

# The potential benefits and costs of stability in the Canadian banking sector

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## Introduction

The recent financial crisis of 2008 has highlighted the resilience of the Canadian banking sector. Whereas bank failures were numerous in the United States and Europe, none occurred in Canada. This is the more remarkable noting that this occurred without public authorities injecting capital in any Canadian banks, contrary to what was widespread elsewhere. Finally, all major Canadian banks, with the exception of one, remained profitable during this trying period. Indeed, this exceptional resilience was acknowledged internationally and was, and still is, a great source of pride for Canadians.

Avoiding the economic disruption and costs associated with bank insolvencies is clearly a great benefit. However, this paper examines whether stability of the banking sector would also come with some, perhaps hidden, economic costs. More generally, it will address Question #2 of the consultation paper:

*«How well does the financial sector framework currently balance trade-offs between the three core policy objectives of stability, efficiency and utility?»*

Optimizing the complex trade-off between these three desirable goals is, in our opinion, the most important and difficult challenge faced by the regulator.

The analysis will proceed as follows. Firstly, we claim that to identify the potential benefits and costs of stability it is necessary to understand the economic factors which contributes to the stability of the banking sector. Secondly, we discuss the potential benefits and costs associated with the stability of the Canadian banking sector. Finally, should the current trade-off be sub-optimal, we will make suggestions to rebalance these benefits and costs.

## 1. Economic factors contributing to banking sector stability

We take the view of the British economist, Sir John Hicks (1935), who coined the famous phrase: «The best of monopoly profits is the quiet life. » Basically, this statement asserts that firms enjoying market power can achieve higher profits while at the same time taking less risks. A lower level of risk is indeed synonymous with stability and the quiet life. Rhoades and Rutz (1982) reiterated this analysis using the concepts of efficient frontier and utility functions and came to the same conclusion.

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This analysis can also be stated in the traditional Structure-Conduct-Performance paradigm of industrial organization theory. Briefly, this hypothesis states that a concentrated structure leads to less competitive behavior and performance characterized by higher profits, less output and less risk. The intuition behind this hypothesis is that a firm enjoying market power can achieve excellent profitability without having to take great risks. Also taking the benefit of market power mainly in the form of decreased risk rather than greater profit has a great advantage: it is less visible and less likely to generate negative reactions. Finally, although top managers usually own shares to align their interest with those of other shareholders, the fact remains that their human capital is undiversified and thus they have a greater interest than other shareholders in avoiding the bankruptcy of the firm. Thus, they have a bias towards maintaining the risk of the firm at a low level, which is easier when the firm has market power.

Several empirical researches provide interesting evidence in this regard. First, Allen and Engert (2004) show that the Canadian banking sector is characterised by monopolistic competition, a behavior which is less than perfect competition. Technically, they use the H-statistic of Panzar and Rosse (1987), which is 1 for perfect competition and 0 or less for a monopoly or a collusive oligopoly. They obtain an H-statistic of 0.35 which is clearly closer to 0 than to 1. This result can be linked to the study by Berger, Klapper and Truk-Ariß (2009), who showed that less competition is correlated with more stability, as measured by the Z-index, a measure of the probability of bankruptcy. Finally, the study by Beck, Demirguc-Kunt and Levine (2006) concludes that, as expected, concentration in the banking sector leads to less competition and more stability.

We believe that evidence supports this hypothesis relative to the Canadian banking sector. The table below shows three indicators of bank performance: the return on equity (ROE), a measure of profitability, the gross impaired loans ratio (GIL), a measure of credit risk, and the beta coefficient, a market measure of systematic risk.

**Risk-return indicators for the large Canadian banks in 2015<sup>2</sup>**

Bank	ROE	GIL	Beta
Royal Bank of Canada <sup>3</sup>	18.6%	0.47%	0.91
TD Bank	14.7%	0.48%	0.63
Scotia Bank	14.6%	0.44%	1.13
Bank of Montreal	12.5%	0.58%	0.80
CIBC	18.7%	0.27%	0.94
National Bank of Canada	16.9%	0.10%	1.01
<b>Mean</b>	<b>16.0%</b>	<b>0.39%</b>	<b>0.90</b>

<sup>2</sup> The ROE and GIL data were taken from the 2015 annual reports of the banks. The beta coefficients were taken from the *Globe and Mail Investors* web site.

<sup>3</sup> See the Appendix for a further analysis of economic profit at the Royal Bank of Canada

First, it is clear that a 16.0% average rate of return on equity is a large rate of return in the context where 1 to 3 years government bonds have a rate of 0.5% according to the Bank of Canada. This implies a 15.5% risk premium for business risk, which is huge! On the other hand, the ratio of gross impaired loans is fairly low at 39 basis points. Similarly, the average systematic risk coefficient at 0.9 shows that on average banks are taking less risk than the other firms in the market, where the reference value for average risk is 1.0. Taken together, these indicators provide support for the view that Canadian banks enjoy high returns with a relatively low level of risk.

We conclude that market concentration and market power are a likely contributors to the stability of the Canadian banking sector. Admittedly, they are also other factors. The good health of the Canadian economy and the good monetary, fiscal and regulatory environment in which banks operates have also contributed to financial stability.

## **2. The potential benefits and costs of stability**

If market concentration is an important determinant of banking stability, then the benefits and costs of stability become easy to identify as they would originate from the same cause.

Microeconomics shows that market power shifts the supply curve and generates an equilibrium where price is higher and quantity is lower. In these two effects lie, we think, the benefits and costs associated with stability.

Higher prices for bank services would explain the high level of profitability, which can be observed. This in turn allow banks to reinvest in their capital and maintain good capital ratios which contribute to stability. Higher prices are a disadvantage for consumers, but this inconvenience is mitigated by the fact that ownership of major banks is widely dispersed. As a matter of fact, it can be said that the vast majority of Canadians are indirect owners of banks through their private and public pension funds and mutual funds. Thus, the indirect redistribution of profits to most of the population is a strong compensatory mechanism which makes higher profits a lesser evil. This mechanism is not perfect however, as employees and managers of banks, extract a rent from the market power held by their employer. Also, the redistribution of profits is clearly not exactly proportional to the consumption of financial services.

The second effect of market power is the restriction of output. In the case of banks, this is related to turning down marginal loans considered too risky, which would otherwise be accepted in a more competitive market. This is the most difficult effect to observe and measure as it is almost invisible. The only indirect evidence would be the very low levels of delinquencies and defaults on loans. This restriction on output has potentially very significant consequences. First, there are no direct compensatory mechanisms in this

case. A small firm which doesn't get its bank loan, may, most of the time simply abandon its project. This may imply less employment, less innovation, less productivity and less GDP growth. It is clear that all these economic issues are concerns for Canada at this moment and banking concentration could be a factor. Eventually, the restriction of output is a dead weight loss for the economy as a whole. This is why the effect of market power on the behavior of banks towards risk taking and quantity of output is, in our opinion the most important effect, much more important than the price effect. This is why it is so critical to make sure that there is enough competition in the banking sector and that the optimal trade-off between stability and performance (efficiency and utility) be achieved.

Our perception is that concentration in the Canadian banking sector is too high and moreover it is not currently trending in the right direction. To our knowledge, the department of finance has been preoccupied with increasing competition for a long time and has taken many measures over the years to try and achieve this goal. However, one must observe that the forces of the market have been stronger than the regulatory measures taken.

### **3. Propositions for guiding the evolution of market structure in the banking sector.**

First, we would suggest that the Department of Finance perform or obtain a formal research testing the hypothesis that concentration in the banking sector may have a negative effect on innovation, productivity and growth using an international sample and controlling for relevant factors.

Secondly, we believe that if the Government of Canada is serious about increasing competition in the banking sector it will need to go beyond the regulatory framework and consider using both monetary and fiscal measures.

A recent research by the Bank of Canada has shown that large systemically important banks enjoy an implicit government guarantee because of their too big to fail nature and thus benefit from a 65 basis points advantage in debt financing. Clearly, this creates a symmetric disadvantage for smaller banks and contributes to build a barrier to entry. We believe that such a disadvantage should be compensated by the Bank of Canada offering a lower rate to small banks.

Similarly, we propose that small banks should be given a tax advantage, the details of which to be determined. This could be interpreted in the following way. Tax payers would accept to pay more taxes to finance the subsidy to small banks in order to benefit from more competition in the banking sector and possibly a more dynamic economy.

## Conclusion

This article has addressed the issue of stability in the Canadian banking sector. It claims that stability is obtained in part through concentration and market power. Admittedly, stability has significant advantages, however it may involve hidden costs such as higher prices for consumers and most importantly lower output, which in this case means a lower supply of credit with significant negative effects on the economy.

In sum, we believe that the current situation does not constitute an optimal trade-off as it is biased slightly too much towards stability and somehow under-weigh the negative side effects on efficiency and utility.

We would strongly suggest that the Government of Canada consider deploying a full arsenal of monetary, fiscal and regulatory measures to favor the de-concentration of the banking sector and foster an increase in competition for the benefit of consumers and the economy as a whole.

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## Appendix

### Economic profit at the Royal Bank of Canada

The Royal Bank of Canada (RBC) provides in its 2015 annual report an interesting analysis. It computes what is called «economic profit». Basically, economic profit is what remains for shareholders, once all factors of production are paid at their fair value. This calculation includes capital as a factor of production. Thus the «fair cost of capital» needs to be estimated. Economic profit is what goes to shareholders over and above the fair reward for the use of their capital. The calculations, taken from p.21 of the 2015 annual report of RBC, are shown below.

#### *Economic profit*

Economic profit is net income excluding the after-tax effect of amortization of other intangibles less a capital charge for use of attributed capital. It measures the return generated by our businesses in excess of our cost of capital, thus enabling users to identify relative contributions to shareholder value.

The capital charge includes a charge for common equity and preferred shares. For 2015, our cost of capital was 9.0%.

The following table provides a summary of our Economic profit:

(Millions of Canadian dollars)	2015							Table 15	
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total		
Net income	\$ 5,006	\$ 1,041	\$ 706	\$ 556	\$ 2,319	\$ 398	\$ 10,026		
add: Non-controlling interests	(8)	2	–	(1)	–	(94)	(101)		
After-tax effect of amortization of other intangibles	22	69	–	21	–	1	113		
Goodwill and intangibles writedown	–	4	–	–	–	–	4		
Adjusted net income (loss)	\$ 5,020	\$ 1,116	\$ 706	\$ 576	\$ 2,319	\$ 305	\$ 10,042		
less: Capital charge	1,544	551	148	251	1,550	852	4,896		
Economic profit (loss)	\$ 3,476	\$ 565	\$ 558	\$ 325	\$ 769	\$ (547)	\$ 5,146		

Basically, RBC estimates its cost of capital, ie the fair return to be given to shareholders, at 9%. This implies profits of 4896 million \$ leaving an economic or excess profit of 5146 million \$, ie total profits are more than twice the fair cost of capital.

We know from economic theory that under perfectly competitive markets, economic profit should be zero, ie shareholders should just get a fair and competitive reward for the use of their capital. Many hypotheses can be put forward to try and explain the presence of a positive economic profit: an exceptionally well managed and/or innovative firm. However, a simple and obvious possibility is that the firm operates in a less than perfectly competitive market and that it enjoys significant market power. In such a case, economic profit would just be a measure of the rent it can extract from its market power. To us, this explanation seems the most likely.