⁴

This study aims to address this question and other related issues. I examine the existing empirical evidence on scope and scale economies in banking. In a recent survey paper, Berger, Demsetz, and Strahan evaluate the extensive, primarily U.S., evidence.⁵ Their findings are, if anything, quite sobering about scope and scale economies. However, most studies that they report on are quite dated. An important question, therefore, is whether this empirical evidence is suitable for explaining the current wave of consolidation. Although I conclude that the existing evidence is of some value (and I cite some newer evidence that is of greater value), I doubt that it is really helpful for understanding the current restructuring in banking. Several issues play a role here. Apart from econometric and sample-selection issues, and possibly fundamental changes in underlying “state variables,” in my view *the* important issue is that *strategic* considerations are *the* driving force behind the current wave of consolidation. As I argue, these considerations may have little to do with true scale or scope economies. Rather, learning, first-mover advantages, and strategic advantages of market power and associated “deep pockets” may explain the current wave of consolidation and the broad scope of many players in the industry.

Strategic positioning might, for the moment, be the rule of the game and an optimal response to the uncertainties and rapid (and unpredictable) changes facing financial institutions today. Consolidation might

2. See Berger (1998); Berger, Hunter, and Timme (1993).

3. See John and Ofek (1995); Comment and Jarrell (1995).

4. See, for example, a recent report by Oliver, Wyman and Company in collaboration with Morgan-Stanley that has the illuminating title “The Need to Differentiate.” Oliver, Wyman and Company (2002).

5. Berger, Demsetz, and Strahan (1999).

then be an evolutionary phenomenon and be followed by a new type of repositioning when the uncertainties become more manageable. However, as I argue, the competitive pressures are growing in the financial services industry. Margins are eroding, and costly scope-expanding strategies may become unsustainable. The viability of a broad “wait and see” strategy may soon be over.

This paper is organized as follows. I start with a discussion of the growing research in the field of financial intermediation. This research—mainly theoretical in nature—sheds light on the costs and benefits of bank funding vis-à-vis direct funding in the financial market. Although primarily focused on the funding role of banks and financial markets, it provides valuable insights into the economics of banking. In this context, I also discuss the growing importance of securitization and the impact of competition on the value of relationship banking. These insights provide a foundation for understanding the role of financial institutions in the future. Subsequently, I discuss the extensive empirical literature on scale and scope economies in banking. Here, I focus on scale and scope considerations that may become important in the future. An issue in this context is that the literature needs to differentiate more between the various activities (services and products) of financial intermediaries. Scale and scope economies have been looked at too generically. Next I introduce strategic considerations—in particular, the importance of *strategic positioning*—and discuss in some detail the relevance of these insights for the ongoing restructuring in the European financial services industry. Finally, I conclude by offering some thoughts on the (to be expected) disaggregation of the value chain, with a more prominent role for alliances and joint ventures. I also discuss some political considerations, particularly in the European context, that may have an important impact on the future path of the ongoing restructuring.

Fundamentals: The Economics of Banking

What does economic theory tell us about the role of financial institutions? The relevant field of financial intermediation offers some guidance in uncovering the added value of financial institutions. The literature has focused primarily on three issues: the role of banks in funding real activities, the value of relationships in intermediated finance versus transac-

tions in financial markets, and the prospects of liquefying bank assets (for example, securitization).

In this section, I examine what economic theory has to say on each of these issues. Of particular interest also is the impact of the ever more competitive environment on the value of relationship banking. This sheds some light on the competitive positioning of financial institutions and their possibly changing role. Although these insights are primarily theoretical, they provide a valuable foundation for understanding the ongoing restructuring in the financial services industry.

Traditional Versus Modern Banking

Traditional commercial banks hold nonmarketable or illiquid assets that are funded largely with deposits. There is typically little uncertainty about the value of these deposits, which often can be withdrawn on demand. The liquidity of bank liabilities stands in sharp contrast to that of bank assets, reflecting the banks' *raison d'être*. By liquefying claims, banks facilitate the funding of projects that might otherwise be infeasible.

The banks' assets are illiquid largely because of their information sensitivity. In originating and pricing loans, banks develop proprietary information. Subsequent monitoring of borrowers yields additional private information. The proprietary information inhibits the marketability of these loans. The access to information is the key to understanding the comparative advantage of banks. In many of their activities, banks exploit their informational advantages and the related network of contacts. This relationship-oriented banking is a characteristic of value-enhancing financial intermediation. The relationship and network orientation applies not only to traditional commercial lending but also to many areas of "modern banking."

One might be tempted to interpret modern banking as transaction oriented. An investment bank—generally considered a prime example of modern banking—facilitates a firm's access to public capital markets. The role of the investment bank could be interpreted as that of a broker: matching buyers and sellers for the firms' securities. In this interpretation, investment banks just facilitate transactions, which would confirm the transaction orientation of modern banking. The investment banks' added value would then be confined to their networks—that is, their ability to economize on search or matching costs. As a characterization of

modern banking, this describes their economic role too narrowly. Investment banks do more. They—almost without exception—*underwrite* those public issues; that is, they absorb credit and placement risk. This brings the role of an investment bank much closer to that of a commercial bank engaged in lending; the processing and absorption of risk are typical intermediation functions similar to those encountered in traditional bank lending.⁶

In lending, a bank manages and absorbs risk (for example, credit and liquidity risks) by issuing claims on its total assets with different characteristics than those encountered in its loan portfolio. In financial intermediation theory, this is referred to as *qualitative asset transformation*.⁷ The underwriting of an investment bank can be interpreted analogically; risk is (temporarily) absorbed and is channeled through to the claimholders of the investment bank. The role of investment banks is therefore more than just purely brokerage. Underwriting requires the acquisition of information about the borrower, which is supported by a relationship orientation. A relationship orientation will therefore still be present in investment banking, in the direction of both investors (placement capacity) and borrowing firms.

What is also true, however, is that relationships in investment banking depend much less on local presence. Nevertheless, public debt issues are *relatively* hands-off, with few interactions between financiers and borrowers over time.⁸ The full menu of financing options for borrowers includes many other products with varying degrees of relationships. For example, syndicated loans are found in the continuum between bank loans and public debt issues. These are offered by investment banks and commercial banks alike and typically involve several financiers per loan. Generally, only the lead banks have a relationship with the borrower, and the relationship intensity is somewhere between a bank loan and a public debt issue.⁹

6. From this perspective, it is not surprising that several European banks are integrating their debt capital market activities with their corporate lending operations. Previously, they had the debt capital market activities typically linked to equity capital market operations (within their investment banking divisions). The commitment to equity-linked investment bank activities is being reduced or even dismantled by many players in the industry.

7. See Greenbaum and Thakor (1995).

8. Berlin and Mester (1992).

9. See Dennis and Mullineaux (2000).

It is important that the relationship aspect involves not only funding but also various other financial services, such as letters of credit, deposits, check clearing, and cash management services. I do not focus on these services per se, but one should keep in mind that these services can expand the information available to the intermediary. As some have argued, the information that banks obtain by offering multiple services to the *same* customer may be of value in lending.¹⁰ For example, the use of checking and deposit accounts may help the bank to assess a firm's loan repayment capability. Thus the scope of the relationship may affect a bank's comparative advantage.

Are Bank Loans Special?

Some see public capital market financing as a potentially superior substitute for bank lending, but, stated as such, this is unwarranted. Bank lending has distinct comparative advantages. In particular, it may support enduring close relationships between debtor and financier that may mitigate information asymmetries. This has several components. A borrower might be prepared to reveal proprietary information to its bank, while it never would have disseminated this information to the financial markets.¹¹ A bank might also be more receptive to information because of its role as enduring and dominant lender. This amounts to observing that a bank might have better incentives to invest in the acquisition of information. While costly, the substantial stake that it has in funding the borrower and in maintaining an enduring relationship—with the possibility of reusing information over time—increases the value of information.¹²

The bank-borrower relationship is also less rigid than those normally encountered in the financial market. The general observation is that a better flow of information facilitates more informative decisions. In particular, relationship finance could allow for more flexibility and possibly value-enhancing discretion. This is in line with the important ongoing discussion in economic theory on rules versus discretion, where discre-

10. Degryse and Van Cayseele (2000).

11. Bhattacharya and Chiesa (1995).

12. Diamond (1984) introduces intermediaries as delegated monitors. See Chan, Greenbaum, and Thakor (1986) for a discussion on information reusability and James (1987) and Lummer and McConnell (1989) for empirical evidence. For a nice illustration supporting the special role of banks, see Berlin (1996).

tion allows for decisionmaking based on more subtle—potentially non-contractible—information.¹³ Two dimensions can be identified. One dimension is related to the nature of the bank-borrower relationship; the other involves the structure of contracts. The first emphasizes that the bank-borrower relationship is in many ways a mutual commitment based on trust and respect.. This allows for *implicit*—non-enforceable—long-term contracting. An optimal flow of information is crucial for sustaining these “contracts.” Information asymmetries in the financial market and the non-contractibility of various pieces of information may rule out long-term access to alternative sources of capital market funding as well as *explicit* long-term commitments by banks. Therefore, both bank and borrower may realize the added value of their relationship and have an incentive to foster the relationship.¹⁴

Another feature is that relationship banking could accommodate an intertemporal smoothing of contract terms, including accepting losses for the bank in the short term that are recouped later in the relationship. Petersen and Rajan show that credit subsidies to young or de novo corporations may reduce the moral hazard problems and information frictions that banks face in lending to such borrowers.¹⁵ However, subsidies impose losses on the bank. Banks may nevertheless provide funding if they can expect to offset these losses through the long-term rents generated by these borrowers. The point is that without access to subsidized credit early in their lives, de novo borrowers would pose adverse selection and moral hazard problems so serious that *no* bank would lend to them. Relationship lending could make such subsidies and accompanying loans feasible because the proprietary information generated during the relationship produces rents for the bank later in the relationship and permits the early losses to be offset.¹⁶ Berlin and Mester show that rate-insensitive core deposits allow for intertemporal smoothing in lending rates.¹⁷ This suggests a complementarity between deposit taking and

13. See, for example, Simons (1936); Boot, Greenbaum, and Thakor (1993).

14. Mayer (1988) and Hellwig (1991) discuss the commitment nature of bank funding. Boot, Thakor, and Udell (1991) address the *credibility* of commitments. Schmeits (2002) formally considers the impact of discretion (flexibility) in bank loan contracts on investment efficiency.

15. Petersen and Rajan (1995).

16. The importance of intertemporal transfers in loan pricing is also present in Berlin and Mester (1998).

17. Berlin and Mester (1998).

lending. Moreover, the loan commitment literature has emphasized the importance of intertemporal tax-subsidy schemes in pricing to resolve moral hazard and also the complementarity between deposit taking and *commitment* lending.¹⁸

The other dimension is related to the structure of the explicit contracts that banks can write. Bank loans are generally easier to renegotiate than bond issues or other public vehicles for capital market funding. The renegotiation allows for a qualitative use of flexibility. Sometimes this is a mixed blessing because banks may suffer from a soft budget constraint (the borrowers may realize that they can renegotiate *ex post*, which could give them perverse *ex ante* incentives). In reality, bank loans often have *priority* to resolve this problem. With priority a bank may strengthen its bargaining position and thus become tougher.¹⁹ The bank could then credibly intervene in the decisionmaking process of the borrower when it believes that its long-term interests are in danger. For example, the bank might believe that the firm's strategy is flawed or a restructuring is long overdue. Could the bank push for the restructuring? If the bank has no priority, the borrower may choose to ignore the bank's wishes. This is because the borrower realizes that the bank cannot credibly enforce its demands. The bank could threaten to call the loan, but the borrower, anticipating the dreadful consequences not only for himself but also for the bank, realizes that the bank would not carry out such a threat. However, when the bank has priority, the prioritized claim may insulate the bank from these dreadful consequences. It could now *credibly* threaten to call the loan and enforce its wishes on the borrower. This then identifies an important advantage of bank financing: *timely intervention*.²⁰

These observations highlight the complementarity of bank lending and capital market funding. Prioritized bank debt facilitates timely intervention. This feature of bank lending is valuable to the firm's bondholders as

18. On the importance of intertemporal tax-subsidy schemes in pricing to resolve moral hazard, see Boot, Thakor, and Udell (1991). On the complementarity between deposit taking and commitment lending, see Kashyap, Rajan, and Stein (1999).

19. See Dewatripont and Maskin (1995) on the issues of soft budget constraints. Diamond (1993), Berglöf and von Thadden (1994), and Gorton and Kahn (1993) address the priority structure.

20. One could ask whether bondholders could be given priority and allocated the task of timely intervention. Note that bondholders are subject to more severe information asymmetries and are generally more dispersed (that is, have smaller stakes). Both characteristics make them ill suited for an "early" intervention task.

well. They might find it optimal to grant bank debt priority over their own claims and, in doing so, delegate the timely intervention activity to the bank.²¹ Consequently, the borrower may reduce its total funding cost by accessing both the bank credit market and the financial market.

Diamond as well as Hoshi, Kashyap, and Scharfstein further develop arguments highlighting the complementarity of bank lending and capital market funding.²² Hoshi, Kashyap, and Scharfstein show that bank lending exposes borrowers to monitoring, which may serve as a certification device that facilitates simultaneous capital market funding.²³ Diamond shows that borrowers may want to borrow first from banks in order to establish sufficient credibility *before* accessing the capital markets. Again banks provide certification and monitoring. Once the borrower is “established,” it switches to capital market funding. In this explanation, there is a *sequential* complementarity between bank and capital market funding. In related theoretical work, Chemmanur and Fulghieri show that the quality of the bank is of critical importance for its role in certification.²⁴ This suggests a positive correlation between the value of relationship banking and the quality of the lender. The overall conclusion is that bank lending potentially facilitates more informative decisions based on a better exchange of information.²⁵ Although not universally valuable, this suggests a benefit of relationship-oriented banking.²⁶

21. The bondholders will obviously ask to be compensated for their subordinated status. This—ignoring the timely intervention effect—is “a wash.” In other words, the priority (seniority) or subordination features can be priced out. That is, as much as senior debt may *appear* cheaper (it is less risky), junior or subordinated debt will appear more expensive.

22. Diamond (1993); Hoshi, Kashyap, and Scharfstein (1993).

23. Empirical evidence provided by James (1987) and Slovin, Sushka, and Hudson (1988) support the role of banks in certification. Other evidence can be found in Houston and James (1995).

24. Chemmanur and Fulghieri (1994).

25. See, for example, Petersen and Rajan (1994) and Houston and James (1995) for empirical evidence.

26. The relationship feature of (primarily commercial) banking also has drawbacks. There are two primary costs to relationship banking: the soft budget constraint problem and the hold-up problem. The soft budget constraint problem has to do with the potential lack of toughness on the bank’s part in enforcing credit contracts that may come with relationship banking proximity. The problem is that borrowers who realize that they can renegotiate their contracts *ex post* like this may have perverse incentives *ex ante* (Bolton and Scharfstein 1996; Dewatripont and Maskin 1995). The seniority structure of bank loans may mitigate this. The hold-up problem has to do with the information monopoly the bank generates in the course of lending, which may allow it to make loans at noncompetitive

Securitization: A Threat to Bank Lending?

Securitization is an example of a financial innovation—or an innovation in funding technology—that suggests a potential gain of (transaction-oriented) markets at the expense of bank lending. Is this true? Let me first evaluate the economics of securitization.²⁷

Securitization is an example of the unbundling of financial services. It is a process whereby assets are removed from a bank's balance sheet. More specifically, banks no longer permanently fund assets; instead the investors buying the asset-backed securities provide funding. Asset-backed securities rather than bank deposits then fund dedicated pools of bank-originated assets. As I emphasize, securitization does not signal the demise of banks, even if it becomes an economically important innovation (and thus substantially reduces the banks' on-balance-sheet assets). To see this point, I analyze the traditional lending function in some detail.

The lending function can be decomposed into four more primal activities: origination, funding, servicing, and risk processing. Origination subsumes screening prospective borrowers and designing and pricing financial contracts. Funding relates to the provision of financial resources. Servicing involves the collection and remission of payments as well as the monitoring of credits. Risk processing alludes to hedging, diversification, and the absorption of credit, interest rate, liquidity, and exchange rate risk. Securitization decomposes the lending function such that banks no longer fund the assets but continue to be involved in the primal activities.

The economics of securitization dictate that the originating bank *credit enhances* the issue. Credit enhancement is typically achieved through the provision of excess collateral, guarantees, or a letter of credit. Effectively this means that the originating bank continues to bear

terms in the future to the borrower. More specifically, the proprietary information about borrowers that banks obtain as part of their relationships may give them an information monopoly. In this way, banks could charge (ex post) high interest rates on loans (see Sharpe 1990; Rajan 1992). The threat of being “locked in,” or informationally captured by the bank, may make the borrower reluctant to borrow from the bank. Potentially valuable investment opportunities may then be lost. Alternatively, firms may opt for multiple bank relationships. This may reduce the information monopoly of any one bank, but possibly at a cost. Ongena and Smith (2000) show that multiple bank relationships indeed reduce the hold-up problem but worsen the availability of credit.

27. Gorton and Pennacchi (1995) provide an economic rationale for bank loan sales and securitization. See also Stone and Zissu (2000).

part of the consequences (losses) if the securitized assets do not perform. The credit enhancement reduces the riskiness of the asset-backed claims from the investors' perspective, but, which is more important, it addresses conflicts of interest rooted in the originating bank's proprietary information. With private information in possession of the originating bank, the market requires assurances that the bank will truthfully reveal the quality of the assets it seeks to sell. As with a warranty in product markets, credit enhancement discourages misrepresentation by requiring the originator to absorb a portion of the losses owing to default. Similarly, credit enhancement signals the market that the originator will perform a thorough credit evaluation and an undiminished monitoring effort. Credit enhancement therefore reduces the information sensitivity of securitized claims by enhancing their marketability.²⁸

This implies that securitization could lead to a *reconfiguration* of banking. Banks would continue to originate and service assets, while also processing the attendant risk in order to sustain these activities. Banks would still screen and monitor borrowers, design and price financial claims, and provide risk management services. As such, securitization would preserve the incremental value of banks.²⁹

How important will securitization become? I can only offer a very tentative answer. So far, the securitization market is still small in Europe, but it is growing. The U.S. market is much more developed. For example, the total volume of mortgage-linked securitization issues in Europe amounts to just 8 percent of that in the United States, where it stands at \$1.6 trillion.³⁰ In the United States, securitization has spread rapidly in the last two decades, but mainly for car loans, mortgages, and credit card receivables. The standardization and modest size of these credits allow diversification of idiosyncratic risks on pooling. Private information distortions—as discussed in the context of credit enhancement—are thought to be less severe for these standardized credits.

28. The reputation of the originating bank will be equally important. Moreover, accreditation by credit-rating agencies could also add to the marketability of the securitized claims.

29. See also Boyd and Gertler (1995). They argue that a substitution from on-balance-sheet to off-balance-sheet banking may have (falsely) suggested a shrinking role for banks. As in the description of securitization in the text, much of the bank's value added in the primal activities would be preserved.

30. Figures from the Bond Market Association.

What can be said about the larger, more customized, and more heterogeneous commercial loans? These tend to be more information sensitive. Their quality is therefore more dependent on the rigor of initial screening and subsequent monitoring. Hence the pooling of commercial loans does less to dissipate their information sensitivity, attenuating the benefits of securitization. These considerations, however, do not preclude the securitization of business credits. They merely elevate the cost. For example, with more information-sensitive assets, the originating bank may need to retain a larger portion of the credit risk; credit enhancement becomes more important. If the information sensitivity is too severe, credit enhancement, short of total recourse, may not overcome the private-information problem. Thus the potential advantages of securitization would largely be lost, and traditional bank lending would continue to dominate. However, for an increasing array of moderately information-sensitive assets, securitization might become the preferred intermediation technology.

In fact, over the last few years several successful examples of transactions involving the securitization of business credits have emerged. Including synthetic transactions (default swaps), the European volume of CDOs (securitization of business credits) has grown from €40 billion in 1999 to €128 billion in 2001. Moreover, a new market for the securitization of working capital (via asset-backed commercial paper conduits) is rapidly coming to maturity.³¹

As my discussion of the economics of securitization suggests, even if securitization becomes prevalent, banks could continue to play an important role for most of the primal activities that were previously combined together in bank lending. More important, the comparative advantage of banks rooted in proprietary information about their clientele could be preserved. However, the message is not totally comforting for banks. In particular, the securitization of loans may greatly benefit from standardization in the origination (lending). This may weaken the bank-borrower relationship somewhat. The securitization trend also forces banks to think about their market positioning. A key question is whether securitization skills (structuring, but also placement capacity with end investors) need to be developed. In other words, can the commercial bank continue

31. As a caveat, some of this activity in securitization is undoubtedly induced by capital arbitrage, and the new Basel II capital requirements may mitigate this somewhat.

just to originate assets (and let others bring in the securitization skills), or do securitization skills need to be developed in-house? For most commercial banks, it would be very difficult to develop placement capacity. Also their sheer size would make this a difficult proposition. Some structuring skills, however, and a better feeling for the financial markets might become indispensable.

Is Relationship Banking at Risk?

I have argued that relationships may facilitate a continuous flow of information between debtor and creditor that could guarantee uninterrupted access to funding. Some, however, believe that more competition threatens these relationships, while others argue the exact opposite. The question then is how elevated interbank competition or more intense competition from the financial market affect relationship banking.³²

I first consider the viewpoint that more competition means less relationship banking. The argument here is that with more competition borrowers might be tempted to switch to other banks or to the financial market. When banks anticipate a shorter lifespan for their relationships, they may respond by reducing their relationship-specific investments. More specifically, anticipated shorter relationships inhibit the reusability of information and thus diminish the value of information.³³ Banks may then find it less worthwhile to acquire costly proprietary information, and relationships will suffer. Shorter or weaker relationships may then become a self-fulfilling prophecy.

A complementary negative effect of competition on relationship banking may come from the impact that competition has on the intertemporal pricing of loans. Increased credit market competition could impose constraints on the ability of borrowers and lenders to share surpluses intertemporally. In particular, it would become more difficult for banks to “subsidize” borrowers in earlier periods in return for a share of the rents in the future. Thus the funding role for banks that Petersen and Rajan see in the case of young corporations may no longer be sustainable

32. A second trend is the better dissemination of information. This, by itself, could reduce the value of (previously) proprietary information in the hands of banks and possibly reduce the value of relationship banking.

33. Chan, Greenbaum, and Thakor (1986).

in the face of sufficiently high competition.³⁴ This indicates that excessive interbank competition *ex post* may discourage bank lending *ex ante*.³⁵

An alternative view is that competition may elevate the importance of a relationship orientation as a distinct competitive edge. It may mitigate somewhat the negative effect that pure price competition would otherwise have on bank profit margins. Boot and Thakor show that a relationship orientation can alleviate these competitive pressures because a relationship banking orientation can make a bank more *unique* relative to competitors.³⁶ A more competitive environment may then encourage banks to become more client driven and to customize services, thus focusing more, rather than less, on relationship banking.³⁷

The impact of competition on relationship banking is complex; several effects need to be disentangled. What has emerged, though, is that greater interbank competition may very well elevate the value of relationship banking. Pure price competition is an unattractive alternative. However, truly creating an added value in relationship banking may require skills that many banks do not (yet) have. Without those skills, a retreat from relationship banking (including, for example, downsizing of the branch network) might be unavoidable.

Conclusions

The overall picture emerging from this overview of economic theory is that banks play an important role in the process of financial intermedi-

34. Petersen and Rajan (1995).

35. Berlin and Mester (1998) provide a related, albeit different, argument. Their analysis suggests that competition forces banks to pay market rates on deposits, which may complicate the potentially value-enhancing smoothing of lending rates. An extensive empirical literature focuses on the effect of consolidation in the banking sector on small business lending. This consolidation may in part be a response to competitive pressures. The effects on small business lending are, however, not clear-cut.

36. Boot and Thakor (2000).

37. Boot and Thakor (2000) distinguish generic (information-extensive) transaction lending by banks from relationship lending. Transaction lending is most similar to direct funding in the financial market. Boot and Thakor's analysis attaches two dimensions to relationship lending: volume and intensity or quality. That is, banks can choose to offer more relationship loans (at the expense of transaction loans) but also have to decide on the *intensity* of their relationship loans. Intensity points, for example, to sector specialization: How much does a bank invest in specific knowledge of a firm or industry? The more the bank invests, the better it can fine-tune its services to the needs of its relationship borrow-

ation. Banks process information, often proprietary, and will continue to have a distinct role in lending. Securitization of bank loans has some impact, but it will not fundamentally affect the relationship-oriented role of banks. However, obtaining some capabilities in the market for debt capital might become necessary.

Although most of the arguments in this section focus on the role of banks in lending, the applicability of the analysis is broader. Banks facilitate a fine-tuning of intermediation services and capitalize in this way on their relationships. The growing competitive pressures in the industry will more than ever force banks to search for comparative advantages. Offering tailored, relationship-oriented financial services is only possible for those institutions that can capitalize on distinct skills. The optimal scale and scope have not been addressed. I discuss this topic next.

Issues of Scale and Scope in Banking

Scale and scope economies are often cited as one of the main reasons behind the current wave of mergers and acquisitions in banking. But are scale and scope economies truly present? And could they rationalize the current restructuring in the industry? In this section, I first summarize the empirical evidence on scale and scope economies. Existing empirical evidence is quite generic. The existing studies do not differentiate between which activities in combination could offer scope benefits, nor do they focus on which activities generate economies of scale.

After discussing the empirical evidence and the main barriers to realizing scope and scale economies, I identify the main sources of scope and scale economies. I conclude with some observations on the activities that I consider most susceptible to scale and scope economies.

Early Empirical Evidence on Scale and Scope Economies

Scale and scope economies in banking have been studied extensively. A recent survey paper by Berger, Demsetz, and Strahan concludes that, in general, the empirical evidence cannot readily identify substantial

ers. Boot and Thakor's main finding is that competition induces banks to make more relationship loans at the expense of (generic) transaction loans. However, the quality (or intensity) of the relationship loans is lower when interbank competition heats up.

economies of scale or scope.³⁸ Scale economies are not readily found in banks beyond a relatively small size as measured by total assets (that is, beyond \$100 million up to \$10 billion in total assets). The story on scope economies is even more negative. Diseconomies of scope are quite prevalent. An important caveat is that this research largely involves U.S. studies only. Contrary to banking in many other countries, U.S. banking has historically been quite fragmented.³⁹ The mergers and acquisitions that were included in most studies took place in an environment where severe constraints existed on the type and geographic dispersion of activities. It is conceivable that these restrictions made it difficult to benefit from scale and scope economies.⁴⁰ Moreover, most studies use data from the 1970s and 1980s. Since the structure, technology, and environment of banking have changed dramatically over the last decade, it is not clear whether insights from those studies readily apply today.

In any case, most empirical researchers in the area of industrial organization will acknowledge that scale and scope economies are very difficult to measure. So, at best, very modest conclusions could ever be drawn from these empirical studies. The presence of largely inconclusive results should then not be surprising. Moreover, inefficiencies in managing larger organizations may mitigate possible benefits of scale and scope. This would be in line with the sizable literature on the “diversification discount.” Berger offers an illustration by observing that managerial ability to control costs creates a differentiation in bank performance that may well dominate the potential scale economies.⁴¹ The difference between an “average bank” and the “best-practice bank” is about 20 percent (of the costs of the average bank), while cost scale economies in the 1980s were not more than 5 percent but possibly are more today. Berger also argues that managerial ability may have an equally big impact on revenue efficiency.

38. Berger, Demsetz, and Strahan (1999). See also Shaffer and David (1991); Cornett and Tehranian (1992); Mester (1992); Clark (1996); and Mitchell and Onvural (1996).

39. This is not really surprising. U.S. banks faced substantial regulatory constraints on their activities concerning both the type of their activities (for example, banks could engage in commercial banking or investment banking, not both) and their location (for example, limits on interstate banking). More recently, however, regulatory constraints have become less binding. This undoubtedly partially explains the surge in mergers and acquisitions.

40. See also Calomiris and Karceski (2000).

41. Berger (2000).

A complication in the empirical studies is also that increasing scale and scope may facilitate market power and thus elevate profitability in the *absence* of scale and scope economies. This effect might be less important in intergeographic market mergers. Moreover, alternative distribution networks (for example, direct banking) and the proliferation of financial markets may have reduced the effective market power of locally concentrated financial institutions and elevated the contestability of markets. This points at a more general issue: the level of concentration may no longer be a good proxy for the (non-) competitiveness of a market.

Another issue is that the level of aggregation in most studies is high and may obscure the benefits of scale and scope. In particular, one should look at what *type* of mergers and acquisitions involve scale and scope benefits. For example, Flannery points at recent research suggesting that mergers with both a geographic and an activity focus are most value enhancing.⁴² Similarly, in analyzing scope and scale issues, one should focus on the type of activities. What are the scale economies in each activity? And what mix of products offers true scope economies?⁴³

A final concern relates to the effect of mergers on the valuation of financial institutions. A popular methodology is to look at the announcement effect of a merger. A problem with this approach is that mergers may change the structure and dynamics of the industry. If this were the case, the announcement effect could measure all kinds of other effects, including changes in expectations. Some of these and other concerns are summarized in table 1.

Further Evidence on Scope and Scale Economies

Let me first focus on scope economies. In “earlier” work (up to the mid-1990s), scope economies were measured by comparing the costs of a

42. Flannery (1999). An important issue is whether this only points at market-power benefits or whether true efficiency gains could be at work as well.

43. It is surprising that this type of research is still hard to find. A lot of research has been done on potential conflicts of interest in universal banking. To some extent, this is activity specific (investment banking versus commercial banking). However, this research is of limited interest for this study because it ignores the question of complementarity between activities. This is not surprising because the literature is motivated solely by the obscure Glass-Steagall regulation in the United States (see Kroszner and Rajan 1994; Puri 1996). See Ramirez (2002) for some evidence on the scope economies in U.S. banking before the Glass-Steagall Act.

Table 1. Some Problems with the Existing Empirical Studies on Scale and Scope Economies

<i>Subject</i>	<i>Issues</i>
<i>Market power analysis: effect on prices and profits</i>	
Static	Is concentration the right measure? What about contestability of markets?
Dynamic (effect of M&A)	The effects of changes in market power and efficiency are difficult to disentangle: (a) profitability ratios are affected by market power, (b) cost ratios via costs of deposits are linked to market power, (c) operational costs are affected by the relative importance of deposits versus purchased funds. Event studies are affected by “signaling.” That is, the immediate effect of a merger announcement on stock prices incorporates all types of changes in expectations.
<i>Efficiency consequences</i>	
Static	What is the best way to measure scope economies? Data points are lacking for mega-institutions.
Dynamic	There is little differentiation between the type of mergers and the type of activities.

specialized single-product financial institution to a financial institution producing multiple financial services. Ferrier, Grosskopf, Hayes, and Yaisawarng offer a typical study along these lines.⁴⁴ They consider possible scope benefits of five closely related bank services—demand deposits, time deposits, real estate loans, installment loans, and commercial loans. Their sample includes 575 banks that participated in the Federal Reserve’s functional cost analysis (FCA) program in 1984. Comparing the costs of the more specialized corporations to those of the more diversified corporations, they conclude that less than 3 percent of the banks in the sample showed scope economies, while 79 percent had scope diseconomies. Other contemporary studies come to similar conclusions.⁴⁵ Ferrier, Grosskopf, Hayes, and Yaisawarng also show that diseconomies of scope were most likely for the larger banks in the sample.⁴⁶

More recent studies have focused on different efficiency concepts—in particular, profit efficiency. Again the results are inconclusive at best. In

44. Ferrier and others (1993).

45. Berger, Hanweck, and Humphrey (1987); Pulley and Humphrey (1993).

46. Ferrier and others (1993).

a typical study, Berger, Humphrey, and Pulley focus on the joint "consumption" benefits of deposits and loans—in a sense the benefits of one-stop banking.⁴⁷ Theoretically, various benefits could be envisioned, such as lower transaction and search costs and lower information costs. However, no profit efficiency enhancement could be discovered. This does not necessarily imply that scope economies do not exist. It is (theoretically) possible for competition between financial institutions to prevent banks from retaining the benefits. That is, the surplus that scope expansion creates might be passed through to the consumers. But in general scope economies are hard to realize. Illustrative in this respect is a study by Saunders in which, of twenty-seven studies, thirteen find diseconomies of scope, six find economies of scope, and eight are neutral.⁴⁸

However, also in these studies "old" data dominate. Recently, DeLong looked at the shareholder gains—that is, the immediate announcement effects—from focused versus diversifying bank mergers in the United States between 1988 and 1995.⁴⁹ He found that focused mergers had positive announcement effects both in the level of activity and in geography. Moreover, focus in activities was more important than geographic focus, albeit the latter was important as well.⁵⁰ Activity-diversifying mergers had no positive announcement effects. These results point at the presence of scale rather than scope economies.

Although this paper (again) focuses on relatively small U.S. banking institutions (market cap of approximately \$2 billion for the acquirer and less than \$100 million for the target), recent European evidence on much larger institutions confirms the desirability of geographic focus. Beitel and Schiereck, analyzing mergers between European financial institutions between 1985 and 2000, show that domestic (intrastate) mergers on average have significantly positive combined (bidder plus target) announcement effects, but that these were weaker in the last few years (1998–2000).⁵¹ They also find that diversifying domestic mergers (partic-

47. Berger, Humphrey, and Pulley (1996).

48. Saunders (2000).

49. DeLong (2001).

50. Geographic expansion in the United States often involves buying up neighboring (focused) retail banks, which allows for economies on information technology systems, management processes, and product offerings. Relative to the European scene, where geographic expansion often implies buying up big universal banks across the border, fewer barriers to an effective integration exist. This may explain the more favorable U.S. evidence.

51. Beitel and Schiereck (2001).

ularly between banks and insurers) had on average a positive value impact. In line with this evidence, the Citigroup-Travelers merger resulted in an increase in the stock prices of both merger partners.⁵² The latter insight is also confirmed in other European studies on mergers between banks and insurers; for example, Cybo-Ottone and Murgia find a positive effect on combined value.⁵³ However, the distribution of the value gains is often tilted against bidders. Especially in cross-border bank mergers, bidding banks suffer a severe loss in value (and targets come out extremely well).

The importance of geographic focus may point at problems with managing (and improving) foreign acquisitions but also highlights the market power effect. Domestic consolidation often facilitates market power, and this is present with both scale- and scope-expanding mergers and acquisitions.⁵⁴

These (and related) studies focus on stock market responses to acquisition announcements. While these announcement effects reveal the market's expectation of future cash flow, actual performance may differ from market expectations. As DeLong puts it, "Although the prior conditions to predict successful mergers may exist, their presence may be difficult to discern."⁵⁵ This is particularly true for some of the mega-mergers observed today. A lack of data points and potentially radical and unprecedented shifts in the structure of banking give us (and the market) little guidance in interpreting the consequences of these mergers for value. As an example, the reported significant positive announcement effects associated with bank-insurance mergers may be difficult to reconcile with the current market sentiment.

An alternative approach for analyzing scale and scope economies is to focus on structural differences between financial conglomerates and specialized institutions. Several studies look at the relative cost and profit

52. Michael Siconolfi, "Big Umbrella: Travelers and Citicorp Agree to Join Forces in \$83 Billion Merger," *Wall Street Journal*, April 7, 1998.

53. Cybo-Ottone and Murgia (2000).

54. In an interesting recent paper, Focarelli, Panetta, and Salleo (2002) contrast the motivation for mergers to that of acquisitions. They conclude, based on Italian data, that mergers often have a strategic, revenue-enhancing objective (cross-selling), while acquisitions often aim at improving the credit policy (and thus the loan book quality) of the target.

55. DeLong (2001), p. 250.

efficiency.⁵⁶ Vander Venet examines this in the European context.⁵⁷ He finds somewhat higher cost and profit efficiency for conglomerates and universal banks. This may seem surprising in light of earlier comments. However, these efficiency differences cannot be translated readily in scale and scope economies. The banking industry is changing rapidly, and the (traditional) inefficiencies in banking are coming under attack from competitive pressure and technological advances. Differences in efficiency may just reflect differences in the state of adjustment of these institutions, translating into temporarily diverging levels of X-efficiency rather than scale or scope economies.

Problems with Realizing Economies of Scope and Scale

Technological and regulatory frictions affect the potential realization of scope (and scale) economies. For example, a merger between two financial institutions may not readily lead to scale and scope economies because the integration of computer systems may take time. An interesting account on this very issue is the integration of Citicorp and Travelers. A quote from the *New York Times*:

Citibank and Travelers say their deal is mainly about finding ways to grow rather than cutting costs. But the challenge will be finding common ground between Citicorp's traditional emphasis on advanced technology and Travelers' preference for low-cost, no frills systems.⁵⁸

The same article states that Citicorp has to resolve a backlog of past integration issues before it can even think of making its systems compatible with those of Travelers. These issues point at the potential frictions that severely hamper the realization of scale and scope benefits. For example, ultimately, technological benefits might also include the cross-use of databases from the insurance and banking side. The realization of this scope benefit might have to wait until systems are finally made compatible. The bottom line is that technological frictions may severely hamper the realization of scope (and scale) benefits.

A similar argument can be made with respect to regulatory constraints. If regulations force banking and insurance activities to be oper-

56. For example, Berger and Mester (1997).

57. Vander Venet (2002).

58. "Business Day Section," *New York Times*, April 13, 1998.

Table 2. Possible Barriers to Realizing Economies of Scope and Scale

<i>Barrier</i>	<i>Examples</i>
Technological barrier	Incompatible computer systems, conflicting distribution channels
Regulatory barrier	Explicit limitations on activities, regulatory-induced Chinese walls
Managerial barrier	Lack of leadership, cultural differences
Political considerations	“National flagship” attitude

ated separately, potential scope economies may suffer. This problem was most acute in the United States, where up to recently insurance and banking activities could not be combined under one corporate roof. In many other countries, regulations are (were) less stringent but could still have a major impact on the feasibility of realizing scope economies.

In the end, implementation issues are crucial as well. As the earlier reported evidence shows, there are enormous differences between the best-practice and average-practice financial institutions. Managerial ability may play a crucial role.

A final barrier may come from political considerations. Many countries seek to protect their domestic financial institutions and, if needed, help to create “national champions” to preserve domestic ownership and control. Table 2 summarizes the main barriers to realizing scope and scale economies.

Sources of Scope and Scale Economies

Having presented the mixed empirical evidence, I now examine the main sources of scale and scope economies:

- Information technology–related economies,
- Reputation- and marketing- or brand name–related benefits,
- Financial innovation–related economies,
- Benefits of diversification.

INFORMATION TECHNOLOGY–RELATED ECONOMIES. The first source, information technology, is most likely of great importance. Recent developments in information technology facilitate a more efficient and effective use of databases over a range of services and customers. That is, client-specific information may allow for scope economies and facilitate a competitive advantage to financial institutions that can offer a range of

services to their clientele. Similarly, the possibilities for reusing information across customers may have increased.

Information technology helps in identifying related client needs. Scope economies therefore apply to all products that could be sold to the same group of clients. Examples for bank-insurance conglomerates include life insurance features in mortgages, asset management or private banking services combined with life insurance, commercial credits in combination with industrial risk insurance, and export financing together with export credit insurance.

This also points at distribution network-related benefits. These benefits may be rooted in information technology developments. In particular, information technology developments may facilitate scale economies in running a sizable distribution network. Simultaneously, scope economies might become much more visible. For example, information technology facilitates an increasing array of financial products and services to be offered through the same distribution network. Customers may attach value to “one-stop shopping,” which encourages some financial institutions to offer a broader package of financial services tailored to particular categories of customers.

The developments in information technology also may affect the scope of control; information technology could facilitate the management of a bigger organization. This means that information technology could result in scale and scope economies. The implication is also that sizable investments in information technology are needed to truly benefit from scale and scope economies.

REPUTATION AND BRAND NAME MARKETING. The second source of scale and scope economies is linked to reputation and to brand name and marketing. Scope benefits may be present in the joint marketing of products to customers. Brand image is partially related to marketing but is also linked to the notions of trust, reputation, and confidence. These notions play an important role in the financial services industry. Increasingly, financial service providers are offering services that crucially depend on their reputation. For example, the growing importance of off-balance-sheet claims puts great emphasis on the ability of financial institutions to honor these *contingent* liabilities. But also the success of modern “virtual” distribution channels (the Internet) may depend crucially on reputation. Under certain conditions, increasing scale and scope allow financial institutions to capitalize more on their reputation. That is, a

wider scope (or scale) may help a financial institution to put its reputational capital at work.⁵⁹

A concrete example is the Dutch bank-insurance conglomerate ING, which offers direct banking services in, for example, Spain. The name ING is linked in advertisements explicitly to the Nationale Nederlanden brand name, its insurance subsidiary, which is a well-known and respected institution in Spain. This type of branding “externality” is also used by players entering the financial services arena from other industries (for example, supermarkets that leverage their brand name for financial services offerings).⁶⁰

FINANCIAL INNOVATION. The next source of potential scale and scope economies is financial innovation-related economies. Financial innovation as a source of scope and scale economies is a two-edged sword. Some suggest that larger institutions are less likely to innovate due to the inherent bureaucracy. This might be true, but that is a governance issue. *Ceteris paribus*, larger institutions could better recoup the fixed costs of financial innovations. Innovations could be marketed to a larger customer base or introduced in a wider set of activities. For financial innovations, scale and scope might be particularly important given the rapid imitation by competitors. Only for a short period of time does a true competitive advantage exist. A wider scope and larger scale may help to recoup the fixed costs in this short period of time. Financial innovation-related economies could also be directly related to product and client databases. Wider product and client databases can provide superior information for the design of financial innovations.

Bank-insurance combinations could potentially be successful in leveraging each other’s product skills. For example, insurance subsidiaries could benefit from derivative innovations coming from the banking arm. Similarly, securitization skills developed in banking are heavily cross-used, and, more recently, several securitization innovations have been motivated by particular needs in the insurance operation.

DIVERSIFICATION. The fourth potential source of scale and scope economies is the benefit of diversification. Several products might be

59. See Boot, Greenbaum, and Thakor (1993).

60. The ING example also shows the possible sharing of marketing expertise between insurance and banking subsidiaries. Banking subsidiaries have generally benefited from the extensive direct marketing expertise of the insurance arm. In the case of ING, the Post-bank (an ING subsidiary) skills in direct banking were also relevant.

close substitutes—for example, pension, life insurance, and saving products. Combining these products and services within one organization mitigates the effects of demand substitution over these products and activities. This *could* be interpreted as a diversification benefit but may also point to cross-selling benefits.

From a corporate finance perspective, diversification is a controversial argument. After all, investors (shareholders) could diversify, and why would a financial institution itself need to do this (unless, of course, there are synergies and thus scope benefits)? However, various frictions may explain the value of diversification. For example, diversification facilitates an internal capital market where businesses that generate cash flow could help to fund other activities that need funding. If raising external funds is costly, this may add value. Nevertheless, this might be a mixed blessing. Often the presence of internal capital markets invites cross-subsidization of marginal or loss-making activities that could wipe out potential benefits. This is also the finding of Berger and Ofek, who see an average diversification discount of 13–15 percent.⁶¹ Having said this, it is true that a low volatility in returns is considered very important in banking. This points to some benefit of diversification.

A link can also be made to the proliferation of off-balance-sheet banking. These activities involve all kinds of guarantees that lead to contingent liabilities. For such activities, the credibility of the bank in being able to honor such guarantees is crucially important. One measure of this is a bank's credit rating. With the proliferation of off-balance-sheet banking, ratings have become more important. If diversification helps in getting a better rating, a stronger argument for diversification can be made.

Further Observations and Conclusions

The various sources that I have discussed point to potential *revenue* (output) and *cost* (input) synergies.

Table 3 summarizes the discussion so far. Most potential sources of economies of scale and scope are related to distribution. The importance of the distribution network is clear and should be considered a primary source of scope and scale benefits.

The possibility for scope economies is generally present. For example,

61. Berger and Ofek (1995).

Table 3. Revenue and Cost Synergies

<i>Source and type of synergy</i>	<i>Example</i>
<i>Information technology–related economies</i>	
Revenue	Cross-selling potential
Cost	Fixed cost of information technology; reusability of information (cross-sectional and intertemporal); scale economies in running distribution network
<i>Reputation- and marketing- or brand name–related benefits</i>	
Revenue	Acceptance of new distribution channels (Internet); cross-selling potential
Cost	Fixed cost of marketing, branding
<i>Financial innovation–related benefits</i>	
Revenue	Superior innovations based on broader set of information; better extraction of rents due to bigger network
Cost	Fixed cost of innovation
<i>Benefits of diversification</i>	
Revenue	Avoidance of loss of turnover to substitutes; benefits linked to off-balance-sheet activities
Cost	Internal capital market and subsidies

on the demand side, the proliferation of savings products and their link to pensions, mutual funds, and life insurance clearly push for joint distribution and thereby facilitate economies of scope. However, a word of caution is warranted. Consider, for example, investments in information technology. Developments in information technology might have made it possible to better exploit potential scope economies by offering multiple products to a particular group of customers, using new direct distribution channels with relatively easy access to (formerly) distant customers. However, developments in information technology offer very good possibilities for focused single-product players as well. Also interfaces (may) come up that help to bundle the product offerings of specialized providers, thereby becoming a substitute for an integrated provider. Only very well-managed financial services firms may realize positive scope economies. The execution (X-efficiency) is probably more crucial than ever before, since inefficiencies will be exploited by single-product players. This means that it is very unlikely that (ultimately) a single strategy will dominate in the financial services sector.

The same arguments apply to vertical disintegration of the value chain. Specializing in one segment of the value chain might, for now, be

too risky a strategy. Banking is too much in turmoil, and specialization within the value chain may lead to an overly vulnerable dependence on the other players. But ultimately it seems realistic to expect the emergence of, for example, product specialists without a distribution network.⁶² This would fit a situation where financial intermediaries become supermarkets that sell products from a variety of suppliers.⁶³

The scale economies and benefits coming from focus could be substantial.

In the particular context of bank-insurer mergers, several other comments can be made. An important issue concerns the potential benefits coming from asset management. Some argue that the income stream from asset management is relatively stable and hence a welcome addition to the otherwise erratic revenue stream of financial institutions. There might be some truth in this, but this benefit, at least from a corporate finance perspective, cannot be really big. That is, diversification for purely financial reasons could also be accomplished by investors individually in the financial market. Thus, unless the synergies with other business lines are substantial (and possibly they are), an independent asset management operation is a credible alternative.

Similarly, people argue that bank-insurance combinations have a distinct benefit on the funding side. Diversification may allow for a more effective use of equity capital. Also direct funding synergies may apply. The mismatch between assets and liabilities on the bank's balance sheet (short-term funding, long on the asset side) might be the reverse from that of an insurer (long-term obligations). Again, corporate finance theory is skeptical about the validity of these arguments.

Another argument for combining life insurance and banking is that it could augment the total asset management pool and thus offer scale economies. Although this might be true, more recently banks and insurers have learned that the asset management operation requires distinct skills and is not "automatically" profitable as a passive spin-off from other

62. See also Hamoir and others (2002).

63. On the benefits of vertical (dis)integration in the financial services industry, there is little empirical work. An interesting exception is a recent paper by Berger and others (2002), which looks at profit scope economies in combining life and non-life in the insurance industry. They find that conglomeration (and hence scope) *might* be optimal for larger institutions that are primarily retail or consumer focused and have vertically integrated distribution systems.

(feeding) activities. Thus synergies are present, but not necessarily dominant. This is not say that combining banking and insurance with an appropriate customer focus could not be value enhancing. As stated earlier, combining banking and insurance could offer synergies in distribution. This builds on the discussion of distribution network–related benefits.

However, other factors may undermine the possibility for realizing scope benefits. For example, due to national tax regulations, life insurance needs to be tailored to each specific country. Also other differences exist between countries in terms of (corporate) culture, law, and so forth. These complications make it important to have well-focused operations outside the home market and to abstain from scope-expanding strategies that would complicate the operation even more. In some cases, this also means that one should abstain from broad cross-border acquisitions and only choose to go cross-border where the specific activity at hand requires this.

These observations help to understand the reconfiguration of many European financial institutions. In particular, it becomes increasingly questionable to rationalize a universal banking strategy based on some company-wide synergy argument. Scope economies need to be carefully examined and linked directly to specific market segments across clients, products, and geographic areas of operation.⁶⁴

Scope as a Strategic Advantage

The analysis so far has focused solely on scope and scale economies. This in itself is inadequate for predicting or explaining the positioning of financial institutions. The actual positioning will depend on quite a few other factors as well. In particular, a financial institution that has to position itself today will take the following factors into account:

—What are my core competencies? And what is my current position and financial strength?

—How do I expect the market for financial services to develop? Can I distinguish various scenarios?

—What market structure do I expect in the various scenarios? In particular, what do I expect the competition will do?

64. See also Smith and Walter (1997).

Only at this stage, the potential for scope and scale economies enters:

—What are the scope and scale economies in the delivery of financial services?

This implies that scope and scale economies are just one input, albeit an important one, for the positioning today. It is also worth noting that the decision about scale and scope (involving choices about clients, products, and geographic presence) is not final. For example, the choices being made today could seek to keep options open, anticipating further restructuring once more information becomes available. This is important for interpreting the restructuring that we observe. The current restructuring is motivated by strategic considerations (for example, positioning) and may not give a good indication about what the future structure of the financial services sector will be. Current decisions might be “posturing” vis-à-vis competitors that might be undone in the future. In this section, I develop this strategic rationale for restructuring in the financial services sector.

General Framework

The explanation developed in this section is that strategic uncertainty about future exploitable core competencies may dictate broadening of scope. The basic idea is as follows. Suppose a financial institution knows that—perhaps due to deregulation—it can participate in another market at some time in the future. The problem is that this is a new market, so the financial institution is highly uncertain about whether it has the skills to compete effectively in it.⁶⁵ The institution has two choices. It can wait until that future time to find out whether it has the capabilities and “core competencies” (as defined by Hamel and Prahalad) for this new market.⁶⁶ Or it can enter the market “early” and discover what its skills are prior to making costly resource allocation decisions. The advantage of the second approach is that it permits the institution to “experiment” with a new business and learn whether it has the skills to compete in that business. This learning permits better decisions when

65. These are strategic investments in activities that are “uncertain.” What I mean by this is that the investment is in an activity with uncertain profit potential or that the fit between the new activity and the existing activities is uncertain. In both interpretations, the profit potential is “uncertain.”

66. Hamel and Prahalad (1990).

competition commences. In particular, having better knowledge about its own skills allows the institution to be more aggressive in its decisions regarding output and to gain market share when it knows that its skills are superior to those of its competitors and to exit the market when its skills are inferior.

One could explain scope expansion as the financial institution reserving the right to play in a variety of “new” activities. By making incremental investments today, the institution puts itself in a privileged position through the acquisition of superior information by learning. This allows it to wait until the environment becomes less uncertain before determining whether to compete in the new market and, if so, how aggressively.⁶⁷ In a recent paper, Boot, Milbourn, and Thakor develop a model that formalizes these ideas and incorporates scope as a potential competitive advantage.⁶⁸ Their framework is as follows. It starts out with a financial services sector with narrowly defined existing activities and asks whether financial institutions should expand into a “new” activity. A key feature of the analysis is that there is strategic future uncertainty about the demand for this new activity—that is, the activity has prospects only in the long run, and demand may not materialize. The institution must decide whether or not to expand in this activity and, if so, whether to enter early or late. Early entry is costly because the activity becomes important only later. Demand may not materialize, and entering early requires investments to be made prior to the resolution of demand uncertainty. Moreover, the scope expansion associated with investing in strategic options could reduce the competitiveness of existing operations (say, due to dilution of focus). However, early entry offers potential strategic advantages. In particular, early entry could lead to the discovery of skills that would allow for a more efficient delivery of the new activity and hence make the financial institution a more credible competitor once the prospects of this activity become clear.

The question is, When will the benefits of early entry outweigh the costs? The uncertainty about skills plays a key role here. If this uncertainty is substantial, early entry may be beneficial. The other key factor is the competitive environment of the financial services sector and the

67. See also Courtney, Kirkland, and Viguier (1997) for the link between strategy and uncertainty.

68. Boot, Milbourn, and Thakor (2002).

anticipated competition for the new activity. Suppose that the new activity can also be offered by a specialized provider (a “boutique” specializing in this activity). If the financial institution enters (early or late), one could consider the market for this activity as a Cournot duopoly game. Early entry is beneficial because it would then learn its skills in the new activity. This allows the institution to compete more aggressively when it has favorable information about its skills and more cautiously when it has poor information about its skills. The benefits of early entry also depend on the likelihood that a specialized provider will come along. Whether early entry is optimal will thus crucially depend on the competitive environment.

Importance of the Competitive Environment

Also the competitive environment of the existing activities enters the analysis because of the investment and risk associated with early entry in the new activity. If the existing activities face “too much” competition, financial institutions will be unable to absorb the investment and risk that come with early entry in the new activity. An immediate implication is that investments in strategic options and thus the adoption of broader, less focused strategies will be observed in less competitive industries, whereas firms in competitive industries will embrace more focused strategies. This could explain why continental European financial institutions generally follow broad strategies. Their local market power allows them to afford the “widening of scope” strategy and to benefit from its potential future strategic advantages.

Moreover, the anticipated future competitive environment for the new activity matters as well. If the financial institution anticipates facing little or no competition in this activity in the future, early entry—with its accompanying cost and dilution of focus—is unnecessary because a competitively unchallenged institution can operate successfully in this market without the benefit of early entry. At the other extreme, when the anticipated competition for the new activity is very intense (perhaps due to many potential future competitors), early entry is not an attractive proposition and is once again suboptimal. The analysis thus leads to the prediction that moderate anticipated competition in the new activity together with not “too much” competition in the existing activities facilitate early entry. Table 4 summarizes the main insights.

Table 4. Optimal Scope as a Function of the Competitive Environment

<i>Anticipated competitive environment in the strategic option (new activity)</i>	<i>Current competitive environment in existing financial services activities^a</i>	
	<i>Little to moderate competition</i>	<i>High competition</i>
Little competition	Narrow	Narrow
Medium competition	Broad	Narrow
High competition	Narrow	Narrow

a. Narrow—no early investment in new activity. Broad—early investment in new activity.

The analysis shows that starting from a situation with strategic uncertainty, the competition the financial institution faces in its current activities together with the competition it anticipates in the future in the new activity lead to predictions about early entry and hence optimal scope. Scope expansion is seen to be optimal when there is high strategic uncertainty, moderate competition expected in the new activity, and low-to-moderate competition in the existing activity.

In this context the benefits of consolidation also could be explored. Now assume that there are multiple competing institutions at the outset. Consider two of these contemplating a merger. The question before them is whether consolidation (merging) today gives them a competitive advantage in undertaking the new activity tomorrow. The answer is affirmative. Merging helps to create “deep pockets” and possibly also reduces the degree of competition, making investments in strategic options more affordable. These effects have little significance in an environment without strategic uncertainty. The analysis thus predicts greater consolidation in industries with more strategic uncertainty.

Is Strategic Uncertainty Special to Financial Services?

Why does this model of strategic uncertainty fit financial institutions so well? There are at least three reasons. First, deregulation in the financial services sector is opening doors to new activities at a rate that is unprecedented since the Great Depression. Second, the swirling tides of technological and regulatory changes are generating a level of uncertainty about the skills needed to operate successfully in the future that is perhaps greater in the financial services sector than in any other industry. Lastly, banks and to some extent insurers have traditionally faced limited

competition in their home markets. This has created “deep pockets” across the industry and serves to support the broad strategies observed particularly in banking. The combined validity of these arguments makes the model especially suited for the financial services industry.

The precise interpretation of the model of strategic uncertainty could be amended to fit financial institutions even better. In particular, one could interpret the institution’s problem as not knowing what combination of activities will give it a competitive edge in the future. In this interpretation, a financial institution is not contemplating new activities but may be contemplating “old” activities from which it traditionally chose to abstain. Entering early or, better, choosing a wider set of activities would let the institution discover what activities optimally fit together.

Relevance of Strategic Options in the European Context

I now highlight a broader interpretation of the strategic option explanation in the context of the restructuring of the European financial services industry. Industry practitioners believe that a strong position in the home market is crucial for a successful expansion in foreign markets. Generally, this seems to be the case. I give a few examples in the context of banking. Belgian banks generally have weak foreign operations. One reason is that the Belgian political situation (the split between the French- and Dutch-speaking regions) does not allow for strong domestic powerhouses. Swedish and other Scandinavian banks suffered from a financial crisis in the late 1980s and early 1990s, inhibiting their foreign aspirations. Spanish banks started to consolidate “late.” However, once consolidation began, multiple mergers rapidly led to two big banks, BBVA and SCH. Their foreign aspirations are largely limited to the South American market but (after running into problems in South America) also involve other Southern European countries. The Dutch, Swiss, and—to a lesser extent—French powerhouses have strong franchises in their home markets, and all have foreign aspirations.⁶⁹

In the interpretation of the Boot, Milbourn, and Thakor analysis, strength in the home markets allows financial institutions to invest in

69. The German banks face difficulties in their home market. Across the channel, HSBC and Royal Bank of Scotland have strong positions in their home markets and seek focused international expansion. For a further perspective, see Walter and Smith (2000).

strategic options.⁷⁰ An important one is investment banking. While continental European banks traditionally dominated the domestic activity in investment banking, they have had a more marginal role in investment banking in foreign markets and now also face severe competition in their domestic investment bank activity. Many of them feel that a presence in investment banking might be important for their existence as powerful banks in the future. They are willing to accept—for the moment at least—relatively low returns on those activities. The potential, but uncertain, vital role of these activities in the future defines them as a strategic option.

From the point of view of maximizing shareholder value, investing in strategic options might be desirable (if, at least potentially, sufficiently lucrative). However, how can we distinguish the “strategic option” explanation from a simple managerial entrenchment explanation? That is, managers (and governments!) may just want powerful institutions for their own sake. Distinguishing between those explanations is difficult. As the experiences of the (no longer independent) French bank *Credit Lyonnais* teach us, banks that are not accountable and, even worse, operate as a playground for government-appointed “cronies” are unlikely to follow value-maximizing strategies. Growth then becomes a managerial entrenchment strategy.

Banks themselves are ambivalent too. The struggle of European banks in investment banking is a perfect example: while some see it as a strategic option, others (*NatWest*—now *Royal Bank of Scotland*—and *Barclays*) have retreated. Also the recent partial retreat of *ING* from investment banking is consistent, as are the problems that *Dresdner Bank* faces with investment banking under the umbrella of *Allianz*. Although investment banking might be a valuable strategic option, lack of profitability or deep pockets may dictate a retreat. Obviously, opinions may also differ on the viability and importance of investment banking as a strategic option. Just last year, many analysts argued that the lending capacity of commercial banks could give them a competitive edge in the investment banking market. More recently, particularly considering the large losses on telecommunications-related debt incurred by some of these players, this “synergy” looks much less convincing.

I see similar ambivalence vis-à-vis insurance activities. Some think

70. Boot, Milbourn, and Thakor (2002).

that insurance activities are perfectly complementary to commercial banking activities (for example, to economize on the distribution network) and have embraced them (see ING and Credit Suisse-Winterthur); others choose to stay out of them (for example, AEGON). Also players may differ in their assessment of the viability and importance of insurance activities as a strategic option. But here, at least in terms of distribution to targeted customer segments, some agreement exists on the complementarity and synergies between commercial banking and insurance. The strategic consideration might be a different one. For example, AEGON may envision that its “elbow room” in taking part in the ongoing consolidation in the insurance industry would be hampered by linking up to a banking institution now. After the consolidation phase is over, it may actually subscribe to the bank-insurance model. However, it may also believe that having more focus and more choices for alliances and joint ventures is superior.

Nevertheless, I do believe that scale and scope economies are present in banking. Simultaneously, however, I observe that much of the consolidation in the European financial services sector is defensive. Consolidation has increased scale and scope mainly in domestic markets and facilitated local market power. Size has reached proportions that seriously question the presence of any more benefits of scale. And is the wider scope truly sustainable? Will it not cause dilution and loss of focus? If so, it will clearly limit the desirability of investing in strategic options. Instructive in this respect is that the operations of European financial institutions in foreign markets (where they face more competition) are generally well focused.

Summary

Strategic considerations play an important role in the restructuring of the financial services industry. The arguments developed in this section help to give a prescription about where scope and (to some extent) scale become important from a strategic perspective.

What activities are most readily subjected to these considerations? The primary deciding factor is strategic uncertainty, with the degree of competitiveness as a complementary factor. In my view, the development of alternative distribution channels (for example, the Internet) is a primary source of strategic uncertainty. Also the developments in informa-

tion technology have potentially substantially broadened the feasible scope of control. This has induced uncertainty about the desirable scale and scope of operations. For the moment, bigger and broader seem the safest option.

However, the arguments developed in this chapter are subtler. Also the degree of competitiveness plays an important role. “Deep pockets” are important for the broad-scope strategy. Here the competitive environment comes in. In particular, “too much” competition would dilute the “deep pockets” and prevent or limit scope expansion. Up to recently, however, the relatively protected position of institutions in their home markets has allowed institutions to choose a broad positioning. As markets become more open, both to foreign competitors and intersector entry, this choice will be reconsidered. I believe we have entered that phase. More focus becomes rapidly inevitable.

The Future: Concluding Observations

A potentially important alternative to consolidation is the concept of an alliance. This concept is poorly developed in the context of banking. This is to some extent surprising. Banks did, and still do, engage in correspondent banking, particularly in the context of cross-border payment services. But correspondent banking is losing its importance. In particular, with the advent of information technology, international payment and settlement systems have become available (for example, the emergence of TARGET and settlement systems like Cedel and Euroclear). These developments reduce the need for correspondent banking. More important, correspondent banks may have become competitors in the areas where they were cooperating before. For example, some banks seek to gain a competitive edge by offering proprietary cross-border payment facilities. This indicates an important consideration for the feasibility of correspondent banking or alliances, for that matter. It only works if the interests of the participating institutions are sufficiently aligned.⁷¹ But why may alliances become important?

71. Correspondent banks could traditionally not enter each other's markets. Interests were therefore more readily aligned.

The fundamental reason is that vertical disintegration in the value chain will gain in importance.⁷² This allows for greater specialization and hence focus, with potential scale economies as well. Alliances could play an important role in this process. They may introduce more durable, yet flexible, cooperative structures, facilitating interactions between the different parties in the value chain. An example is the opening up of a bank's distribution network to products from others. In that way, institutions could exploit their local presence by capitalizing on their distribution network, and simultaneously product specialists may emerge that feed products into these distribution networks.

The applicability of this idea is broader. Financial institutions rooted in strong local relationships may gain access to more "distant" asset management services that are scale intensive and globally, rather than locally, oriented. It may well be possible to offer some of these services in an alliance (that is, "to join forces") and still capitalize on customer-related synergies. Although some will argue that a merger with these institutions would allow for a smoother operation of these services, I take issue with this point of view.

First, for several reasons, cross-border mergers may not (yet) be feasible. A focused alliance would create valuable linkages between institutions with immediate synergy benefits but could also allow the possibly nationally rooted partners to "get to know" each other. In that sense, it would be an intermediate phase. As a second argument, the alliance model based on asset management or specific investment banking activities may, if properly designed, combine the benefits of an integrated universal banking structure and a stand-alone type of organization of those activities. For example, the alliance partners all have a limited exposure to these activities, which helps them to maintain focus. In particular, cultural conflicts and distractions associated with trying to build up (or buy) an investment bank while running a relationship-rooted regional bank are prevented.⁷³ Obviously, the alliance model does not come without cost. The important task is to define clearly a portfolio of activities that would become part of the alliance. This would not be investment banking in the

72. See also Berlin (2001).

73. The experience of some Western banks is that top management gets fully distracted by the investment banking activities and spends disproportionately little time on the often more profitable non-investment banking activities.

broadest sense of the word. Similarly, in the case of asset management, the alliance partners would each maintain their own proprietary access to the customers but would join forces in the asset management operations, including research and back-office activities. This would facilitate the investments in information technology that allow the partners to capitalize on scale economies. Maintaining proprietary access by the individual alliance partners would preserve customer-related scope economies.

The same arguments could be made for bank-insurance combinations. That is, rather than merge, banks could choose to engage in an alliance with an insurer. The alliance model is indeed observed (for example, Credit Suisse–Winterthur before the merger). It is possible to distribute insurance products via a bank's distribution network based on a license agreement.⁷⁴ However, at least up to recently, the perception in the market was that the integration of information technology is only ensured with an outright merger. Thus the desired synergy in distribution (and also the complementary feeding of asset management operations) would seem to favor integration.

A key question is whether this will remain so. I tend to believe that joint ventures and alliances will gain importance in the future. It will also help if the level of uncertainty in the industry subsides a little. Vertical disintegration now may create an unpredictable dependence on other parties in the value chain. Developments in information technology actually help to provide smooth transitions between the different parties in the value chain. Economies of scale and benefits from focus could be obtained in this way.

In the end, alliances seem only feasible if the activities that are part of them can be run as a more or less separate (jointly owned) business unit with considerable independence from the “mother institutions.” This is, for now, probably most likely for (smaller) regionally specialized financial institutions that may want to join forces in, for example, investment banking and asset management. For bigger institutions, alliances are, for now, less prevalent, but when these institutions (finally) choose to focus, alliances will “mushroom.”

74. Very recently, ABN AMRO announced that it would put its (limited) insurance operations in a joint venture with Delta Lloyd. It hopes that the alliance will promote a more effective cross-selling of insurance products via its own distribution networks.

*Political Considerations and National Identity:
Europe Versus the United States*

The more consolidated financial sector observed in Europe gives a clear hint about what can be expected in U.S. banking when regulatory constraints become less binding (as they have become in recent years). But what can be said more fundamentally about the *diverse* European experience? I discuss political considerations in the context of differences between the banking industry in Europe and the United States.

Let me first focus on the arguably superficial common European experience as it may relate to the United States. Europe and the United States share some similar dynamics. In particular, the relaxation of constraints on interstate banking in the United States is reminiscent of the European Union banking directives liberating cross-border banking. However, a fundamental difference between the United States and Europe immediately surfaces. The domestic banks in Europe were—and are—protected as domestic flagships. A fundamental belief that foreigners should not control financial institutions has (so far) almost prevented any cross-border merger.

The political dimension is at the root of this. Even in countries where governments do not interfere directly in banking operations and where banks are considered truly commercial enterprises (and have generally been successful; for example, ABN AMRO and ING in the Netherlands), the political dimension is important. Central banks, ministries of finance, and the banks operate in close concert. This is not surprising: a very homogeneous group of executives is in charge of the financial sector, central bank, and government ministries, guaranteeing a clear national identity of domestic institutions. In countries such as France and Italy that have explicit government involvement, foreign control over domestic institutions is even more unlikely unless banks become so inefficient and weak that involvement of foreigners becomes almost inevitable. To some extent, this is happening. For example, in the bidding war for the French bank CIC, ABN AMRO was favored by some because of its excellent track record vis-à-vis competing French bidders, and the U.K. bank HSBC succeeded recently in buying up Credit Commercial de France.

The primary response to the liberating European Union directives has so far been defensive: domestic mergers are generally encouraged to pro-

tect national interests. A case in point is Germany. Many have observed that banking in that country is surprisingly dispersed despite the (traditionally!) powerful images of Deutsche Bank, Commerzbank, and Dresdner Bank (now part of Allianz). Public policy definitely aims at protecting the interests of these powerful institutions, but the consolidation is played out mainly on the *Länder* level (the separate states)—indeed, precisely at the level where the political dimension is at work. This is an important explanation for the regional and *not* national consolidation in German banking.

I conclude that the national flagship dimension has been of primary importance in Europe. Cross-border expansion is rare, and consolidation is primarily observed within national borders. For the United States, this gives little direction. Interstate expansion has been a driving force behind the consolidation in U.S. banking. Politics now seems to interfere little with interstate expansion. The political dimension in the United States seems focused on the demarcations among commercial banking, investment banking, and insurance. Powerful lobbies are successful in mobilizing (local) politicians and in this way have been able to obstruct major banking reform in the U.S. Congress, at least up to the passing of the Gramm-Leach-Bliley Act of 1999.

In other words, in both the United States and Europe vested interests are at work. In Europe national authorities are preserving their national flagships; in the United States powerful lobbies are seeking to preserve traditional demarcations between financial institutions. These observations do not yet answer the question whether national (European) authorities are serving the interests of their constituencies when advocating national flagships. This is a different issue and may have to be looked at in a game-theoretic context. If *other* countries are following these policies, an individual country may be well advised to follow the same policy. However, all would possibly be better off if none would follow a “national flagship policy.”

The Future

There are powerful forces behind consolidation. I believe that consolidation is only partially driven by value-maximizing behavior. As I have emphasized, the political dimension cannot be ignored. Consolidation in Europe and the United States will continue. The regional expansion that

characterizes much of the U.S. wave of mergers will carry over to Europe. Cross-border acquisitions are coming, particularly with the arrival of the euro and the European Monetary Union (EMU). The euro and EMU are catalysts that will accelerate the integration of national financial markets and induce a more pan-European view on financial services.

Strategic considerations—as highlighted in this study—have created broad powerhouses. But this will change. Competitive pressures will force financial institutions to discover their true competitive advantages and to choose an optimal configuration of services and activities. The new demarcations between the financial institutions may be very different from the past. The process of restructuring will be a fascinating one. The current developments are just an interesting start.

References

- Beitel, Patrick, and Dirk Schiereck. 2001. "Value Creation and the Ongoing Consolidation of the European Banking Market." Working Paper 05/01. University of Witten/Herdecke, Institute for Mergers and Acquisitions.
- Berger, Allen N. 1998. "The Efficiency Effects of Bank Mergers and Acquisitions: A Preliminary Look at the 1990s Data." In Yakov Amihud and Geoffrey Miller, eds., *Bank Mergers and Acquisitions*, pp. 79–111. Boston: Kluwer Academic.
- . 2000. "Efficiency in Banking: Professional Perspectives." In Anthony Saunders, ed., *Financial Institutions Management*, pp. 300–01. McGraw-Hill.
- Berger, Allen N., J. David Cummins, Mary A. Weiss, and Hongmin Zi. 2002. "Conglomeration Versus Strategic Focus: Evidence from the Insurance Industry." *Journal of Financial Intermediation* 9: 322–62.
- Berger, Allen N., Rebecca S. Demsetz, and Philip E. Strahan. 1999. "The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future." *Journal of Banking and Finance* 23 (February): 135–94.
- Berger, Allen N., Gerald A. Hanweck, and David B. Humphrey. 1987. "Competitive Viability in Banking: Scale, Scope, and Product-Mix Economies." *Journal of Monetary Economics* 20 (3): 501–20.
- Berger, Allen N., David B. Humphrey, and Lawrence B. Pulley. 1996. "Do Consumers Pay for One-Stop Banking? Evidence from an Alternative Revenue Function." *Journal of Banking and Finance* 20 (November): 1601–21.
- Berger, Allen N., William C. Hunter, and Stephen G. Timme. 1993. "The Efficiency of Financial Institutions: A Review and Preview of Research Past, Present, and Future." *Journal of Banking and Finance* 17 (April): 221–49.
- Berger, Allen, and Loretta Mester. 1997. "Inside the Black Box: What Explains Differences in the Efficiency of Financial Institutions?" *Journal of Banking and Finance* 21 (July): 895–947.
- Berger, Philip G., and Eli Ofek. 1995. "Diversification's Effect on Firm Value." *Journal of Financial Economics* 37 (1): 39–65.
- Berglof, Erik, and Ernst-Ludwig von Thadden. 1994. "Short-Term vs Long-Term Interests: Capital Structure with Multiple Investors." *Quarterly Journal of Economics* 109 (August): 1055–84.
- Berlin, Mitchell. 1996. "For Better and for Worse: Three Lending Relationships." *Business Review, Federal Reserve Bank of Philadelphia* (November–December): 3–12.
- . 2001. "'We Control the Vertical': Three Theories of the Firm." *Business Review, Federal Reserve Bank of Philadelphia* (Q3): 13–22.
- Berlin, Mitchell, and Loretta J. Mester. 1992. "Debt Covenants and Renegotiation." *Journal of Financial Intermediation* 2: 94–133.
- . 1998. "Deposits and Relationship Lending." *Review of Financial Studies* 12 (3): 579–608.
- Bhattacharya, Sudipto, and Gabriella Chiesa. 1995. "Proprietary Information, Financial Intermediation, and Research Incentives." *Journal of Financial Intermediation* 4 (4): 328–57.

- Bolton, Patrick, and David Scharfstein. 1996. "Optimal Debt Structure and the Number of Creditors." *Journal of Political Economy* 104: 1–25.
- Boot, Arnoud W. A., Stuart I. Greenbaum, and Anjan V. Thakor. 1993. "Reputation and Discretion in Financial Contracting." *American Economic Review* 83 (5): 1165–83.
- Boot, Arnoud W. A., Todd T. Milbourn, and Anjan V. Thakor. 2002. "Evolution of Organizational Scale and Scope: Does It Ever Pay to Get Bigger and Less Focused?" Working paper. University of Amsterdam.
- Boot, Arnoud W. A., and Anjan V. Thakor. 2000. "Can Relationship Banking Survive Competition?" *Journal of Finance* 55 (2): 679–713.
- Boot, Arnoud W. A., Anjan V. Thakor, and Gregory Udell. 1991. "Credible Commitments, Contract Enforcement Problems, and Banks: Intermediation as Credibility Assurance." *Journal of Banking and Finance* 15 (June): 605–32.
- Boyd, John H., and Mark Gertler. 1995. "Are Banks Dead, or Are the Reports Greatly Exaggerated?" NBER Working Paper 5045. Cambridge, Mass.: National Bureau of Economic Research, February.
- Calomiris, Charles W., and Jason Karceski. 2000. "Is the Bank Merger Wave of the 90's Efficient? Lessons from Nine Case Studies." In *Mergers and Productivity*, pp. 93–161. NBER Conference Report Series. University of Chicago Press.
- Chan, Yuk-Shee, Stuart I. Greenbaum, and Anjan V. Thakor. 1986. "Information Reusability, Competition, and Bank Asset Quality." *Journal of Banking and Finance* 10 (June): 243–53.
- Chemmanur, Thomas J., and Paolo Fulghieri. 1994. "Reputation, Renegotiation, and the Choice between Bank Loans and Publicly Traded Debt." *Review of Financial Studies* 7 (3): 475–506.
- Clark, Jeffrey A. 1996. "Economic Cost, Scale Efficiency, and Competitive Viability in Banking." *Journal of Money, Credit, and Banking* 28 (3): 342–64.
- Comment, Robert, and Gregg A. Jarrell. 1995. "Corporate Focus and Stock Returns." *Journal of Financial Economics* 37 (1): 67–87.
- Cornett, Marcia M., and Hassan Tehranian. 1992. "Changes in Corporate Performance Associated with Bank Acquisitions." *Journal of Financial Economics* 31 (2): 211–34.
- Courtney, Hugh G., Jane Kirkland, and Patrick Viguerie. 1997. "Strategy under Uncertainty." *Harvard Business Review* (November-December): 67–79.
- Cybo-Ottone, Alberto, and Maurizio Murgia. 2000. "Mergers and Shareholder Wealth in European Banking." *Journal of Banking and Finance* 24 (June): 831–59.
- Degryse, Hans, and Patrick Van Cayseele. 2000. "Relationship Lending in a Bank-Based System: Evidence from European Small Business Data." *Journal of Financial Intermediation* 9: 90–109.
- DeLong, Gayle L. 2001. "Stockholder Gains from Focusing Versus Diversifying Bank Mergers." *Journal of Financial Economics* 59 (2): 221–52.
- Dennis, Steven A., and Donald J. Mullineaux. 2000. "Syndicated Loans." *Journal of Financial Intermediation* 9: 404–26.

- Dewatripont, Mathuis, and Eric Maskin. 1995. "Credit and Efficiency in Centralized and Decentralized Economies." *Review of Economic Studies* 62 (4): 541–55.
- Diamond, Douglas W. 1984. "Financial Intermediation and Delegated Monitoring." *Review of Economic Studies* 51 (3): 393–414.
- . 1993. "Seniority and Maturity of Debt Contracts." *Journal of Financial Economics* 33 (3): 341–68.
- Ferrier, Gary, Shawna Grosskopf, Kathy J. Hayes, and Suthathip Yaisawarng. 1993. "Economies of Diversification in the Banking Industry: A Frontier Approach." *Journal of Monetary Economics* 31 (3): 229–49.
- Flannery, Mark. 1999. "Comment on Milbourn, Boot, and Thakor." *Journal of Banking and Finance* 23 (February): 215–20.
- Focarelli, Dario, Fabio Panetta, and Carmello Salleo. 2002. "Why Do Banks Merge?" *Journal of Money, Credit and Banking* 34 (4): 1047–66.
- Gorton, Gary, and James A. Kahn. 1993. "The Design of Bank Loan Contracts, Collateral, and Renegotiation." NBER Working Paper 4273. Cambridge, Mass.: National Bureau of Economic Research.
- Gorton, Gary, and George G. Pennacchi. 1995. "Banks and Loan Sales: Marketing Nonmarketable Assets." *Journal of Monetary Economics* 35 (3): 389–411.
- Greenbaum, Stuart I., and Anjan V. Thakor. 1995. *Contemporary Financial Intermediation*. Orlando, Fla.: Dryden Press.
- Hamel, Gary, and C. K. Prahalad. 1990. "The Core Competence of the Corporation." *Harvard Business Review* (May-June): 79–91.
- Hamoir, Olivier, Carl McCamish, Marc Niederkorn, and Christopher Thiersch. 2002. "Europe's Banks: Verging on Merging." *McKinsey Quarterly* 3.
- Hellwig, Martin. 1991. "Banking, Financial Intermediation, and Corporate Finance." In Alberto Giovanni and Colin Mayer, eds., *European Financial Integration*, pp. 35–63. Cambridge University Press.
- Hoshi, Takeo, Anil K. Kashyap, and David S. Scharfstein. 1993. "The Choice between Public and Private Debt: An Analysis of Post-deregulation Corporate Financing in Japan." NBER Working Paper 4421. Cambridge, Mass.: National Bureau of Economic Research, August.
- Houston, Joel, and Chris James. 1995. "Bank Information Monopolies and the Mix of Private and Public Debt Claims." Working Paper. Gainesville: University of Florida.
- James, Christopher. 1987. "Some Evidence on the Uniqueness of Bank Loans." *Journal of Financial Economics* 19 (2): 217–35.
- John, Kose, and Eli Ofek. 1995. "Asset Sales and Increase in Focus." *Journal of Financial Economics* 37 (1): 105–26.
- Kashyap, Anil K., Raghuram Rajan, and Jeremy C. Stein. 1999. "Banks as Liquidity Providers: An Explanation for the Co-existence of Lending and Deposit-Taking." NBER Working Paper 6962. Cambridge, Mass.: National Bureau of Economic Research, February.
- Kroszner, Randall S., and Raghuram Rajan. 1994. "Is the Glass-Steagall Act Justified? A Study of the U.S. Experience with Universal Banking before 1933." *American Economic Review* 84 (4): 810–32.

- Lummer, Scott L., and John J. McConnell. 1989. "Further Evidence on the Bank Lending Process and the Capital-Market-Response to Bank Loan Agreements." *Journal of Financial Economics* 25 (1): 99–122.
- Mayer, Colin P. 1988. "New Issues in Corporate Finance." *European Economic Review* 32 (3): 1167–83.
- Mester, Loretta J. 1992. "Traditional and Nontraditional Banking: An Information-Theoretic Approach." *Journal of Banking and Finance* 16 (June): 545–566.
- Mitchell, Karlyn, and Nur M. Onvural. 1996. "Economies of Scale and Scope at Large Commercial Banks: Evidence from the Fourier Flexible Functional Form." *Journal of Money, Credit, and Banking* 28 (2): 178–99.
- Oliver, Wyman and Company. 2002. "The Future of European Corporate and Institutional Banking." In collaboration with Morgan-Stanley, March.
- Ongena, Steven, and David C. Smith. 2000. "What Determines the Number of Bank Relationships? Cross-country Evidence." *Journal of Financial Intermediation* 9 (1): 26–56.
- Petersen, Mitchell A. and Raghuram G. Rajan. 1994. "The Benefits of Lending Relationships: Evidence from Small Business Data." *Journal of Finance* 49 (1): 3–37.
- . 1995. "The Effect of Credit Market Competition on Lending Relationships." *Quarterly Journal of Economics* 110 (2): 407–43.
- Pulley, Lawrence B., and David B. Humphrey. 1993. "The Role of Fixed Costs and Cost Complementarities in Determining Scope Economies and the Cost of Narrow Bank Proposals." *Journal of Business* 66 (3): 437–62.
- Puri, Manju. 1996. "Commercial Banks in Investment Banking: Conflict of Interest or Certification Role?" *Journal of Financial Economics* 40 (3): 373–401.
- Rajan, Raghuram G. 1992. "Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt." *Journal of Finance* 47 (4): 1367–400.
- Ramírez, Carlos D. 2002. "Did Banks' Security Affiliates Add Value? Evidence from the Commercial Banking Industry during the 1920s." *Journal of Money, Credit, and Banking* 34 (2): 393–411.
- Saunders, Anthony. 2000. *Financial Institutions Management: A Modern Perspective*, 3d ed. Burr Ridge, Ill.: Irwin.
- Schmeits, A. 2002. "Discretion in Bank Contracts and the Firm's Funding Source Choice between Bank and Financial Market Financing." Working Paper. Washington University.
- Shaffer, Sherrill, and Edmund David. 1991. "Economies of Superscale in Commercial Banking." *Applied Economics* 23 (2): 283–93.
- Sharpe, Steven A. 1990. "Asymmetric Information, Bank Lending, and Implicit Contracts: A Stylized Model of Customer Relationships." *Journal of Finance* 45 (4): 1069–87.
- Simons, Henry C. 1936. "Rules Versus Authorities in Monetary Policy." *Journal of Political Economy* 44 (February): 1–30.
- Slovin, Myron B., Marie E. Sushka, and Carl D. Hudson. 1988. "External Monitoring and Its Effect on Seasoned Common Stock Issues." *Journal of Accounting and Economics* 12 (4): 397–417.

- Smith, Roy C., and Ingo Walter. 1997. *Global Banking*. New York: Oxford University Press.
- Stone, Charles A., and Anne Zissu. 2000. "Securitization: The Transformation of Illiquid Financial Assets into Liquid Capital Market Securities: Examples from the European Market." *Financial Markets, Institutions, and Instruments* 9 (3-4): 133–278.
- Vander Vennet, R. 2002. "Cost and Profit Efficiency of Financial Conglomerates and Universal Banks in Europe." *Journal of Money, Credit, and Banking* 34 (1): 254–82.
- Walter, Ingo, and Roy C. Smith. 2000. *High Finance in the Euro-Zone*. London: Financial Times and Prentice-Hall.