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A large, stylized white graphic of a classical building facade with a pediment and columns, set against a light gray background. The title and author information are centered within a white rectangular area in the middle of the facade.

## **The Financial Services Sector: An Update on Recent Developments**

**by Charles Freedman and Clyde Goodlet**



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August 2002

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Charles Freedman and Clyde Goodlet

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## **Abstract**

The Canadian financial industry continues to experience significant changes. This report provides an update on recent developments and re-examines a number of issues facing financial service providers that were identified in Technical Report No. 82. In particular, this report highlights the role of economies of scale and scope as they relate to mergers and concentration, the strategies being followed by financial service providers, and how changes in information technology have affected service delivery. Developments in these areas continue to pose significant challenges for financial service providers as they attempt to develop strategies to maintain their profitability and long-run viability.

*JEL classification: G2*

*Bank classification: Financial institutions; Financial services*

## **Résumé**

Le secteur financier canadien continue de connaître d'importants changements. Les auteurs font le point sur l'évolution récente du secteur et réexaminent certains défis auxquels sont confrontés les fournisseurs de services financiers et qui ont été décrits dans le Rapport technique n° 82. Les auteurs mettent notamment en lumière le rôle que jouent les économies d'échelle et de gamme dans un contexte de fusions et de concentration, les stratégies adoptées par les fournisseurs de services financiers et l'incidence des progrès des technologies de l'information sur la prestation de services. Les mutations en cours continuent de poser des défis de taille aux fournisseurs de services financiers en quête de stratégies propres à maintenir leur rentabilité et leur viabilité à long terme.

*Classification JEL : G2*

*Classification de la Banque : Institutions financières; Services financiers*





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## 1. Introduction

In mid-1997, we wrote a report that analyzed the past changes and future prospects of the financial services sector.<sup>1</sup> It was prepared as the background paper for a Ditchley Canada conference in October 1997 on the future of the financial industry, and was published as Bank of Canada Technical Report No. 82 in March 1998. We approached the subject by examining the driving forces behind the developments that had been taking place over the previous decade or so and then indicating some of the challenges that these forces would pose for financial service providers (FSPs) looking forward. While not attempting to be definitive in terms of what the future might hold, our analysis tried to suggest the factors that FSPs would have to consider in developing their future strategies.

The key factors that we identified as driving the developments in the financial services industry were technological change, the changing nature of competition in the financial services sector, and changes in household demographic trends. The challenges facing the financial services industry were discussed under two main headings—the importance of size, and the challenge facing an FSP in determining the range of services and products that it would offer.

In this report, we re-examine a number of the issues facing the financial services sector and provide an update on recent developments. Particular emphasis is placed on changes in our views since the earlier report was written almost five years ago. While much of what we wrote then still seems appropriate, further analysis and some of the recent developments in the industry, in Canada and elsewhere, have led us to modify our views in certain respects. In particular, we will highlight the following areas: the role of economies of scale and scope, mergers and concentration (within sectors and across sectors, within borders and across borders), the strategies being followed by FSPs, and the role of changes in information technology on service delivery. We do not re-examine the earlier report's section on regulatory challenges.

Before discussing the emerging landscape in the financial services industry, it is worth underlining what we believe has not changed. The underlying functions performed by the financial services sector have not changed, remaining constant through time and across countries, although their relative importance may have altered over time. A good characterization of the functions carried out by the financial services sector is provided by Merton and Bodie (1995), who focus on six functions of the sector:

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1. We define the sector as the combination of financial service providers, financial markets, and the infrastructure that links financial sector participants together.

- (i) ways of clearing and settling payments to facilitate economic and financial transactions;
- (ii) mechanisms for the pooling of resources and for subdividing the shares in various enterprises;
- (iii) ways of transferring economic resources through time, across borders, and across industries;
- (iv) ways of managing risks;
- (v) mechanisms for the provision of price information to help coordinate decentralized decision-making in various sectors of the economy;
- (vi) ways of dealing with incentive problems created when one party to a transaction has information that the other party does not have or when one party acts as agent for another.

What has changed, and what has drawn so much attention, is the way that services are provided, the instruments used to provide the services, and the nature of the entities providing the services.

Another point worth bearing in mind is that change in the financial services sector is not new. Significant change has occurred in the Canadian financial sector during almost any period that one cares to examine. What continues to be most noteworthy about the current period is the pace and scope of change, which appear to be greater than ever, and the uncertainty faced by FSPs as they attempt to develop strategies to maintain their profitability and long-run viability.

## **2. Technological Change and Operational Efficiencies**

As anticipated, technological change has continued to have an impact on back-office operations of FSPs by significantly increasing the scale at which they must operate to be efficient. FSPs appear to be following three strategies in attempting to achieve efficient scale in their back-office operations. (These strategies are also being used in other parts of their business.) First, they are *expanding* or *building* back-office operations, which involves developing the capacity to process transactions (including accounting and custody services). For example, the announced strategy of the Royal Bank of Canada (RBC) is to capture the largest market share in Canada in the area of transactions processing. The RBC explicitly recognizes the role of economies of scale in this area and the need to develop the volumes to support its business plan. It is not clear that there is room for more than one FSP in the Canadian market in this area. Indeed, another bank recently announced that it was exiting from part of this area and has sold the back-office network that it ran for independent money managers. In addition, to achieve the volumes necessary for efficient operation, the RBC is aggressively expanding its transactions-processing business in a number of other countries.

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The second strategy is to *buy* scale. FSPs are acquiring existing business functions from others in an attempt to achieve an efficient scale. Examples of this strategy with respect to back-office operations include purchases by the RBC of transactions processors, particularly those located in other countries. This accords with a widely held view of financial sector participants and commentators that for Canadian FSPs to achieve efficient scale in their operations, they must, at a minimum, focus on the North American market for financial services, not just the Canadian market.

The third strategy is to *borrow* scale. This can be done by outsourcing certain activities to other entities that can operate at a scale that is not achievable by Canadian FSPs. For example, in the case of credit cards, large U.S. companies have operations that are 10 to 20 times larger than those of the largest Canadian banks. There appear to be significant economies of scale in this area, and consequently there are incentives for Canadian credit card issuers to outsource their back-office operations to these large entities. An example of this is the Canadian Imperial Bank of Commerce (CIBC), which sold its merchant-card services operation to a much larger entity, with three times the processing capacity, in return for a 25 per cent equity position. The expectation of the CIBC is that it will realize a higher rate of return on its investment in the larger operation than if it had continued its own in-house operations.

Another way to expand operations that is similar to borrowing scale is to enter into joint ventures or strategic alliances with other FSPs. While such a strategy could be effective in the short run, it is not clear that it will be viable in the longer run, since one of the partners may want to take control of the operation. Whether technological developments, particularly in facilitating the dissemination of information, can help to deal with this potential problem remains to be seen. An example of this type of strategy in Canada is Moneris Solutions, a joint venture by the Bank of Montreal and the RBC, which provides credit- and debit-card acceptance services, including point-of-sale terminal rentals and Internet transaction services. It is reportedly the largest payment-processing entity of its type in Canada and one of the largest in North America.

In our previous report, we raised the question of whether FSPs would begin to develop common systems to support internal risk management (e.g., risk modelling, information systems for management) or to develop common industry software to support certain activities (e.g., interfaces to clearing and settlement systems). To the best of our knowledge, there has been little or no movement in this direction.

There has, however, been some discussion regarding the creation of common information systems to help calculate capital requirements for operational risk. Under the proposed revisions to the Basel Capital Accord, commercial banks that wish to use their internal models will have to

develop databases upon which they can base their models. Recent technological developments are only now making such strategies feasible. In many cases, individual banks do not have sufficient data to support the use of models, and there have been proposals to pool information. Whether such pooling would lead to the development of a common methodology remains to be seen, but this is a possible way for banks to spread the significant costs of developing models across many users.

### **3. New Instruments and Different Ways of Putting Functions Together**

A few years ago, the trend seemed to be towards the unbundling of functions and products. This was related to the movement by FSPs towards an internal requirement that each segment of their business stand on its own in terms of profitability,<sup>2</sup> and consequently that there would no longer be cross-subsidization of activities. However, as we noted in our earlier report, there was the potential for rebundling of products, and this seemed most likely to occur in areas where there were economies of scope or synergies, including those related to the use of information, across activities.

An example of the approach that would require each business activity to stand on its own can be found in the strategy of the CIBC, which places a very high emphasis on the need to allocate balance-sheet resources to business activities of high strategic value and sustainable returns. The specific objective of the CIBC is to allocate relatively more resources to business lines with higher risk-adjusted returns on capital subject to considering the volatility, sustainability, strategic importance, and growth potential of such earnings. Thus, business activities that do not meet this test or that are considered unable to meet this test in the future are “exited” or adjusted. During 2001, under this strategy, the CIBC reduced its “non-core” loan portfolio, sold distressed loans, sold a private banking subsidiary, and sold its merchant-card services business.

Interestingly, in the area of unbundling and rebundling financial services and products, there have been movements in both directions in recent years. As an example of unbundling, we would note that the development and spread of various risk transfer mechanisms, such as credit derivatives and collateralized debt obligations, have permitted FSPs to further separate the loan-origination function from the ongoing risk exposure to the borrower. This is a continuation of a trend that has been going on for some time. In the past, it involved techniques such as loan syndication and the

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2. There is some question as to how far this strategy can be taken, given the joint use of distribution channels and marketing by different lines of business.

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securitization of a widening range of financial obligations, from mortgage loans to credit card receivables to other personal loans.

On the other side, we have seen examples in Canada of rebundling or linking different types of transactions. Thus, the Bank of Montreal has stated that its focus in consumer lending activities for 2002 is to “Increase penetration of our existing customer base with bundled products.” Another example is the tendency of some banks to link their willingness to extend corporate loans to customers to the readiness of those customers to undertake their capital market business (such as underwriting) with the bank. For example, the *National Post* reported (23 October 2001) that the RBC is “taking an axe to its corporate loan division. RBC Capital Markets lends money to about 1,000 corporate clients. The bank will focus on about 500 ‘core’ clients; the rest will be considered non-essential, and the loans may not be renewed when they come due.” Chuck Winograd, the head of the RBC’s corporate and investment banking division, is quoted in the same article as saying that “We’re not getting out of the lending business, but we must make it a real business.” A plausible interpretation of the RBC’s approach is that it will extend loans only to clients that it can service in other areas, of which capital market services are probably the most notable.<sup>3</sup>

The argument behind this type of linking appears to be that corporate lending by itself is a low-return activity (which uses up large amounts of bank capital), while capital market services yield significantly higher returns, such that the overall return on capital to the bank from the combined activity would be satisfactory.<sup>4</sup> Some dealers that are not associated with banks have complained that they find it hard to compete with the bank-owned dealers because they do not have the same capacity to offer lines of credit for corporate lending as do the banks.

From an economic perspective there is a puzzle here. If corporate lending does not offer a sufficiently high return to cover the cost of the capital needed to support it, why don’t the spreads on such lending widen? Wider spreads on corporate lending would allow FSPs to charge lower fees to the companies that use capital market services, since the FSPs would have less need to

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3. The *National Post* of 5 April 2002 quoted Mr. Winograd as saying that corporate lending “is a market with little discipline and no real barriers to entry. If it isn’t the Swiss, it’s the Germans. If it’s not the Germans, it’s the Americans. The Canadian banks, including RBC, are also far from saints. Somebody is always trying to win market share. In good times, the profitability of this product can only be described as poor. In bad times, it is much, much worse.” Mr. Winograd went on to explain that the reason for being in this business is “collateral revenues,” presumably the fees from underwriting deals and advising on mergers and acquisitions. As a Moody’s report (2002) put it, “For the Canadian banks, the loan syndication market is the entrée into securities underwriting.”
  4. It is worth noting that this widespread view of the relative returns on corporate lending and capital market services depends in part on the allocation of the cost of shared services between the two lines of business, which at times can be quite arbitrary.

cross-subsidize the corporate loans. And even if the basis of the linkage is one of economies of scope (arising, say, from the joint use of information on the company in corporate lending and in underwriting), this would not explain the different rates of return on the two types of activity, only the ability of the joint supplier to undercut separate suppliers. The argument is sometimes made that corporate lending is a low-return activity since it has become commoditized and can be met by a wide variety of suppliers, but this does not resolve the puzzle. The ability of a company to access lines of credit from a range of FSPs should make it easier, not harder, for the company to use different FSPs in raising different kinds of funds, and thus make it more difficult for FSPs to link the different types of services.

Another new type of instrument that was noted in our previous report was electronic money, both the stored-value card (SVC) and network money or digital cash. The SVC was introduced with great fanfare, and there was considerable discussion in the press and among economists of its potential to substitute for, and perhaps lead to the elimination of, paper currency. While the pilot projects undertaken by Mondex and others showed that the SVC was technically feasible, it has not proved to be economically viable in Canada, at least for the present. The problem appears to be that the potential revenues from a fully functioning SVC initiative are unlikely to offset the high costs of establishing a comprehensive national infrastructure capable of supporting such a scheme. It is possible that the SVC will become an add-on should credit card companies move to a chip card as part of their effort to deal with credit card fraud. But, even then, it is not clear how much SVCs will be used. In Europe, where there are a large number of SVCs outstanding, their use for purchases is much less impressive. This can be seen in the results of a recent global survey by the Bank for International Settlements (BIS 2000), based on 1999 data. The average value of purchases using SVCs is less than US\$10 for most types of SVCs; in very few cases is it above US\$25. More importantly, the amount outstanding (which is equivalent to central bank currency outstanding) is typically small, and in no case does it appear to exceed US\$75 million. This is much smaller than the proponents of this type of product had expected. That said, future developments in Singapore, which appears to be positioning itself to go virtually electronic over the next half-dozen years, will bear close watching.

A similar skepticism has been expressed about network money. While the *Economist* (19 February 2000) commented that “Digital currencies are sprouting all over the Internet,” it went on to say that “virtual money does not yet pose a serious threat to the real thing.” Moreover, the Bank for International Settlements survey (BIS 2000) indicates that, at least to date, there are relatively few network-based products in operation and that all of them are very small.

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An earlier article by Freedman (2000) on the implications of the introduction of electronic money for the implementation of monetary policy concluded that “it is extremely unlikely that e-money will displace bank notes or the settlement services that are offered by central banks in the foreseeable future.” This is still our view.

#### **4. Delivery Mechanisms**

FSPs have continued their efforts to use technology to develop a broader range of channels for the delivery of financial products and services. However, while there has been considerable progress in this regard, it has not been as revolutionary as some had predicted.

There has been increased use of automated banking machines (ABMs), and the scope of activities that ABMs support has been expanded.<sup>5</sup> Computer banking has also become more widespread. Debit and credit cards can be used readily in Internet transactions. The use of the Internet by FSPs has expanded considerably, and FSPs are experimenting with mobile devices to facilitate customer access to their products and services. Electronic bill presentment and payment are moving ahead rapidly, typically in joint ventures between FSPs and non-financial entities.

The strategy of FSPs with significant branch networks has increasingly been to use technology to handle low-margin routine transactions and to focus their branch network on advisory services and the sale of high-value products. This strategy is characterized by many FSPs as “bricks and clicks.” As we discussed in our earlier paper, many customers want the ability to deal face-to-face with FSP representatives, at least for those transactions that are relatively large and irregular or that require advice.

This strategy has led to the need for better-trained and differently qualified branch staff, who have better access to information technology and who do more than simply carry out routine transactions. It has also led to the development of different types of branches and branch locations. Unprofitable branches are being closed, and new branches are being opened, often on the premises of other firms such as department stores or grocery stores. And while virtual banks have been successful in certain areas, they have not supplanted the traditional banks more broadly, nor are they likely to do so.

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5. It is interesting to note that there has been a significant increase in the number of white-label ABMs deployed in Canada. Between 1999 and 2001, white-label machines increased their share of machines from 20 per cent to almost 40 per cent, and accounted for almost all of the deployment of new machines. For the most part, white-label machines are owned by non-FSP entities, although some FSPs are now deploying white-label machines through subsidiaries.

Another interesting development is the use of branches and electronic delivery networks to sell the financial products of third-party producers. Some FSPs have concluded that distribution is a relatively profitable activity and are prepared to cannibalize their own products so that their customers can be offered the best price/service combination in all areas. Among the factors driving this development are the desire to use excess capacity in distribution channels and, in some cases, the savings that FSPs realize from not having to develop and market their own version of a product. Examples are the sale of mutual funds not produced by the FSP selling them and the sale of term deposits of another institution. It will be interesting to see whether this tendency spreads to other types of deposit and credit products.

Similarly, some FSPs are developing Web sites to facilitate access by their customers to a wide variety of products and services. One example is the establishment of Web auction facilities for small businesses that need financing. This type of site allows the small business to indicate its financing needs, and possible lenders to bid for the business. The FSP providing the site does not necessarily intend to lend the funds, but rather intends to make its revenues from operating the site. Clearly, not all FSPs can follow this strategy. But the development of such sites has the potential to lower the costs of financing for small businesses, and to reduce the costs of entry for a range of entities interested in pursuing small-business lending. Some FSPs are also creating business-to-business (B2B) Web sites, which are intended to facilitate transactions such as the purchase of supplies.

Customers' use of non-financial companies as information providers, although it does not appear to have become a major trend, remains a concern of FSPs. Some non-financial firms are trying to capture customers by providing a service that would allow customers to see all of their financial assets and liabilities at the same time. These so-called aggregators pose some interesting issues. For example, to be able to bring together a customer's assets and liabilities in one place, they need the customer's Personal Identification Number (PIN) for each of the institutions that a customer deals with so that they can obtain the information. Customers have, so far, not shown a strong interest in such a service, perhaps because of security concerns. Partly in response to the challenge posed by aggregators, FSPs have made it easier for customers to access information about all their assets and loans with the institution and to carry out transactions electronically. And customers seem to be embracing these developments, as FSPs report significant increases in the use of these types of service. Such developments, along with a willingness to sell third-party financial products, have allowed FSPs to mount a vigorous defence to the challenge of aggregators.



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Credit-scoring techniques have become more widespread and have made standard loans to consumers and to small- and medium-sized enterprises (SMEs) less costly. They have also helped FSPs to gain better control of their loan processes by improving consistency in their decision-making processes, which is expected to lead to a reduction in problem loans.<sup>6</sup> Foreign financial institutions have thus far not been able to capture an appreciable share of small-business lending to Canadian companies by using such techniques, although, interestingly, the CIBC has entered into an alliance with Wells Fargo Bank to provide small businesses with additional options for accessing credit.

Such techniques raise a number of questions. How will credit scoring (in particular, the reduced role of judgment in making loans) affect the relationship between FSPs and SMEs? How well will credit scoring reflect the risk in SME loans and will the pricing of such loans adequately reflect the risk? Will FSPs use credit-scoring systems purchased from third parties, or will they develop their own systems? If the former turns out to be the case, how will an FSP differentiate itself from other FSPs in this line of business?

There continue to be some significant barriers to the use of information technology by FSPs in the innovation of products and services and in their delivery channels. First, legal and regulatory frameworks may be insufficient or inconsistent in the context of new products or services that were not contemplated when the frameworks were created. Examples of this are the acceptability of electronic signatures or electronic imaging of paper records for legal purposes. At the same time, the legal framework may also not have kept pace with innovations that could help prevent or otherwise deal with the criminal use of new products or services.

Second, governance practices in market infrastructures may favour inertia rather than facilitate change. Since many of these governance practices are based on co-operation, they may tend to protect the interests of the entities that own the co-operative arrangement to the detriment of innovators that are not part of the market infrastructure. This concern was raised in the Cruickshank report (2000), which reviewed the state of competition in the U.K. banking sector. Cruickshank concluded that mutual governance models, which are common in payment system arrangements, limit effective competition between systems, lead to anti-competitive restrictions on access, result in anti-competitive and inefficient pricing of the services of the clearing and settlement systems, and lead to a lack of innovation or a slow adoption of new innovations that

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6. An interesting issue for government-funded loan programs is whether the use of credit-scoring techniques in the private sector will result in greater adverse selection problems for government loan programs that have not adopted these techniques. See Stanton (1999).

can result in less good service to end-users of these systems than would otherwise have been the case.

Third, developments in security (including confidentiality, authentication, integrity, authorization, and non-repudiability) have typically not kept pace with developments in functionality, thus inhibiting the adoption of innovative developments.

Fourth, with the increased use of information technology (IT), operational risks may have increased, raising concerns about the ability of an FSP to offer a given product or service continuously. The practice of outsourcing many IT-related activities can exacerbate this risk and raises interesting questions for the supervisors of regulated FSPs.<sup>7</sup>

Fifth, in certain cases, where standardization is important (e.g., to facilitate interoperability or the sharing of information), it may be difficult to coordinate all of the FSPs and the non-financial participants in the activity. Market incentives are often insufficient to bring about this coordination.

## **5. How Important is Size?**

One area in which our views have changed somewhat is that of scale economies.

To set the scene, let us consider what happened during the 1990s with regard to mergers and acquisitions in the financial services industry, as evidenced by the findings of a recent study by the Group of Ten (2001) on consolidation worldwide in the financial sector.<sup>8</sup> The study made the following observations.

- There was a high level of merger and acquisition activity in the 1990s among financial firms in the thirteen countries studied,<sup>9</sup> and there was a marked acceleration of this activity in the last three years of the decade.
- Most mergers and acquisitions involved firms competing in the same segment of the financial services industry and in the same country. The second most common form of consolidation was domestic mergers involving firms in different segments of the industry. The least common forms of consolidation involved cross-border mergers and acquisitions, especially those involving firms from different segments of the industry.

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7. In this regard, see the Office of the Superintendent of Financial Institutions (2001).

8. See also the Organisation for Economic Co-operation and Development (2000), and European Central Bank (2000).

9. The eleven countries in the G-10 grouping plus Spain and Australia.

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- Most of this activity involved banking firms (70 per cent of the value of the mergers). The number of banking firms decreased in almost every country studied and the concentration of the banking industry increased (when measured by the percentage of a country's deposits controlled by the large banks). Other measures of concentration (e.g., with respect to off-balance-sheet activities) showed even larger increases in concentration.
  - Joint ventures and strategic alliances increased significantly, especially in the last two years of the decade. Cross-border alliances were more common than domestic deals, in contrast to the situation in merger and acquisition activities.

In our previous report (pages 18–19), we were very careful in our characterization of the extent of economies of scale. We wrote that:

Economies of scale clearly exist in certain parts of the operation of FSPs. However, empirical work thus far has provided no evidence that a bank has to be a mega-institution, rather than just large, to exploit most economies of scale. And, of course, some economies of scale can be exploited by outsourcing or by purchasing certain types of services from specialist institutions, as has happened in other industries and in the backroom operations of banks.

The assertion about empirical work not providing evidence on the importance of economies of scale for larger banks was based on the literature available at the time. That literature focused largely on U.S. banks, most of which fell into the small- to medium-sized categories, since they were mainly local banks. Since then, there has been increased research on non-U.S. banks, which has involved the analysis of economies of scale in the large to very large bank categories. Also, with the waves of mergers in the United States in recent years, there is now a greater number of large and very large banks (including the new super-regional banks) whose data are available for the analysis of economies of scale. The experience with mergers over the past decade has also provided insights into the factors leading to increased concentration.

An important point we want to note in this area is the distinction between business lines, where economies of scale are directly relevant, and the size of the financial institution as a whole, where other factors play the central role.

The recent literature seems to suggest that economies of scale in a number of business lines extend further than previous empirical work had indicated. This conclusion is supported by the growth of monolines, which exploit economies of scale in process-intensive or information-intensive areas, such as credit card processing or discount brokerage operations. One result has been recognition of the importance of outsourcing in certain areas, or of dropping some business lines entirely, and of becoming world class in those niche lines of business in which the FSP decides to specialize. A key factor behind these changes has been the developments in information and communications technology, most notably the rapid increase in processing power

and the sharp decline in telecommunications costs. With many of the new technologies having high fixed costs and low marginal costs, it is not surprising to see significant increases in size and concentration in those business lines where such technologies play an important role.

The benefits from the overall size of a financial institution (as opposed to increased scale in given lines of business) come from somewhat different sources. There is an increased possibility of economies of scope in institutions that have multiple business lines. As well, diversification across business lines can lead to smoother revenue flows as long as the returns are not highly correlated. And it has been argued that more capital is needed to be a major player in transactions with very large customers.<sup>10</sup>

As noted earlier, the prevalent view is that the Canadian market for financial services is too small for even the largest Canadian FSPs to operate at an efficient scale in certain lines of business. At a minimum, large Canadian FSPs believe that they need to be North American entities. A number of recent examples of such a North American strategy are noteworthy.

- (i) The Bank of Montreal purchased the U.S. on-line brokerage arm of Credit Suisse First Boston (2001), which brought one million new accounts to the bank. When this operation is merged with the bank's Harris operations it will create the seventh-largest discount brokerage in North America.
- (ii) The RBC bought a Minneapolis broker (2000), doubling the size of its wealth management operations, and then bought a Boston broker (2001), giving the RBC a national presence in the United States. It now owns the ninth-largest full-service broker in the United States.
- (iii) The CIBC is expanding its Amicus (white-label banking) operations in the United States, offering retail banking products, credit card, insurance, and mutual fund products in Winn Dixie and Safeway stores, following the President's Choice model in Canada. The bank argues that the in-store approach reduces the costs of creating branches and building brand recognition.
- (iv) The TD Bank's purchase of Waterhouse and other brokerage operations resulted in the second-largest on-line brokerage in the United States. The TD Bank also announced plans to

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10. In contrast to these views, the G-10 report on consolidation in the financial sector (Group of Ten 2001) noted that current evidence suggests that only relatively small banks could generally become more efficient from an increase in size, although the study pointed out that future changes in technology and market structure might affect economies of scale and scope. It also noted that in its surveys with FSPs regarding the potential for efficiency gains from consolidation, FSPs' views differed significantly from the results of standard research. The report suggested that the reasons for this difference might be that: (i) FSPs may not look at cost reductions or revenue enhancements relative to peer group trends; (ii) FSPs may focus on absolute cost savings rather than on measures of efficiency; (iii) research results are for the typical merger, while some specific consolidations do result in efficiency gains; and (iv) past consolidations may have suffered from restrictive regulations that may not hold in the future.

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follow a strategy similar to that of the CIBC by opening branches in two-thirds of the Wal-Mart stores in the United States. Regulatory concerns delayed the implementation of this strategy and led the TD Bank to reduce the number of stores in which they plan to open branches.

The key questions for these FSPs are the extent of the economies of scale in their various areas of specialization, and, where economies of scale are important, whether the FSPs can achieve the size necessary to realize them and to be competitive with the very large FSPs in the United States. However, regulatory restrictions may limit the ability of FSPs to realize these economies.

One final observation should be noted. As is evident in the non-financial sector, there can be waves of conglomeration and divestiture as views change about the benefits and costs of size. This fact has been especially true of conglomerates that brought together operating businesses without much in the way of synergies. Whether the same pattern will hold true in the financial area remains to be seen. But we find it particularly interesting that one of the most noteworthy cross-sectoral mergers in recent years, the Citicorp–Travelers merger, may be partly undone by the sale of the property and casualty part of the business. Commenting on this merger, Deloitte Research (2001) stated that the “most notable example of a scope-based player attacking the insurance industry is Citibank’s acquisition of Traveler’s, the fifteenth largest player in the life insurance and P&C fields: the explicit strategy here is to leverage Traveler’s new access to Citicorp’s distribution channels and new opportunities for bundling to move up the ranks.” What does the recent announcement by Citigroup, that it intends to divest itself of the property and casualty business of Travelers, imply about the highly touted synergies in that arrangement?

## **6. Concluding Remarks**

The challenges facing FSPs in deciding on their strategies for the future remain daunting. An interesting suggestion on how to maintain strategic flexibility in the financial services industry was made by Deloitte Research (2001). It argues that in the face of uncertainty about winning strategies, FSPs should “acquire the right, but not the obligation, to control and integrate specific operating assets into their core businesses when and as appropriate.” They call this strategy the acquisition of real options and state that “Just as a financial option costs only a fraction of the value of the stock on which the option contract is written, a real option can cost only a very small percentage of the full value of controlling and integrating the resources required by a scenario that, today, is only a possibility.”

For example, when a number of new and different kinds of initiatives are underway to deliver a certain type of service, and it is unclear which approaches will end up as survivors, a bank might

invest in many of the new service providers, even knowing in advance that most of its investments will be unsuccessful. Or it might use some of the new approaches experimentally in parts of its business, while not committing totally to any single approach until it became clear which were the superior forms of delivery.

FSPs will always face uncertainty regarding those developments that will generate winners in the marketplace and those that will disappear without a trace. Hence there is clearly a need for more research into the forces behind innovations or barriers to innovation in the financial services industry, so as to provide useful insights for FSPs as well as for public sector regulatory authorities.

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## Bibliography

- Bank for International Settlements (BIS). 2000. *Survey of Electronic Money Developments*. Basel Committee on Payment and Settlement Systems, No. 38.
- Bank of Montreal. 2001. *Annual Report*. Book Two, page 28.
- Canadian Imperial Bank of Commerce (CIBC). 2001. *Annual Report*.
- Cruickshank, D. 2000. *Competition in U.K. Banking: A Report to the Chancellor of the Exchequer*. London: HM Treasury.
- Deloitte Research. 2001. *Strategic Flexibility in the Financial Services Industry: Creating Competitive Advantage out of Competitive Turbulence*. New York: Deloitte Research.
- European Central Bank. 2000. *Mergers and Acquisitions Involving the EU Banking Industry—Facts and Implications*. Frankfurt.
- Freedman, C. 2000. “Monetary Policy Implementation: Past, Present and Future—Will Electronic Money Lead to the Eventual Demise of Central Banking?” *International Finance* 3(2): 211–228.
- Freedman, C. and C. Goodlet. 1998. *The Financial Services Sector: Past Changes and Future Prospects*. Technical Report No. 82. Ottawa: Bank of Canada.
- Group of Ten. 2001. *Report on Consolidation in the Financial Sector*. Basel.
- Merton, R.C. and Z. Bodie. 1995. “A Conceptual Framework for Analyzing the Financial Environment.” In *The Global Financial System: A Functional Perspective*, edited by D.B. Crane et al., 3–31. Boston: Harvard Business School.
- Moody’s Investors Service. 2002. *Canadian Banks and the Global Loan Syndication Business: Special Comment*. New York: Moody’s Investor Service Inc.
- Office of the Superintendent of Financial Institutions. 2001. *Outsourcing of Business Functions by Federally Regulated Financial Institutions*. Guideline B-10.
- Organisation for Economic Co-operation and Development. 2000. *Mergers in Financial Services*. DAFFE/CLP(2000)17.
- Stanton, T.H. 1999. “Credit Scoring and Loan Scoring: Tools for Improved Management of Federal Credit Programs.” PriceWaterhouse Coopers.

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