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The evolving landscape of banking

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The structure of the financial services industry is in flux. Liberalization, deregulation, and advances in information technology have changed the financial landscape dramatically. Interbank competition has heated up and banks face increasing competition from nonbanking financial institutions and the financial markets. The predictability of the industry with low levels of financial innovation, little innovation in distribution channels and well defined and rigid institutional structures is gone. Product innovations, new distribution channels, and emerging new competitors are in abundance. Moreover, the subprime crisis that has hit the financial sector in 2007–2008 appears to have a major impact on the structure of the industry. This article emphasizes the importance of understanding the economics of banking for assessing the changes in the industry. In particular, we point at relationship banking as a prime source of the banks' comparative advantage. The proliferation of transaction-oriented banking (trading and financial market activities) does however seriously challenge relationship banking. In order to focus on these issues in a rigorous way, we will evaluate the key insights from the relationship banking literature, including the potential complementarities and conflicts of interest between intermediated relationship banking activities and financial market (underwriting, securitization, etc.) activities. We also address the issue of the optimal conglomeration of bank activities, including the empirical evidence on scope and scale economies. We analyze the strategic positioning of banks in the currently highly uncertain competitive arena, and link this to the theory of the firm and particularly firm boundaries and learning.

1. Introduction

That the business of banking has changed considerably is an understatement. Liberalization, deregulation, and advances in information technology have changed the financial landscape dramatically. Interbank competition has heated up and banks face increasing competition from nonbanking financial institutions and the financial markets. The traditional predictability of the industry is gone. Product innovations, new distribution channels, and emerging new competitors are in abundance. Not surprisingly national demarcations of banking markets become obsolete. While many

national authorities seem inclined to protect their local banks, few will deny that ownership of financial institutions is no longer a domestic affair. Nevertheless, foreign bank penetration remains low, with <15% of relevant financial assets in the hands of foreign institutions in the EU. This may point at potentially a lack of contestability and hence competitiveness. It may help explain why OECD statistics show that from 1994 to 2005 the value added of financial services has remained constant in Europe at around 5% of GDP, while in the United States it has increased from 6% to almost 8% (OECD, 2007). While this points at potential inefficiencies and may confirm that banking has not yet faced the full force of cross-border competition, in part, also the economics of banking may help explain the strong position of local institutions. The nature of the banking activity might be such that banks may face more favorable competitive conditions in their home markets due to knowing their local markets and the depth of relationships they have with local borrowers in particular. Indeed, this seems to be in line with one of the strategic shifts in banking over the last decade: banks increasingly have started (re)emphasizing the importance of their local markets. *The Economist* rightfully concluded that "Banks have rediscovered the virtue of knowing their customers,"[1] or as Citigroup's retail banking head Steven S. Freiberg puts it, "Citi should think locally."[2] Banks now clearly seek to build up a deep local market presence; depth of market penetration appears to be critical for a sustainable competitive position.

But how to look at the broader positioning of banks in general? How is their role evolving, and what can be said about the structure of the banking industry "tomorrow?" These are the questions being addressed in this article. We will argue that the ongoing revolution in information technology has improved information dissemination and enhanced the overall functioning of financial markets. The proliferation of financial innovations, advances in securitization, and underwriting help push funding to the financial markets. Does this tilt the comparative competitive advantage to the transaction-oriented financial markets? In particular, many suggest that the banks' traditional comparative advantages in relationship banking have been diluted by transaction-oriented finance. This begs the question: what is the future of relationship-based bank lending? And, more generally, what should be the competitive positioning of banks? These questions have gained further importance with the subprime crisis that has hit the financial sector in 2007–2008. At the surface, investment banks have suffered most, and largely have disappeared as stand-alone entities (e.g. the demise of Lehman Brothers, or the takeover of Merrill Lynch by Bank of America). Also, the advances in securitization have been questioned as the securitization and repackaging of the subprime mortgages was considered one of the culprits of the crisis. However, while tempting, interpreting

[1] *The Economist*, 'A Survey of international banking,' 17 April 2004, p. 3.

[2] See "Thinking locally at citigroup," *Business Week*, 24 October 2005, p. 50–51.

these developments as permanent shifts in the structure of banking goes too far. We first really need to understand the economics of banking.

Banks have been groping with these questions. Given the uncertainties faced, it is not really surprising that following bank strategic choices is like being on a roller coaster. The diluted and then reinvigorated relationship banking focus—including the massive branch closures followed by re-branching activities—is just one example. Several banks have also dramatically changed course on the importance that they attach to retail banking. ABN AMRO, which has disappeared by now, unfolded a wholesale banking-based strategy in 1999 to change course 5 years later recognizing the importance of the commercial banking (including retail) operation. Deutsche Bank at one point announced the sale of its retail bank—Bank 24—before reversing itself and considering retail one of the core pillars of its strategy followed by attempts to acquire Dresdner Bank and most recently Germany's Postbank. As another example consider the choices made regarding combining banking and insurance. Lukas Muhlemann, the former CEO of Credit Suisse, commented in 1996 on why Credit Suisse was not buying the insurer Winterthur: "If you only need a glass of milk, why buy the cow?" Why go through the hassle of combining banking and insurance cultures by merging with an insurer if you can also just engage in a distribution agreement via an alliance? Why then consider a merger if a distribution agreement would do? In 1996, he bought Winterthur anyway, confusing the markets.[3] More recently, virtually all players engaged in banking and insurance (Credit Suisse, Citigroup, Fortis, ING, etc.) have learnt that realizing synergies is indeed very difficult, and since 2005 the unbundling of banking and insurance seems to gain momentum. Credit Suisse and Citigroup have already divested sizable portions of their insurance operations.

In order to focus on these issues in a rigorous way, we will evaluate the key insights from the relationship banking literature, including the potential complementarities and conflicts of interest between intermediated relationship banking activities and financial market activities (underwriting, securitization, etc.). Our core message is that the fundamentals of banking have *not* changed. For many of the modern "funding vehicles" bankers' traditional skills are indispensable. In many other cases, bank loans may continue to be the optimal instruments.

Other insights can be obtained from analyzing potential scale and scope synergies in banking. We will argue that it is questionable whether these economies are large enough to justify the consolidation and scope expansion on the scale that we have

[3]His public statement was that merging was desirable because "steady insurance earnings will smooth out choppy banking profits." In his defense, an aggressive Swiss investor had bought up a sizable stake in Winterthur and was trying to undermine the alliance between Winterthur and Credit Suisse. This appeared to be the real reason for the merger. Yet the statement that steady insurance earnings would be beneficial came to haunt Muhlemann. The turmoil around 2002 showed that insurance revenues were a lot less stable than expected.

observed. Moreover, ample research in corporate finance points at the existence of a "diversification discount." On average, diversification seems to destroy value. However, there is substantial empirical evidence that improvements in operating performance and stock returns have been experienced by firms that have refocused. An issue that we will highlight in this context is that research on scale and scope economies needs to differentiate more between the various activities (services and products, including geographic scope) of financial intermediaries. Scale and scope economies have been looked at too generically.

This brings in a strategic dimension as well. While scope economies (synergies) might be present, these typically refer to a steady state situation that allows for an optimal operational approach to capture them. However, they might be quite unimportant if we are far away from such steady state. In the current turmoil, strategic positioning with learning, first-mover advantages and strategic advantages of market power via domestic consolidation and associated "deep pockets" might be the driving force. Thus, the consolidation wave may have little to do with efficiencies and benefits of economies of scope (and even scale), but rather be strategically driven as an optimal response to the uncertainties and rapid (and unpredictable) changes facing financial institutions today. In a sense, we might be talking about banks that just do not know how the world will look "tomorrow," and choose to delay choices by broadening scope. The current merger wave may then be more aimed at gaining and/or pursuing market power, facilitating "breathing room," rather than bring benefits from a scope and/or scale economies perspective. This would make the current consolidation an evolutionary phenomenon that possibly will be followed by a focused repositioning when the uncertainties become more manageable. We will discuss these developments in the context of "The theory of the firm" (Coase, 1937; Grossman and Hart, 1986) and particularly firm boundaries and learning (Holmstrom and Roberts, 1998).

The organization of the article is as follows. In Section 2, we will focus on the comparative economic advantages of banks as intermediaries, particularly in the context of funding corporations. The discussion will center around two issues, one is the potential optimality of relationship-oriented banking as the key characteristic of value-enhancing financial intermediation, the other is the potential complementarity between financial market activities (e.g. underwriting) and bank lending. Section 3 discusses scale and scope economies in banking. In Section 4, the focus shifts to the strategic rationale for choosing a rather broad positioning, and provides the link to "the theory of the firm." Section 5 concludes.

2. Understanding the banking landscape and economics of banking

The banking "landscape" has been heavily affected and shaped by regulation. Banks traditionally operated in a highly regulated environment that essentially aimed at

curtailing competition. In the United States most legislation dates back from the 1930s, particularly the Glass-Steagall Act of 1933. Entry barriers, including limitations on interstate and intrastate banking, were pervasive as were structural barriers between different financial services, i.e. between banking and insurance, and also between investment banking (financial market activities) and commercial banking (typically making loans and accepting deposits). Complementary legislation sought to reduce competition even further. For example, regulatory caps on deposit rates—Regulation Q—were in effect up to the 1980s. While this article is not about bank regulation, acknowledging the considerable regulatory interference in the industry is important for understanding the structure and evolution of the industry.

Banking in the United States and elsewhere has become more competitive (Stiroh and Strahan, 2003). Deregulation has removed structural barriers. This deregulation was at least in part spurred by information technology developments that allowed for the circumvention of regulation (see, e.g. Freixas and Santomero, 2004). Nevertheless, regulation remains a crucial element of the financial services industry everywhere in the world. This is not surprising because some see too much competition as a threat to financial stability (see Vives, 2001, for an overview).

What this means is that banking is still considered "special," and thus developments in the banking industry cannot readily be compared to other industries. Banking has moved though from a very rigid structure to one that has become more diverse and dynamic. As a case in point, for many decades the three "pillars" of the banking industry—products, distribution channels, and the institutional structure of a "bank"—were not changing at all while in the last decade, we see massive product innovations, new distribution channels (internet), and new providers of financial services (e.g. finance corporations).

In this section, we will focus on understanding the impact of this more competitive environment on the precise role being played by banks. We will present key insights from the literature on financial intermediation. We first discuss the role of banks in qualitative asset transformation; i.e. the absorption of risks and the liquidity transformation that are at the core of the banks raison d'être. Subsequently, we discuss the differences and complementarities between bank loans and capital market funding, and the importance of relationship banking. Finally, we will discuss potential conflicts of interest when banks combine lending and capital market activities.

2.1 Relationship- versus transaction 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 are often withdrawable on demand. The liquidity of bank liabilities stands in sharp contrast to that of their assets, reflecting the banks' *raison d'être.*

By liquefying claims, banks facilitate the funding of projects that might otherwise be infeasible.[4]

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 (Diamond, 1984). In many of their activities, banks exploit their information and the related network of contacts. This relationship-oriented banking is a characteristic of value-enhancing financial intermediation. The relationship and network orientation does not only apply to traditional commercial lending but also to many areas of "modern banking."

One might be tempted to interpret modern banking as transaction oriented. So does an investment bank—generally considered a prime example of modern banking—facilitate a firm's access to public capital markets. The investment bank's role could be interpreted as that of a broker; i.e. 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, i.e. their ability to economize on search or matching costs. As a characterization of modern banking, however, this would describe their economic role too narrowly. Investment banks do more. They—almost without exception—*underwrite* those public issues, i.e. absorb credit and/or placement risk. This brings an investment bank's role much closer to that of a commercial bank engaged in lending; the processing and absorption of risk is a typical intermediation function similar to that encountered in traditional bank lending.

In lending, a bank manages and absorbs risk (e.g. credit and liquidity risks) by issuing claims on its total assets with different characteristics from those encountered in its loan portfolio. In financial intermediation theory this is referred to as *qualitative asset transformation*.[5] Underwriting by an investment bank can be interpreted analogously; risk is (temporarily) absorbed and is channeled through to the claim holders of the investment bank. The role of investment banks is therefore more than purely brokerage. Underwriting requires information acquisition about the borrower which is supported by a relationship orientation. A relationship orientation will therefore still be present in investment banking, both in the direction of investors ("placement capacity") and toward borrowing firms.

[4]See Bhattacharya *et al.* (2004) for an overview of the modern literature on financial intermediation.

[5]We do not focus on the costs and benefits of such mismatch on the banks' balance sheets. See Calomiris and Kahn (1991) and Diamond and Rajan (2001) for theories that rationalize jointly the asset and liability structures of banks.

Nevertheless, in a relative sense their involvement, and particularly that of bulge-bracket investment banks, is more transaction oriented. What will also be true, is that in investment banking relationships depend much less on local presence. Public debt issues are *relatively* hands off with few interactions between financiers and borrowers over time (Berlin and Mester, 1992; Rajan and Winton, 1995). The full menu of financing options for borrowers includes many other products with varying degrees of relationships. In the continuum between bank loans and public debt issues, we can find, for example, syndicated loans. These are offered by investment banks and commercial banks alike and involve several financiers per loan. Generally, only the lead banks have a relationship with the borrower, and the relationship intensity is somewhere in-between a bank loan and a public debt issue (see Dennis and Mullineaux, 2000; Sufi, 2007).

It is important to note that the relationship aspect does not only involve funding, but also includes various other financial services, e.g. letters of credit, deposits, check clearing, and cash management services. We will not focus on these services *per se*, but note that the information that banks obtain by offering multiple services to the *same* borrower might be valuable in lending (Degryse and Van Cayseele, 2000). For example, the use of checking and deposit accounts may help banks in assessing a firm's loan repayment capability. Thus, the scope of relationships may affect banks' comparative advantages.

2.2 Bank loans versus public capital market financing

What are the comparative advantages of bank loans over public capital market bond financing? And are they substitutes or also complements? First, some comments on the distinct value added of bank lending.

The proximity between financier and firm in bank lending arrangements may help mitigate information asymmetries. This has several components. A borrower might be prepared to reveal proprietary information to its bank, while it would have been reluctant to do so in the financial markets. More specifically, it may not want to have this information revealed to competitors (Bhattacharya and Chiesa, 1995). 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 information acquisition. While costly, the substantial stake that it has in the funding of a borrower and its often enduring relationship—with the possibility of information reusability over time—increase the value of information. Lummer and McConnell (1989) and Gande and Saunders (2005) provide empirical evidence on the informational value of bank financing. The work of James (1987) first empirically documented the value of renewals of loans, and suggested that banks obtain their primary informational advantage in monitoring borrowers over time rather than by their initial screening activities. The more recent empirical work is somewhat less

resolute in drawing this conclusion (see Lummer and McConnell, 1989; Gande and Saunders, 2005).

Such "closeness" between financier and debtor may also have its drawbacks. An important one is the hold-up problem that has to do with the information monopoly a bank may generate in the course of its lending relationship. This may allow the bank to extend loans to a borrower at noncompetitive terms in the future. More specifically, the proprietary information on borrowers that banks obtain as part of their relationships may give them an informational monopoly. In this way, banks could charge ex post high loan interest rates (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 informational 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.

Another feature is that relationship banking could accommodate is smoothing of interest rates over time (see Allen and Gale, 1997). Petersen and Rajan (1995) show that credit subsidies to young or *de novo* companies may reduce the moral hazard problem and informational frictions that banks face in lending to such borrowers. That is, as in Stiglitz and Weiss (1981), high interest rates could induce risk taking and make banks reluctant to provide short-term loans. A relationship loan that locks in a borrower for more than one period could help because now interest rates could be kept low initially provided rents can be earned in later periods. The point is that without access to "subsidized" credit early in their lives, *de novo* borrowers would pose such serious adverse selection and moral hazard problems 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.[6]

The bank–borrower relationship is also less rigid than those normally encountered in the financial market. The general observation is that a better information flow 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 discretion allows for decision making based on more subtle—potentially noncontractible—information.[7] Two dimensions can be identified. One dimension is related to the nature of the bank–borrower relationship. In many ways, it is a mutual

[6]The importance of intertemporal transfers in loan pricing is also present in Berlin and Mester (1999). They show that rate-insensitive core deposits allow for intertemporal smoothing in lending rates. This suggests a complementarity between deposit taking and lending.

[7]See for example Simon (1936) and Boot *et al.* (1993).

commitment based on trust and respect. This allows for *implicit*—nonenforceable—long-term contracting. An optimal information flow is crucial for sustaining these "contracts." Information asymmetries in the financial market, and the noncontractibility of various pieces of information would rule out alternative long-term capital market funding sources 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.

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 capital market funding vehicles. The renegotiation allows for a qualitative use of flexibility. Sometimes this is a mixed blessing because banks may suffer from a soft budget constraint: borrowers may realize that they can renegotiate ex post, which could give them perverse ex ante incentives. The soft budget constraint problem has to do with the potential lack of toughness ("bargaining power") on the bank's part in enforcing credit contracts that may come with relationship banking proximity (see Boot, 2000). The problem is that borrowers who realize that they can renegotiate their contracts ex post may have perverse incentives ex ante (see Bolton and Scharfstein, 1996; Dewatripont and Maskin, 1995). In reality, bank loans often have priority to resolve this problem. With priority, a bank may strengthen its bargaining position and thus become tougher.[8] The bank could then credibly intervene in the decision 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. The bank could threaten to call the loan, but the borrower—anticipating the adverse consequences not only for him but also for the bank—realizes that the bank would never carry out such a threat. When the bank has priority, the prioritized claim may insulate the bank from these adverse consequences. It could now *credibly* threaten to call the loan, and enforce its wishes upon the borrower. This identifies an important advantage of bank financing: *timely intervention*.[9]

These arguments put some limitations on the desirability of investments by banks in the equity of corporations. Equity is a very junior claim and thus softens a bank's possibility to intervene for very much the same reasons as junior debt. This contrasts somewhat with the emphasis that corporate finance theory puts on agency problems, which would suggests that having a "balanced" combined debt and equity claim on

[8]See Dewatripont and Maskin (1995) on the issue of soft budget constraints. Diamond (1993), Berglöf and Von Thadden (1994), and Gorton and Kahn (1993) address the priority structure.

[9]One could ask whether bond holders could be given priority and allocated the task of timely intervention. Note that bond holders are subject to more severe information asymmetries and are generally more dispersed (i.e. have smaller stakes). Both characteristics make them ill-suited for an "early intervention task."

a corporation might be optimal. From a timely intervention point of view this does not seem desirable. This might explain that equity intermediation is typically in the hands of private equity (PE)-firms and/or bulge-bracket global investment banks that engage much less in relationship banking and focus more on transactions and the associated capital market activities.

2.3 Complementarities between bank lending and capital market funding

The observations in the previous section highlight potential complementarities between bank lending and capital market funding. We argued that prioritized bank debt may facilitate timely intervention. This feature of bank lending is valuable to the firm's bondholders as well. They might find it optimal to grant bank debt priority over their own claims, and in doing so delegate the timely intervention task to the bank.[10] Consequently, the borrower may reduce its total funding cost by accessing both the bank-credit market and the financial market.

Diamond (1991) and Hoshi *et al.* (1993) further develop arguments highlighting the complementarities of bank lending and capital market funding. Hoshi *et al.* (1993) show that bank lending exposes borrowers to monitoring, which may serve as a certification device that facilitates simultaneous capital market funding.[11] Diamond (1991) 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 (1994) show that the quality of the bank is of critical importance for its certification role. 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. While not universally valuable, this suggests a benefit of relationship-oriented banking.

Another manifestation of potential complementarities between bank lending and capital market activities is the increasing importance of securitization. It is a process whereby assets are removed from a bank's balance sheet. Securitization is an example of unbundling of financial services where banks originate assets but investors by buying asset-backed securities provide the funding. Asset-backed securities rather than deposits then fund dedicated pools of bank-originated assets. More specifically,

[10]The bondholders will obviously ask to be compensated for their subordinated status. This—ignoring the timely intervention effect—is a "wash," meaning the priority (seniority) and subordination features can be priced. That is, as much as senior debt may *appear* to be "cheaper" (it is less risky), junior or subordinated debt will appear to be more expensive.

[11]See also Slovin *et al.* (1988) and Houston and James (1995).

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 absorption of credit, interest rate, liquidity, and exchange-rate risks. Securitization decomposes the lending function such that banks would no longer fund the assets, but continue to be involved in the primal activities.

What this implies is that securitization leads to a *reconfiguration* of banking. Banks would continue to originate and service assets, while also processing the attendant risks 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.

In the United States, securitization has been important for a long time, but mainly for car loans, mortgages, and credit-card receivables. The standardization and modest size of these credits allows diversification of idiosyncratic risks upon pooling. More recently, more customized and heterogeneous commercial loans are increasingly being securitized. These tend to be more information sensitive. Their quality is therefore more dependent on the rigor of initial screening and subsequent monitoring. These considerations, however, do not preclude the securitization of business credits. In fact, transactions involving the securitization of business credits have become more common, including synthetic transactions (credit default swaps: CDS), and CDOs (Collateralized Debt Obligations). Moreover, a rather new market for the securitization via asset-backed commercial paper (ABCP conduits) had been growing rapidly.

As the subprime crisis starting in the summer of 2007 has shown, these developments are not without problems. In particular, it is important to note that much of the securitization involves the financing of long-term assets with short-term funding, which induces substantial liquidity risk. Recent events cast doubt on the optimality of such strategies.[12] Also, the residual risk with the originating institutions appeared to have been minimal such that monitoring incentives were compromised (see, Mian and Sufi, 2007). Apparently, the eagerness of banks to securitize claims—preserving the continued inflow of lucrative fees—may well have had a negative effect on the quality of loans that were originated (e.g. promoted subprime lending). And indeed, this appears to have gone hand-in-hand with insufficient residual risk at the originating institutions. The latter may have further undermined incentives to maintain appropriate standards in lending.[13]

[12]Another caveat is that some of this activity in securitization is undoubtedly induced by capital arbitrage; the new Basle II capital requirements may mitigate this somewhat.

[13]As stated, credit enhancement is important for the credibility of the originator that engages in securitization. Apparently, the eagerness of the market (and undoubtedly the willingness of

2.4 Relationship banking: conflicting views

The extant literature clearly points at information acquisition and relationship banking as key distinguishing features of financial intermediaries. An important question then is how the anticipated more competitive environment of banking could affect relationship banking? Some believe that a more competitive environment may threaten relationships; others however have argued the exact opposite. We first consider the viewpoint that more competition implies 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 expected "life-span" of their relationships they may respond by reducing their relationship-specific investments. Banks may then find it less worthwhile to acquire (costly) proprietary information, and relationships suffer. Interestingly, shorter or weaker relationships may then become a self-fulfilling prophecy. This argument highlights the negative spiral that may undermine relationship banking. An important observation is that this negative spiral might be self-inflicted. While competitive banking challenges relationships, the bankers' response—cutting back on information acquisition—may actually damage relationship banking most.

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 intertemporally share surpluses (see Petersen and Rajan, 1995). In particular, it becomes 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 (1995) see in the case of young corporations (see our discussion in Section 2.2) may no longer be sustainable in the face of sufficiently high competition. This implies that excessive interbank competition ex post may discourage bank lending ex ante.

An alternative—diametrically opposite—view is that competition may actually *elevate* the importance of a relationship orientation as a distinct competitive edge. This may somewhat mitigate the negative effect that pure price competition would otherwise have on bank profit margins. Boot and Thakor (2000) show that a relationship orientation can alleviate these competitive pressures, because it can make a bank more *unique* relative to its competitors. A more competitive environment may then encourage banks to become more client driven and customize services, thus focusing more (rather than less) on relationship banking.

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credit-rating agencies to go along) made this safe guard disappear. The disciplining mechanism broke down; residual risk with the arranger was minimal or framed as liquidity guarantees to off-balance street vehicles without appropriately realizing the inherent risks. That is, banks been guaranteeing the refinancing of commercial paper in ABCP transactions via stand-by letters of credit; via this channel, the recent subprime crisis has inflicted considerable losses on some banks.

As we have indicated, relationships may foster the exchange of information, but may simultaneously give lenders an information monopoly and undermine competitive pricing. As discussed in Section 2.2, the informational monopoly on the part of the "inside" lender might be smaller if a borrower engages in multiple banking relationships. This would mitigate the possibilities for rent extraction by informed lenders and induce more competitive pricing (see Sharpe, 1990, and also Petersen and Rajan, 1995).[14] There appears however a trade-off. The "sharing" of borrowers might reduce each lender's incentive to invest in the relationship. The optimal positioning from a borrower's point of view is thus tricky as well. In our view, relationship banking is thus to stay. An exclusive dependence on transaction-oriented finance may induce market failures when problems of asymmetric information are insurmountable. This argument is used by some to highlight the virtues of (relationship oriented) bank-dominated systems (e.g. Germany and Japan) vis-à-vis market-oriented systems.[15]

2.5 Conflicts of interest and synergies in combining lending and capital market activities

Related concerns are the potential synergies and costs (including conflicts of interest) of banks combining lending and capital market activities. A lot of research has been done on potential conflicts of interest in universal banking. This potentially adds insights that help determine the optimal scope of banking. However, the extant research on this question is of somewhat limited use. It is virtually all solely looking at the scope economies in pre-Glass Steagall Act US banking (pre-1933). Also, the studies focus on a very high aggregation level, i.e. the value of combining investment and commercial banking activities (see Kroszner and Rajan, 1994, Puri, 1996; Ramirez, 2002). In a similar spirit, Drucker (2005) shows that junk rated firms and companies in local lending relationships are more likely to select an integrated (universal) commercial investment bank when they expect to issue public debt in the future. This revealed preference in favor of such integrated bank suggests that there are benefits for banks to use private information from lending in investment banking.

[14]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 (see also Section 4). The effects on small business lending, however, are not clear cut. Sapienza (2002) finds that bank mergers involving at least one large bank result in a lower supply of loans to small borrowers by the merged entity. However, Berger *et al.* (1998) show that the actual supply of loans to small businesses may not go down after bank mergers, since they invite entry of *de novo* banks that specialize in small business lending.

[15]An interesting strand of the academic literature focuses on the design of financial systems; see for example Allen (1993) and Allen and Gale (1995). One objective of this literature is to evaluate the pros and cons of bank-dominated versus financial market-dominated systems.

A similar rather positive picture emerges if one looks at US banking following the 1999 Financial Services Modernization Act. It appears that information collected through the banks' commercial lending businesses may have reduced the costs of underwriting debt and equity (see Drucker and Puri, 2005; Schenone, 2004). Gande (2008) concludes that commercial banks have distinct benefits in underwriting leading to lower issuer costs. He also concludes that "the value of banking relationships appears to be largest for non-investment grade, small and IPO firms for whom one would *ex ante* expect the benefit of bank monitoring to be the highest." These arguments could imply that stand-alone investment banks could benefit from being linked to commercial banks. This could justify some of the recent developments where several investment banks have shown interest in commercial banks or even have been taken over by commercial banks.[16]

These observations can also be related to the recent proliferation of private equity firms. One could interpret private equity as intermediation driven from the equity side. That is, private equity firms bring together funding from a group of investors ("partners") and invest that capital as equity in businesses in which they take a clear interest. They extensively involve themselves in monitoring and advising these businesses. How does this relate to the role of banks coming primarily from the debt side? Banks do play a role as venture capitalists, particularly for later stage financing where subsequently a valuable relationship on the lending side may develop. Thus, banks participate with higher probability if subsequent lucrative lending activity may come about (Hellmann *et al.*, 2008).[17] However, permanently combining equity and lending roles might not be optimal, see the analysis on the value of "hard claims" in Section 2.2.[18] In particular, equity as a junior security may undermine a bank's bargaining power, and thus compromise its role in timely intervention. Also soft budget constraint problems may then (re)emerge.

[16]Note that much of this activity is motivated by the acute problems that investment banks face in the subprime crisis. In a sense, being part of a commercial banks gives access to additional safety nets, e.g. deposits and deposit insurance, and extra liquidity facilities with the central banks. It is for sure premature to interpret this as permanent, or as an indication of what is truly optimal. See also Section 3.3 on scale and scope economies in banking.

[17]Observe that a bank may also have (participations in) PE-subsidiaries that operate independently from the other businesses of the bank.

[18]One should distinguish the debt-focused investment banking activity typical for (traditional) commercial banks from the activities of true bulge-bracket investment banks. The latter—say the top 10 global investment banks—increasingly invest their own capital in M&A transactions and other deals, bridging to some extent the gap with PE-firms (see for example *The Economist*, Risk and reward, Special report on international banking, May 19, 2007). This development may also have had an impact on the financial difficulties that particularly stand-alone investment banks have faced following the 2007–2008 subprime crisis. In undertaking these activities, investment banks may have overlevered themselves and made themselves extremely dependent on short-term wholesale funding.

3. The consolidation trend in banking

In this section, we first discuss briefly key sources of scale and scope economies. Subsequently, the focus is on the available empirical evidence on scale and scope economies. The section concludes with an alternative strategic rationale for the consolidation observed in the industry.

3.1 Rationales for consolidation

The following four sources of scale and scope economies can be identified (see Boot, 2003; Walter, 2003): (i) information technology-related economies, (ii) reputation and marketing/brand name-related benefits, (iii) financial innovation-related economies, and (iv) diversification benefits.

Information technology-related economies particularly refer to back office efficiency and distribution network-related benefits. Focusing on the distribution network, one could say that IT developments may facilitate scale economies in running a sizeable distribution network. Simultaneously, scope economies might become much more visible. For example, information technology facilitates an increasing array of financial products and services that could be offered through the same distribution network, and thus allows for cross selling. Reputation and brand name/marketing-related economies are more subtle. Scope benefits may be present in the joint marketing of products to customers. Brand image is partially marketing related, but is also related to the notions of "trust" and "reputation." These notions play an important role in the financial services industry. Financial innovation-related economies particularly refer to large(r) institutions that might be in a better position to recoup the fixed costs of financial innovations. Innovations could be marketed to a larger customer base and/or introduced in a wider set of activities. For financial innovations, scale and scope might be particularly important given the rapid imitation by competitors.

Diversification benefits are more controversial. In many cases, conglomeration may lead to a valuation discount which points at (anticipated) inefficiencies. This is in line with corporate finance theory that tells us that investors can choose to diversify and that this does not need to be done at the firm level. However, several bank activities (see e.g. our discussion about securitization in Section 2.3) benefit from a better rating, which suggests that diversification at the level of the bank could be valuable.

3.2 Empirical evidence

Scale and scope economies are often cited as one of the main reasons behind the current merger and acquisition wave in banking. But are scale and scope economies truly present? The existing empirical evidence is quite generic. Scale and scope economies are looked at from the level of the banks at large. One conclusion that can

be drawn is that the existing studies do not really differentiate between which activities in combination could offer scope benefits, nor do they focus on which activities generate economies of scale.

Scale and scope economies in banking have been studied extensively. A survey paper by Berger *et al.* (1999) concludes that, in general, the empirical evidence cannot readily identify substantial economies of scale or scope. Illustrative is Saunders (2000). He cites 27 studies, 13 of which found diseconomies of scope, 6 found economies of scope, and 8 were neutral. An important caveat is that this research mainly involves US studies using data from the 70s and 80s. The results, therefore, do not capture the dramatic structural and technological changes in banking that since then have taken place. Furthermore, they reflect the historic fragmentation of the US banking industry due to severe regulatory constraints on the type of banking (banks could engage in commercial banking or investment banking, but not both) and the geographic reach of activities (limits on interstate banking) that was present till the deregulation in the 90s (see Calomiris and Karceski, 1998).

A large empirical literature in corporate finance documents that conglomeration destroys value. Berger and Ofek (1995) find that diversified firms trade, on average, at a 13–15% discount relative to a portfolio of specialized single segment firms. Many papers suggest that this "diversification discount" arises from investment inefficiencies caused by inefficient cross-subsidies between the divisions in a conglomerate firm (see Lamont, 1997; Shin and Stulz, 1998).[19] While this literature addresses the impact of conglomeration in general, some recent studies examine the existence of a diversification discount for financial institutions. Laeven and Levine (2005) confirm the existence of a diversification discount in banks that combine lending and nonlending financial services, and suggest that the potential economies of scope in financial conglomerates are not large enough to compensate for potential agency problems and inefficiencies associated with cross-subsidies.

Rajan *et al.* (2000) emphasize that, even though conglomerates trade at a discount on average, 39.3% of the conglomerates trade at a premium. They show that the interrelation between activities within the conglomerate is of crucial importance. Diversified firms can trade at a premium if the dispersion between activities is low.[20] High dispersion induces inefficiencies. This points at the importance of focus within

[19]For example, Berger and Ofek (1995) find that conglomerate firms overinvest in industries with limited investment opportunities, as measured by a low Tobin's q ratio. In the context of the oil industry, Lamont (1997) has shown that diversified companies tend to subsidize and overinvest in poorly performing segments. Furthermore, Shin and Stulz (1998) have shown that investment by segments of a highly diversified firm is larger and less sensitive to their own cash flow than that in unrelated firms, and is also relatively insensitive to the quality of their investment opportunities.

[20]These conclusions are roughly consistent with Boot and Schmeits (2000), who argue that heterogeneity of activities is generally bad for conglomeration.

the conglomerate. In particular, one should look at what *type* of mergers and acquisitions involves scale and scope benefits. Recent research suggests that mergers with both a geographic and activity focus are most value enhancing.[21] 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 product mix offers true scope economies?

In this spirit, DeLong (2001) looked at the shareholder gains—more specifically, the immediate announcement effect on share prices—from focused versus diversifying bank mergers in the United States between 1988 and 1995. She found that focused mergers, both on the level of activity and geography, have positive announcement effects. Moreover, focus in activities was shown to be more important than geographical focus, albeit the latter was important as well.[22] Activity-diversifying mergers had no positive announcement effects. These results point at the presence of scale rather than scope economies. While this study focuses on relatively small US banking institutions (i.e. market cap of the acquirer approximately $2 billion, and market cap of target less than $100 million). European evidence on much larger institutions confirms the desirability of geographical focus.[23]

An alternative approach for analyzing scale and scope economies is to focus on structural differences between financial conglomerates and specialized institutions. Several studies have looked at the relative cost and profit efficiency (e.g. Berger and Mester, 1997; Berger and Humphrey, 1997). Van der Vennet (2002) has looked at this in the European context. He finds somewhat higher cost and profit efficiency for conglomerates and universal banks. This may look surprising in light of earlier comments. However, these efficiency differences cannot readily be translated in scale and scope economies. The banking industry is changing rapidly and the (traditional)

[21]An important issue is whether this only points at market power benefits or whether also true efficiency gains could be at work.

[22]Geographical expansion in the United States often involves buying up neighboring (focused) retail banks, which allow for economies on IT systems, management processes, and product offerings. Relative to the European scene, where geographical expansion often implies buying up big universal banks across the border, fewer barriers to an effective integration exist. This may explain the more favorable US evidence.

[23]Beitel and Schiereck (2001), analyzing mergers between European financial institutions between 1988 and 2000, show that domestic (intrastate) mergers on average have significantly positive combined (bidder plus target) announcement effects, but weaker so in the last few years (1988–2000). They also found that diversifying domestic mergers (particularly 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 (Siconolfi, 1998). The latter insight is also confirmed in other European studies on bank–insurer mergers; e.g. Cybo-Ottone and Murgia (2000) find a positive effect on combined value. A key question is what role market power plays in explaining the value gains in these mergers. Also, one needs to be careful because the "common" market opinion on for example the desirability of bank-insurance combinations has worsened over time.

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 point at scale and scope economies.

3.3 Observations on scale and scope

With respect to the empirical evidence on scale and scope, some general observations can be made. First, scale and scope economies are empirically often dominated by advert changes in managerial efficiency. For example, inefficiencies in managing larger organizations may mitigate possible scale and scope benefits.[24] Second, scale and scope economies are difficult to disentangle from changes in market power. Increasing scale and scope may facilitate market power, and thus elevate profitability in the *absence* of scale and scope economies. This might have become less important recently, since alternative distribution networks (e.g. 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. Third, to the extent that mergers may change the structure and dynamics of the industry, the abnormal stock returns associated with merger announcements reflect such changes. This makes event studies on bank mergers harder to interpret.

As a final comment, a possibly important negative effect of size on performing could follow from the literature on "soft" information and organizational structure. Consolidation may undermine the incentives of banks to produce and utilize soft information. In particular, recent research has shown that large banks are less capable in using soft information (see Berger and Udell, 2002; Stein, 2002, and for empirical evidence Berger *et al.*, 2005). Larger (more centralized) banks base their credit approval decisions more on hard (verifiable) information, whereas smaller (more decentralized) banks can more easily use soft information. What this could imply is that relationship banking suffers. This might be particularly important for the financing of smaller and informationally opaque firms, and also has implications for the optimal decision-making structure of larger financial institutions (see Stein, 2002; Liberti, 2003).[25] These arguments also point at the importance of proximity in relationship banking (see Degryse and Ongena, 2005).

[24]Berger (2000) offers an illustration by observing that managerial ability to control costs creates a differentiation in bank performance that may well dominate potential scale economies. The difference between an "average" bank and the "best practice bank" is about 20% of the costs of the average bank, while cost scale economies in the 1980s did not exceed 5%. Berger argues that managerial ability may have a similar effect on revenue efficiency. See also the industry reports by McKinsey (2005) and BCG (2005).

[25]Strahan (2008), in a recent overview paper on bank structure and lending, asks for more research on this issue. The observed effect of mergers on lending behavior could be spurious, since mergers could have been motivated by a need for granting bigger credits.

Isolating potential scale and scope economies is important. On the demand side, the proliferation of savings products and their link to pensions, mutual funds, and life insurance clearly pushes for joint distribution, and thereby suggests economies of scope. IT developments might have made it possible to better exploit potential scope economies with multiple product offerings to a particular customer group, using new direct distribution channels with relatively easy access to (formerly) distant customers. The very same IT developments however offer also better possibilities for focused single-product players. Interfaces (may) come about that help bundle the product offerings of specialized providers, thereby becoming a substitute for an integrated provider. The lesson is that only very well managed integrated 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. What this means is that it is very unlikely that (ultimately) a single strategy will dominate in the financial services sector.

The same arguments apply to the vertical disintegration of the value chain. Ultimately, it does not seem unrealistic to expect the emergence of, for example, product specialists without distribution network. The scale economies and the benefits coming from focus could be substantial (see also McKinsey, 2002). But in an industry that is reconfiguring itself, 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 other players.[26]

In the particular context of bank-insurance mergers several other comments can be made. Apart from distribution-related synergies, distinct benefits on the funding side are often mentioned. The mismatch between assets and liabilities on the bank's balance sheet (short-term funding, long on the asset side) is typically the reverse of that of an insurer (long-term obligations). Corporate finance theory would again be skeptical, since the mismatch can be resolved via hedging and does not necessitate a merger.

Another argument for combining life insurance and banking is that it could augment the total asset management pool, and thus offer scale economies. While 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 (feeding) activities. Thus, synergies are present, but not necessarily dominant. This is not to say that combining banking and insurance with an appropriate customer focus could not be value enhancing. As stated earlier,

[26]On the benefits of vertical (dis)integration in the financial services industry there is little empirical work. An interesting exception is a paper by Berger *et al.* (2002) that looks at profit scope economies in combining life and nonlife in the insurance industry. They find that conglomeration (and hence scope) *might* be optimal for larger institutions that are primarily retail/customer focused and have vertically integrated distribution systems.

combining banking and insurance could offer synergies in distribution. This builds on the distribution network-related benefits discussed earlier.

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 and sectors in terms of (corporate) culture, law, supervision, etc. These complications could make it important to have well-focused operations outside the home market and 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 understand the reconfiguration of many integrated 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 operations (see also Smith and Walter, 1997).[27]

4. Strategic options

It is worth noting that decisions about scale and scope today (involving choices about clients, products, and geographic presence) are not final. Strategic considerations could enter the decision-making process. 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 today. The current restructuring is possibly motivated by strategic considerations and may not give a good indication about what the future structure of the financial services sector will be.

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 contemplates entering a new market. The problem is that the financial institution is highly uncertain about whether it has the

[27]This discussion ignores financial stability implications, particularly the externalities that financial institutions can cause. Two issues can be identified. One is the general discussion on the interaction between stability and competition. This is a research area that as of yet lacks clear answers, see for example Boyd and De Nicolo (2005) and Boot and Marinč (2008). The other relates to the recent more or less forced takeover of investment banks by commercial banks. The issue is that investment banks could then benefit from the government safety net, see footnote 19. If the safety net grants an implicit (or explicit) subsidy (in this case via access to deposits and deposit insurance, and Federal Reserve System (FED) liquidity facilities), this can obviously affect the privately optimal choices of configuration.

skills to compete effectively in that market, and/or there might be uncertainty about the (ultimate) importance of that market. It has two choices. It can wait until that future time. This "saves" on costly resource allocation today, yet also prevents learning and obtaining a possibly valuable first mover advantage when that new market materializes. Alternatively, it can enter the market "early" and discover what its skills are, and gain potentially valuable first mover advantages. This strategic perspective offers potentially valuable insights for the current restructuring in the industry. We first frame this strategic analysis within the context of the "theory of the firm."

4.1 Link to the "theory of the firm"

While this article puts the concepts of strategic uncertainty and learning in the context of banks, the ideas can be put in the more general context of "The theory of the firm." The boundaries of firms are being constantly reconfigured, yet our understanding of how these boundaries should be drawn remains incomplete. In the theory of the firm, these questions were first studied by Coase (1937). His insight was that the boundaries of firms are determined by the transaction costs of coordinating production under imperfect information; these costs may mean that it is less costly to include certain activities within the firm than to subject them to market exchange. This insight has been subsequently fleshed out and refined by Williamson (1975, 1985), Grossman and Hart (1986), and Hart and Moore (1990). What has emerged is an improved understanding of the role of firm boundaries in providing incentives. Much of this understanding has come from an examination of the "hold-up" problem [e.g. Klein *et al.* (1978) and Grout (1984)]. This analysis has shown that when transacting parties must make relationship-specific investments in an environment of incomplete contracting, it is sometimes better to integrate the transacting parties into a single firm.[28] The reason is that, as independent contractors, one of the parties may find itself being "held-up" by the other, thereby unable to get an adequate return on its relationship-specific investment after the investment is made. The resulting dilution of investment incentives may make market-mediated transactions prohibitively expensive.[29]

[28]Rajan and Zingales (1998) provide a novel interpretation of why transactions take place within a firm, as opposed to the marketplace. They argue that by bringing these transactions within the firm, the firm has a greater ability to restrict employee access to key firm resources. The firm thereby empowers (i.e. provides access) only to those employees who make firm-specific investments.

[29]Countervailing forces are suggested in the important work of Berle and Means (1932). They focus on the agency problems associated with the separation of ownership and control, which are particularly common to large organizations. This literature has led to insightful work on security design (see Aghion and Bolton, 1992), as well as on internal organizational issues, such as internal capital markets. See Gertner *et al.* (1994) for work on this issue, and Bolton and Scharfstein (1998) for an overview of these and other theory of the firm issues.

While these contributions have significantly enhanced our understanding about why firms exist and the benefits they offer relative to market-mediated transactions, they leave unattended some interesting features of firms. As Holmstrom and Roberts (1998) point out:

> It seems to us that the theory of the firm, and especially work on what determines the boundaries of the firm, has become too narrowly focused on the hold-up problem and the role of asset-specificity . . .
> Information and knowledge are at the heart of organizational design . . .
> In light of this, it is surprising that the leading economic theories of firm boundaries have paid almost no attention to the role of organizational knowledge. The subject certainly deserves more scrutiny.

The challenge then is to begin to develop a theory of the firm based on information uncertainty and learning that can explain firm boundary choices in settings in which hold-up problems are small and relationship-specific investments may be high.[30]

To address this challenge in an environment of information uncertainty and learning, consider a firm that has an existing portfolio of assets. In redrawing its boundaries, the firm must decide whether to add a new asset to its portfolio and/or divest an existing asset. This decision must be made in light of information uncertainty about the profitability of the new asset in a market demand sense and uncertainty about whether the firm has the skill to manage the new asset. If these uncertainties are large enough,[31] the firm may decide not to acquire the new asset. The key for the firm in redrawing its boundaries is to figure out its optimal learning and entry strategies that help resolve these uncertainties.

4.2 Conceptualizing strategic uncertainty in banking

One can explain scope expansion as a strategy by a financial institution where it aims to reserve the right to play in a variety of "new" activities.[32] We can conceptualize this as follows. Start out with a financial services sector with narrowly defined existing activities and ask whether financial institutions should expand into a "new" activity. A key feature is that there is strategic uncertainty about the demand for this new activity, i.e. 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: demand may not materialize (entering early requires investments to be made prior to the resolution of demand uncertainty). Moreover, the scope expansion associated with investing in

[30]We also abstain from the agency problems as in Berle and Means (1932).

[31]One could add as third source of uncertainty whether the new asset will be compatible with the firm's existing assets.

[32]This is clearly linked to the literature on real options (see Kulatilaka and Perotti, 1998).

Table 1 Optimal scope as function of the competitive environment

Anticipated competitive environment in the strategic option (new activity)	Current competitive environment in existing financial services activities	
	Low	High
Little competition	Narrow	Narrow
Medium competition	Broad	Narrow
High competition	Narrow	Narrow

Narrow, no early investment in new activity; broad, early investment in new activity.

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 ("learning") 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? This trade-off is complicated. Key factors include the competitive environment of the bank's existing activities and the anticipated competition for the new activity. The competitive environment of the existing activities enters the analysis because of the investment and risks associated with early entry in the new activity. If financial services are very competitive, financial institutions may lack "deep pockets" and be unable to absorb the investment and risks that come with early entry. 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 benefit from its potential future strategic advantages.

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 of dilution of focus—is unnecessary because a competitively unchallenged institution can operate successfully in this market without the benefit of early skills discovery. At the other extreme, when the anticipated competition for the new activity is very intense (perhaps due to many potential future competitors), early entry may once again be suboptimal since competition reduces anticipated future profits. This leads to the prediction that moderate anticipated competition in the new activity facilitates early entry. Table 1 summarizes the main insights.

The analysis suggests that the competition the financial institution faces in its current activity, the competition it anticipates in the new activity and the degree of uncertainty about the skills needed for this new activity jointly 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.

4.3 Is strategic uncertainty special to financial services?

Why does this analysis of strategic uncertainty fit financial institutions so well? There are at least two reasons. First, 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. Second, banks have traditionally faced limited competition in their home markets, driven in part by a favorable attitude of domestic regulators toward creating "national champions." This has created "deep pockets" across the industry, and serves to support the broad strategies observed particularly in banking.

The precise interpretation of the model of strategic uncertainty could be amended to fit financial institutions even better. In particular, one could interpret an institution's problem as it not knowing what combination of activities will give it a competitive edge in the future. This is not necessarily about a financial institution entering new activities, but possibly about the institution entering "old" activities that it traditionally chose to abstain from. Early entry, or rather choosing a wider set of activities, would let the institution discover what activities optimally fit together.

From a shareholder value maximization point of view, investing in strategic options might be desirable. However, how can one 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 several national flagship banks teach us, banks that are not accountable, and even worse, operate as playground for government appointed "cronies" are unlikely to follow value-maximizing strategies. Growth then becomes a managerial entrenchment strategy.

We would subscribe to the view that much of the consolidation in (particularly) the European financial services sector is defensive. Consolidation has increased scale and scope mainly in domestic markets and facilitated local market power. In several cases, size has reached proportions that seriously questions whether any more benefits of scale are present. 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 financial institutions in foreign markets (where they face typically more competition) are generally well focused.

The arguments developed in this section are subtle. "Deep pockets" are important for the broad scope strategy, and this creates a direct link with the competitive environment. In particular, "too much" competition would dilute deep pockets and prevent or limit scope expansion. So far, however, the relative protected position of institutions in their home markets may have allowed institutions to choose a "broad" strategy. As markets become more open, both to foreign competitors and inter-sector entry, this choice might have to be reconsidered. As we have seen, competitive pressures are already building up.

5. Concluding thoughts

Banking is still a surprisingly integrated industry both across business lines and within each separate value chain. As we have indicated, we expect banks to become more focused when uncertainties clear up. While typically this is interpreted as making choices between business lines, what has not become evident yet in the banking sector is that banks may have to specialize within the value chain. They seem so far still very much involved in both upstream and downstream activities. Vertical disintegration allows for greater specialization, and hence focus, with potential gains in scale economies as well (Berlin, 2002). This may well gain in importance over the coming years, particularly considering the increasing competition in banking and the developments in information technology.

As we have highlighted, clear economic insights may help uncover the comparative advantages of financial institutions. The analysis in this article has emphasized the clear cut advantages that banks have in their local markets. Market depth—deep local market penetration—is crucial for exploiting the relationship banking advantages. For now, the financial services sector, however, remains in flux. Strategic "posturing"—choosing a rather broad positioning and merging to get deep pockets—might be an optimal strategy on the transition path. The ultimate configuration of the industry will only become clear once the level of uncertainty in the industry diminishes.

Predicting changes in banking is further complicated by financial stability concerns that bring public policy makers into the arena. It is illustrative to consider that the policy response following the crisis of the 1930s was to separate investment banking from commercial banking (via the so called Glass-Steagall Act of 1933), while following the 2007/2008 subprime crisis policymakers have encouraged investment banks to become part of commercial banks. In the existing body of research not much support can be found for the 1933 measures.[33] Similarly, for the current push toward integration not much support can be found either. Yet, these developments will undoubtedly have enormous impact on the path of development of the financial sector in the years to come.

[33]See for example the discussions in Bhattacharya *et al.* (2004).

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