

Noninterest Income Generating Activities and the Future of Banking

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Abstract

Firms' financial structure has changed drastically over the last decades. Entrepreneurs can get access to direct financing much more easily than they used to. With accelerating financial innovation, this better access to financial markets coincides with financial deepening, and it importantly contributes to disintermediation.

To accommodate this structural mutation, banking regulation has adapted. It now allows financial institutions to be much more involved in market-based activities (e.g., securitization, investment banking and trading). Consequently, the banking landscape has completely mutated compared to the traditional model of the seventies.

This paper discusses the implications of such a change for the future of banking, with a particular focus on the challenges related to macroprudential policies and tools, as they currently stand, and as they are likely to evolve to fulfil their role – i.e., optimally – in monitoring and supervising bank systemic risk.

Keywords: Financial innovation; Financial deepening; Disintermediation; Banking regulation; Market-based banking; Bank systemic risk

JEL Classification: C32; G20; G21

"I believe that banking institutions are more dangerous to our liberties than standing armies".

Thomas Jefferson (1743-1826)

Introduction

In the early eighties market conditions change drastically and firms began to rely increasingly on direct financing to finance their investment projects. For example, in Canada, when we compute the ratio of direct versus indirect financing, the U-Shaped curve which unfolds clearly indicates a long-term increasing trend in direct financing, only temporarily slowed by the subprime crisis (Figure 1).

This structural change has been observed in many countries, and several authors have documented its impact on banking. In particular, in their seminal work on the subject, Boyd and Gertler [1] reflect on disintermediation and ask the following question: Are banks dead? Based on U.S. data, their answer is a resounding "No".

They argue that, in fact, bank profits are doing very well, except that the growth in bank income tends to be attributable, for a substantial part, to business lines only indirectly related to lending, and to non-traditional activities reported off balance-sheet.

When running the same kind of experiments based on Canadian data, we find that the asset-equivalent series of Noninterest Income Generating Activities (N.I.G.A.) computed with the methodology of Boyd and Gertler [1] has indeed grown substantially in the most recent decades (Figure 2). Corroborating this evidence, the share of non-interest income in bank operating income seems also upward trended in this period [2,3].

Consequently, the relative share of loans has substantially decreased, except for a few years during the subprime crisis, when banks market-based activities became the primary suspect of the last financial drama. Although the bulk of bank business still derives from loans, Figure 3 clearly shows that market-based financing play an increasingly important role in the global financial structure.

In our work, we note that the banking regulatory framework has also evolved, essentially changing endogenously to accommodate the

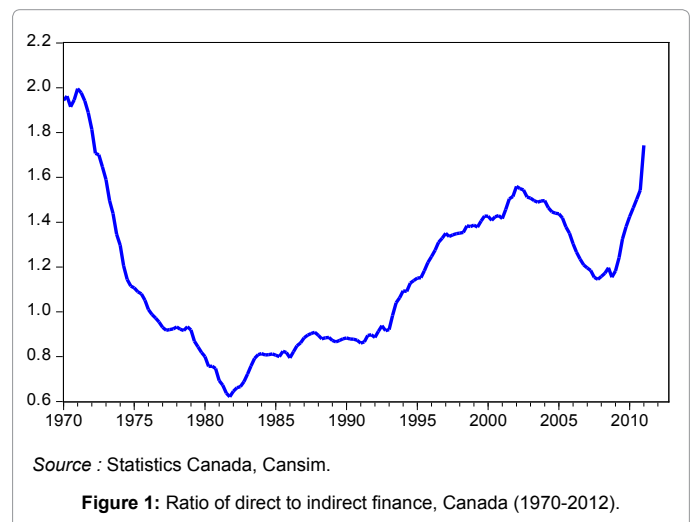
shift in banking practices. For example, in Canada, the successive amendments to the Bank Act nicely relate to the way Noninterest Income Generating Activities (NIGA) influence bank performance [4].

The question then is this: Are NIGA "good or bad", and what to do about them? This is the topic we address in the next section, before discussing the policy implications brought by market-based banking.

Are NIGA "Good or Bad" and What to do About them?

Are NIGA "good or bad"?

They are good, but... Looking at U.S. data, Stiroh [5] and Stiroh

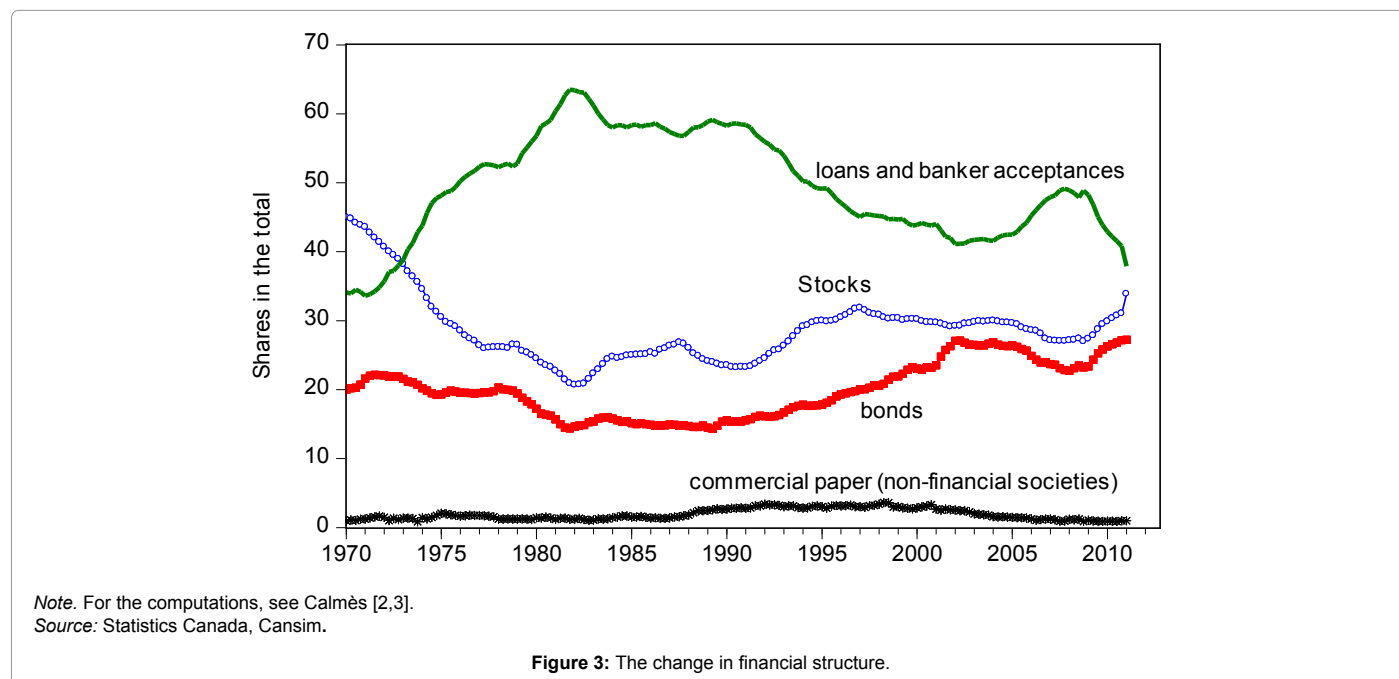
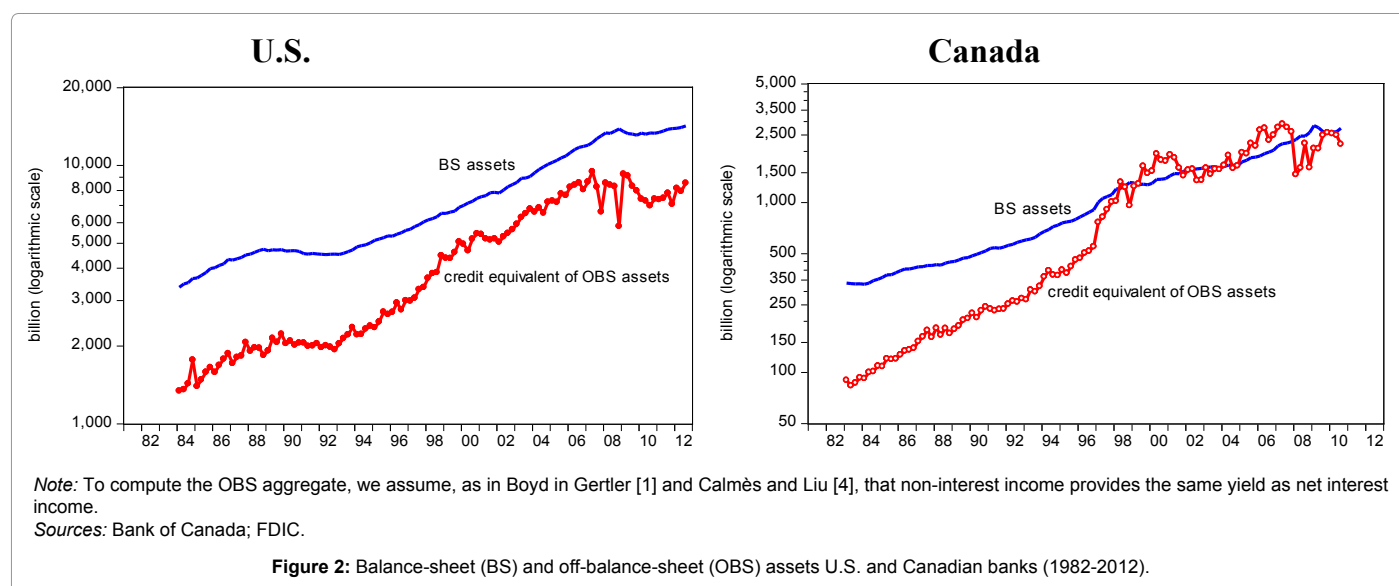


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Received February 21, 2014; **Accepted** March 25, 2014; **Published** March 31, 2014

Citation: Calmès C, Théoret R (2014) Noninterest Income Generating Activities and the Future of Banking. J Stock Forex Trad 3: 125. doi:10.4172/2168-9458.1000125

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and Rumble [6] find that NIGA increasingly contribute to the volatility of the growth of bank income. The authors also note that this trend is reinforced by the increase in NIGA relative weights in banking activities.

Based on Canadian data, if we follow the same portfolio decomposition approach to assess the role played by the various sources of bank income, we can detect the same phenomenon [4].

However, the fact that NIGA generate (procyclical) volatility should not be a concern *per se*, as long as this volatility is compensated by increasing returns. In this respect, the literature is divided [7]. In fact, there has been a first phase when, after the re-introduction of NIGA, risk-adjusted returns were deteriorating [2,3,8].

But in a second stage, once the structural break-point has been passed, risk-adjusted returns clearly show some benefits for banks to

diversify in NIGA – especially if we take rigorously into account the fact that the decision to diversify in non-traditional activities is actually endogenous [9].

What to do about them?

Nothing, ... almost.

As we mention in Calmès and Théoret [9] and Calmès and Théoret [10], NIGA is not that bad after all. In particular, despite their procyclicality, they help banks better manage credit risk. Obviously, if the risk they embed is compensated by higher returns, and if they provide banks some diversification benefits, the best economic policy should be “laissez-faire”.

One of the theoretical arguments supporting this idea, and the reason why we should think twice before implementing any macroprudential policy is the fact that financial innovation enables markets to slowly

converge towards a world of perfect market completeness, where most contingencies of the states of the world can be spanned, and finance can help insure against any idiosyncratic risk.

The broader question then pertains to the *nature* of the risk stemming from NIGA. One source of sub-optimality identified in the literature derives from strategic complementarities, and it leads to systemic risk.

Surprisingly however, even after Basel II, authorities keep focusing too much on credit risk. They seem to fail to realize that NIGA make banks more immune to external shocks. As a matter of fact, in our last article published in the Journal of Banking and Finance [11], we show that the cross-sectional dispersion of credit tends to *increase* after the structural break, both in the U.S. and Canada, and that it only narrows slightly during economic downturns, actually, a little earlier – i.e. the cross-dispersion measure is in fact a leading indicator of the cycle.

In other words, thanks to NIGA, credit risk has become easier to handle. On the other hand however, the systemic risk associated with NIGA really present some challenges to the regulators.

Conclusion: The Future of Banking

There is indeed some empirical evidence of strategic complementarities in the way banks manage their NIGA. In Calmès and Théoret [11], we show that the cross-sectional dispersion in non-interest income *narrows* quite significantly during downturns. In a sense, since banks tend to adjust their NIGA portfolios more homogeneously in these periods, the banking system is the least resilient when we need it to be the most robust.

However, going back to the regulatory era of the past would be a particularly bad idea. As explained earlier, traditional banking activities and NIGA are intimately intertwined, NIGA play a great role in stabilizing credit risk, and they contribute to progressing towards market completeness [12].

Instead of simply forbidding some NIGA, or severely restricting them with liquidity requirements in the hope of preventing any mounting systemic risk, authorities should address the systemic risk they carry *directly*, with a set of rules which ensure that competition plays fully its role.

The subprime crisis was certainly amplified by speculation, but it was not generated by it. Regulatory Capital Arbitrage played an important role [13-15]. Because banks could overcome the regulatory restrictions imposed on credit with NIGA, they lobbied to use RCA. As a matter of fact, it is important to note that badly regulating or overregulating banks only transfer the risk to shadow banks, exacerbating risk-shifting and systemic risk [16].

But at the core of the problem is the question of risk-mispricing [17]. It is the fact that the risks associated with financial institutions' market-based activities were not fully understood which ultimately caused the crisis. Hence, one of the most important tasks ahead is to design a macroprudential framework which encourages financial institutions to be more transparent about their NIGA. Incidentally, it is extremely difficult for researchers to find comprehensive data on these activities, a fact repeatedly mentioned by several authors.

Furthermore, the mere fact that new rules require banks to display more information on their off-balance activities is certainly not a guarantee that market discipline can yet fulfil its role directly. The virtue of competition can apply with good, reliable information, but only to the extent that this information can be used by investors to make their

choices correctly. In other words, Macroprudential *appropriate* tools are needed to systematically report the risks embedded in NIGA¹.

Basel III provision requiring banks to report their leverage might be a good step in this direction. However, as we note in our recent article in the Journal of International Financial Markets, Institutions and Money [18], financial risk indicators such as leverage are poorly designed to monitor systemic risk. So far, the mandatory measures proposed take into account NIGA only partially. Besides, in the case of leverage, the authorities seem to fail to realize that it mainly measures a trend in risk, whereas indicators fluctuating with the business cycles are the ones we ultimately need.

Although we propose time-varying, elasticity-based measures of bank leverage in Calmès and Théoret [18], researchers obviously need to think about other complementary tools as well to help assess the stance of systemic risk. As far as we know, if NIGA are here to stay, on the other hand little progress has been made on the regulatory front, and we are still very far from an optimal set of rules to channel market discipline over NIGA correctly.

Finally, we should not forget that optimal regulation must take into account the incentives of the regulating bureaucracies and of their political masters. Otherwise, we run the risk that regulation increase, instead of decreasing, systemic risk.

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This article was originally published in a special issue, **Economics, Finance and Public Policy** handled by Editor(s). Dr. Jimmy Teng, University of Nottingham, Malaysia