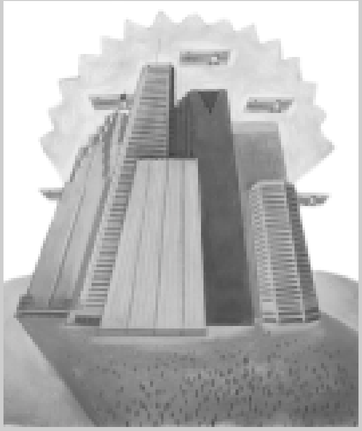
BIG IS GOOD, BIG WORKS

James McIntosh



Mergers can be beneficial, even when reduced competition leads to higher prices, provided higher profits of widely held bank stocks, particularly in mutual and pension funds, offset their losses in services. But efficiencies in scale resulting from mergers may also lead to lower product prices, benefiting all market participants, consumers and producers alike. According to the author's research based on three merger models, the price of banking service falls while their availability rises, amid higher profits. Being big has other advantages, he concludes, notably larger scale in banks' home market as a platform to successful foreign operations.

Les fusions peuvent être profitables même lorsqu'une moindre concurrence provoque une hausse des prix, à condition que les pertes en services soient compensées par l'augmentation des bénéfices générés par les titres bancaires les plus courants, notamment les fonds communs de placement et les caisses de retraite. Mais les économies d'échelle qu'elles produisent peuvent aussi entraîner une baisse des prix avantageuse pour tous les acteurs du marché, producteurs et consommateurs compris. Selon une étude de trois modèles de fusion, le prix des services bancaires baisse à mesure qu'augmentent leur disponibilité et les profits d'ensemble. Les banques fusionnées présentent d'autres avantages, dont l'expansion d'un marché intérieur servant de tremplin à de fructueuses opérations étrangères.

In Canada, as in most other countries, the issue of bank mergers has been and continues to be one of great public interest and concern. This concern is justified. It is clear that in Canada the markets for banking services are imperfect, since most of them are supplied by producers with significant market share. When markets are imperfectly competitive, mergers should be evaluated before any decision to approve them is made. This is because of the potential impact on the welfare of the consumers of the products that are traded in these markets.

The evaluation of mergers in these circumstances is an area of economic policy that is fairly well understood at the theoretical level, and there is considerable agreement among economists as to what criteria should be applied to a merger approval decision.

The main findings of accepted economic theory in this area are that mergers can be beneficial, even when reduced competition leads to higher product prices, if the increase in profits offsets the loss in welfare to consumers from higher prices. But when firms have technology which exhibits increasing returns to scale mergers may actually lead to lower product prices, in which case all market participants gain - consumers and producers. Put another way, it is not always the case that a decrease or lessening of competition is bad for the consumer. Additionally, encouraging new entrants to an industry which is dominated by large firms with increasing returns to scale can be bad for consumers.

Bank profits in Canada, which have been very large until the recent economic slowdown, are viewed by large segments of the public with considerable hostility. While this is not surprising, it reflects a fundamental misunderstanding by the public about the functioning of financial markets. In addition to generating billions of dollars in tax revenues, individuals benefit from holding bank stocks.

Bank stocks are widely held, but the holdings are indirect, the majority of bank shares being held by institutions. The two most prominent institutions are mutual funds and pension funds, both of which involve a large proportion of the Canadian public. When a merger decision affects the profitability of the firms in an industry as important as the Canadian banking services industry, it will also affect the present value of an individual’s assets. Consequently, any analysis of the benefits of bank mergers would be seriously misleading if the procedure neglected the effects on individual assets or incomes. Unfortunately, this appears to have been the case in the 1998 Canadian bank merger decisions.

In their review of the requested bank mergers in 1998, the Competition Bureau was skeptical that there would be any gains in efficiency arising from the mergers. This was based on their perception of what American researchers had found when they looked at scale efficiency and merger results involving US banks. I believe that they misread this literature and they failed to consider its deficiencies which by that time had been well documented. They also ignored other literature which is much more relevant to the Canadian situation than that of the United States.

Most American studies are based on samples of small banks which do not have the country-wide branch networks that Canadian banks have. The emphasis is on cross-section studies with a large number of banks, and minimal attention is paid to time-series or panel data issues. There are also serious unresolved econometric problems with most of these studies.

The Canadian and Australian banking systems, as branch banking systems with large numbers of branches, are very similar, so what is true for Australia is most likely to be true for Canada.

Thus, the Competition Bureau's reliance on what at best can be described as a marginal literature led it to dismiss the potential efficiency gains of Canadian mergers. With no offset to the Bureau's perceived costs of lessened competition, it could offer no support for the mergers. In my view this was the wrong conclusion. As is shown in the next section, there are sufficient scale efficiencies in the technology of the chartered banks in Canada for mergers to produce increased profits and lower prices for banking services.

My research on Canadian chartered bank mergers focused on just one of the dimensions of merger benefits, that is, whether bank mergers would raise or lower the price of banking services. Specific questions like this can only be answered in the context of a particular model or set of assumptions concerning the technology of the banks and the type of market structure in which banks operate. I assumed that the market for banking services was oligopolistic with a competitive fringe of small providers that reacted to the price set by the large players, the Big Six chartered banks. My model was estimated using a time-series of individual bank data from 1976 to 1996. Estimates of scale efficiency were found to be the same for all banks and significantly greater than one. My estimate of the elasticity of scale is 1.26 which is almost identical to that found by Joseph Hughes, Loretta Mester and Choon-Geol Moon in 2001 for large US banks. This study, published by the *Journal of Banking and Finance,* is the most recent study of scale efficiency based on American banks.

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As an additional check, scale efficiency measures were computed using a methodology I developed with J.A Breslaw in 1997. These also dictated increasing returns to scale for banks. Bank costs were also found to vary inversely with the size of the bank as measured by its total assets.

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Three simulation exercises involving potential mergers were then undertaken.

These were a merger between the Bank of Montreal and the Royal Bank of Canada, denoted as merger A, a merger between the Canadian Imperial Bank of Commerce and the Toronto-Dominion Bank, denoted as merger B, and both mergers A and B. A merger between banks results in a new bank, whose total assets are obtained by pooling the assets of the two banks. The cost function of the newly merged bank depends on the pooled asset base and has the same functional form as the two merging banks had before the merger.

What is meant here by a simulation exercise is a comparison of computed pre-merger and post-merger equilibria. For example, in merger A, the comparison is between a six bank model and a five bank model in which two of the players have pooled their assets and are trying to maximize the profits of the merged entity given the strategies of the other four banks.

Mergers in imperfectly competitive industries have the potential of generating product quantity and price changes. These will effect individuals directly as consumers of banking services, and indirectly through income and wealth effects that arise as a consequence of changes in bank profits. The effects on the relative price of banking services of each merger separately, as well as the effect of both mergers together, are shown in Table 1. These were computed for the year 1996.

Mergers A and B as well as the simultaneous merger, A&B, all have the same features: the post-merger price of banking services falls, the total amount of banking services rises, and in each case, the post-merger share of output relative to the combined pre-merger shares declines. Of course, the merged entity has a larger market share than either of its parents. For example, in merger B the combined pre-merger market share of 34.2 percent falls to a post-merger share of 29.5 percent. For all of the mergers the price reductions are quite small, the largest being 3.5 percent for mergers A&B together.

While consumers gain, society gains from a more efficient delivery of banking services. In all of the mergers all the newly formed banks experience substantially lower marginal costs, with merger B generating the larger reductions. The reason seems to be that in 1996 the CIBC and the TD Bank, being smaller than the Bank of Montreal or the Royal Bank, had more to gain from becoming bigger. All banks not involved in mergers deliver more services, so their marginal costs fall as well. Presumably, bank profitability improves through mergers, but the actual amount cannot be computed without knowing factor prices.

Chartered banks have served as a profit centre for the Canadian economy for the last twenty-five years. Our banking system has also provided good service to the Canadian public by offering a wide range of high quality products at reasonable prices. For this to continue, and that should be the ultimate objective of government policy, Canadian banks have to be able to compete in the home market for banking services.

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My results show that increasing size confers advantages in terms of reducing the costs of bringing products to the market. While it is unlikely that foreign banks will move into Canada by offering a complete line of financial products through a system of branches and compete head to head with the Big Six, we can expect to see more mono-line competition from providers like Ing Direct and Wells Fargo Bank.

These "cream skimming" activities by foreign based banks may ultimately not be in the interest of Canadian consumers of banking products because the domestic branch based banks may have to raise prices on other products to cover their costs as a response. The reason for this is that if Canadian banks lose some of their business to foreign banks their costs will rise. Offering banking products from "virtual" internet facilities is an attractive option for foreign banks to compete in the Canadian market. At the moment it is too early to tell how much market share will be lost to this type of competition, but it could be substantial.

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Regardless of amount of new foreign competition in the Canadian banking sector, the revolution in information technology has and will continue to have profound implications for the way banking is done in Canada. One manifestation of this is the rise of ATM usage together with electronic banking. These have fundamentally changed the role that branches play in large branch based banking networks. Bank customers no longer rely on the services that branches provide in the way that they did ten years ago. As a result branches are under-utilized and in order to reduce these inefficiencies the big banks have started to close branches. However, there are limits to the number of branches that can be closed so that this is only a partial solution to the banks' inefficiency problems.

If the regulatory status quo continues banks will certainly survive, but they will continue to close branches. Competition will appear to decrease because the banks will informally agree among themselves to closures which minimize the cost to the general public. They will continue to expand their operations in the United States, the Caribbean and Latin America. Because of the trends in deregulation in the US, opportunities are arising for the expansion of networked branch banking, something which Canadian banks do very well. But this is just branch banking in another market, and while there may be some scale efficiencies to be exploited, the inherent problems associated with branch networks remain.

On the other hand, if Canadian regulators do decide to allow bank mergers, and in addition allow the cross-selling of insurance products by banks, then the future of the Canadian banking sector is much brighter. Cost reductions will accompany domestic bank mergers because

Percentage Price and Output Responses to Mergers

Variable	Price	Output
Merger A BMO-Royal	-3.0	6.4
Merger B CIBC-TD	-0.9	1.7
Mergers A&B BMO-Royal and CIBC-TD	-3.5	7.4

of the elimination of duplicated services. The number of branches in a merged bank will be considerably less than the sum of the two bank's branches before the merger, and each branch would have a larger customer base and a larger range of products.

Considerable savings can be generated here as well as in other areas of bank operations like the provision of brokerage services or the sale of mutual funds. As I mentioned in the previous section, the banks would find it in their interest to pass on some of these cost savings to their customers.

Being big has other advantages. The potential advantages to size are well known and appreciated by Canadian policy-makers. In other countries increased size in banking has been achieved by mergers, and most bank mergers have been with other banks within the same country. As a strategy, getting larger in the home market seems to be the preferred first step in the process of acquiring the necessary scale to be a major international player in the provision of financial services.

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It is, therefore, something of an irony that Ing Direct and Wells Fargo, banks which acquired size in their home markets, are now considerably larger than Canada's largest bank, The Royal Bank, and have established a presence in the Canadian market. Because of regulatory constraints, Canadians end up importing banking services, instead of exporting them, and the high skill, high salary jobs that are associated with head office activities go to San Francisco and Amsterdam rather than Toronto.

James McIntosh is a professor of economics at Concordia University in Montreal. This article is adapted from his testimony to the Senate Banking Committee hearings on large-bank mergers and the public interest.