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Some Thoughts On Financial Reform In Canada

An Analysis and Recommendations to Ameliorate the Instability and Systemic Risk in the Financial System

By Douglas Peters and Arthur Donner[1]

"*Central banking in general and bank regulation in particular are the result largely of the belief that left to its own devices the banking system is inherently unstable.*"[2]

"*One key line of defence against financial instability is the improved framework of financial regulation, supervision and oversight*"[3]

In the past forty years since that first quote was written, there has been a proliferation of bank-like institutions that have the same inherent instability and the same tendency to systemic risk. These "shadow banking" institutions perform a banking-like function of borrowing short term and lending long term. But, differing from the banks, they do so in most cases without adequate capital, without adequate liquidity, and without access to a central bank—and most especially without strong bank-like regulation.

The recent financial meltdown worldwide has been the result of a failure to recognize the basic instability of this new near-banking system. The failure to properly regulate this new reality has, in effect, resulted in a severe recession in the United States, Canada, and throughout the industrialized and developing world. Added to that failure was the lack of effective regulation of the existing banking and insurance systems because of thoughtless deregulation and attempts to find areas of "friendly" regulation. As the Bank for International Settlements indicated in its recent 79th Annual Report, "the financial system has grown and become more complex; it has come to need a more comprehensive set of rules to ensure that it functions smoothly."[4]

If the financial system is to become less unstable, it is time for the "shadow banking" system to come out of the closet and be regulated, just as the banks are. Dr. Ed Clark, CEO of the Toronto-Dominion Bank, in testifying before the U.S. Senate Committee looking into financial regulatory structure admitted that he viewed the regulator as helping him run the bank.[5] It is time that the "shadow banking" system and all other areas of finance see things that way also. The "shadow banking system" consists of those financial concerns that are not federally-regulated banks and insurance companies and which are not provided with the safety valve of central bank protection. In Canada, these would include finance companies, hedge funds, private capital funds, and the trusts that are an integral part of the securitization process.

An important part of the "shadow banking system" that needs federal regulation and supervision is the securitization of debt instruments. Many small and large banks and other financial companies arrange for a selection of their loans, leases, or mortgages to be placed in a trust. In turn, the trust issues securities that are backed by the assets held in the trust. In this way the financial concern can sell its debt assets to the trust

and have more funds available to lend to others. An essential part of this process is obtaining an investment-grade rating of these securities from a credit rating agency. And that rating is paid for by the financial company issuing the security.[6] If the trust issues and sells to the public short-term notes, as in the case of Canada's asset-backed commercial paper market, and the assets backing those notes are longer-term leases or mortgage loans, then the trust must continue to issue and roll-over these notes as they mature.

What happened in Canada in 2007 was that the short-term money market froze and the trusts were unable to reissue and roll-over the maturing notes. At the same time, there were serious questions being raised about the quality of some of the assets backing the short-term notes issued by the trusts. The trusts set up by the banks in Canada were not a serious problem, as these federally-regulated banks had liquidity and the capital to take back the assets in their trusts and place those assets back on the banks' books. The problems were severe , however, for many of the non-bank companies that had sponsored note-issuing securitizing trusts. Many of these companies had neither the liquidity nor the capital available to repurchase the trust's assets and place those assets back on their own books. The result was a $32-billion problem that left investors with substantial losses and a situation that has as yet to be completely resolved.

Prime U.S. Example of Lack of Regulation: How to Spawn Problems

Sub-prime mortgage securitization in the U.S. is a prime example of irresponsible lending combined with irresponsible securitization, an almost total lack of transparency between parties, and inadequate regulation and supervision.

Not only were individuals "sold" mortgages they did not understand, but the credit rating agencies and the eventual buyers of the securities also were not fully aware of the quality of the mortgages backing the securities they rated or purchased. Or, if they were, then there was simply too much money to be made and they ignored or hid the underlying risk. The buying institutions, in most cases, were too busy to carefully review and examine the securities they were buying; or they relied on the ratings of credit rating agencies that were paid by the issuers and thus had major conflicts of interest.[7]

A further set of developments in the U.S. was the huge new phenomena of the unregulated derivatives market and the proliferation of equally unregulated hedge funds and private equity funds.

It is clear that all of these high-risk and naturally "inherently unstable" institutions created systemic risk and needed banking-like regulation. That would include capital requirements, liquidity requirements, careful inspection and regulation, and evaluation of risk, as well as a source of liquidity in the event of an emergency.

The virtual failure and bailout of the American International Group (AIG) is another prime example. In some ways AIG was a traditional insurance company, regulated at the state level but with a worldwide business. One aspect of its business, however, run out of London, England, was, it seems, totally unregulated—and that was the business of credit default swaps (CDS). Credit Default Swaps (CDSs) are insurance policies against the non-payment by a borrower (much like an endorsement on a promissory note). They were originally used to guarantee the payment of municipal bonds. But, under the AIG's London office (and many other institutions), CDSs became the guarantees of the payment of all sorts of complex financial instruments. When the sub-prime mortgage and securities market collapsed, the result was the failure of the complete AIG company and a forced rescue by the U.S. government. This should be clear evidence of the need for federal regulation of the complete business of such financial institutions.

Credit Card Institutions and the World's Payment System

So much of the current financial crisis has been unprecedented in origin and scale that it is important to think "outside of the box" about other possible areas that might endanger the financial system.

Credit card use and the credit card payment system is one such area of concern, since credit card payments now dominate the world's payments system for individual transactions. This is another area of systemic risk and possible instability in the financial and payments system. Credit card payments now far outnumber payments by cheque. The cheque clearing system, however, is operated by the regulated banking system.

Up until last year, the credit card payment system, dominated by Visa and Mastercard, was also operated and owned by a cooperative of the banks issuing the cards. But since then, both Visa and Mastercard have operated as separate corporations. These two corporations manage the brand names "Visa" and "Mastercard"; they make the rules to be followed by the banks and others that actually issue the credit cards; and they operate the clearing system for all the payments that are made by each group of credit card issuers. The companies Visa Inc. and Mastercard Inc. do not issue credit cards.[8] Visa states in its web site: "Visa does not issue cards, set cardholder fees or interest rates, or make loans to cardholders. The cardholder relationships belong to our network of financial institution clients and are managed by them. Visa Inc. derives revenue primarily from fees paid by our financial institution clients based on payments volume, transactions that we process, and other related services we provide."

What Visa and Mastercard do is to set the rules and operate the massive clearing system for payments. These two operations have serious implications, first for consumers and merchants, and second for the security of the financial payments system. Visa Inc.'s report in its 10K filing to the U.S. Securities and Exchange Commission states: "As guarantors of certain obligations of Visa members, we are exposed to risk of loss or insolvency if any member fails to fund its settlement obligations."[9]

These companies set rules, both domestically and internationally, for merchants, individuals, and issuing institutions for the clearing of a vast volume of payments each day, and are a clear part of banking operations. Since both companies operate payments clearing systems both domestically and internationally, there seems to be a clear role for regulation and supervision. Australia, New Zealand, Mexico, and the European Union have already instituted regulation. Canada should consider regulation, both from a consumer protection point of view and from a prudential approach, for this important and growing payments system.[10]

Any failure of the credit card system would leave in question a significant part of the payments system that has become relied upon by both business and individuals. Both companies pose some regulatory questions as they form an important aspect of both the international and individual countries' economies.

There are legitimate concerns as to whether the rules set out by these independent companies should be subject to Canadian regulation, and whether their international rules should come under Canadian regulation insofar as they affect Canadians. These are matters that impinge on consumer, company, and financial institution regulation.

The Initial U.S. Response for New Regulation

The Obama Administration has advanced an important set of proposals that would not only change the regulation of commercial banks, but would also bring hedge funds and other "shadow banks" under federal government regulation. The proposals are wide-ranging and will be carefully examined and likely amended by the U.S. Congress. American banks have already expressed concern about these proposals, and they are a powerful lobbying force in Congress. It will be interesting and extremely important to see how the Obama proposals are treated by Congress. And, most importantly, seeing if the resulting legislation and regulation meets the requirement for a more stable and transparent U.S. financial system.

One interesting aspect of the new U.S. proposals is in the area of securitization of mortgage loans. The Obama Administration proposes that any mortgage that is securitized will remain in part—just 5 per cent is proposed—at the risk of the institution that originally grants the mortgage. In the U.S., most mortgages are sold in bundles as part of a security issue. This is known as the "originate-to-distribute" model. It means that the originating institution that grants a mortgage has no interest in whether or not it is repaid on time or at all. This contrasts with the Canadian system where almost all mortgages are held to maturity in the originating bank or other financial institution. Even with somewhat greater use of securitization by the Canadian financial institutions, the arranging institution is the same bank that made the original mortgage loan, thus maintaining the close relationship with the borrower.

The result, in the U.S., was the pushing of sub-prime mortgages on low-income families,[11] many of whom did not understand the details of the mortgage and the effect of balloon payments set for subsequent

years. Many borrowers of sub-prime mortgages failed to keep up payments and/or defaulted on mortgages. In some instances, the originating institution had no interest in seeing that such mortgages were repaid, and even granted bonuses to employees on the basis of how many mortgages they could generate. And the borrower found that, if he or she got into difficulties, there was no local group with which they might renegotiate the mortgage loan.

Another difference in mortgage lending between Canada and the U.S. is the use of adjustable-rate mortgages (ARMs). As TD Economics states, "ARMs never took hold in Canada. No spikes in mortgage payments means no spikes in delinquencies."[12] In the U.S., "The bulk of surging delinquencies on mortgage loans occurred precisely when the rate [on ARMs] adjusts to a higher level."[13] There was also a sharper rise in housing prices in the U.S., as well as a much sharper fall.

The result of all these factors, and others, was the exceedingly high level of foreclosures in the U.S. Indeed, the rate of foreclosures in the U.S. was about five times greater than in Canada.[14] There are far fewer foreclosures in Canada, as the borrower can usually contact his or her local bank that still holds their mortgage and come to a reasonable adjustment.[15] The new U.S. proposals, if passed by Congress, will help to reduce the irresponsible lending practices, but will do little to improve the foreclosure question.

Canada's Financial Market Difficulties: The ABCP Case

Canada has not been immune from difficulties in its financial markets. A case in point is the asset-backed commercial paper (ABCP) market in Canada. It operated well as a source of funds for many borrowers, such as small leasing companies, automobile lenders, and others. That is, until the leverage became excessive, capital and liquidity became too little, and the access to liquidity from banks and other institutions became questionable. The value of some of the assets backing the commercial paper also began to be doubted. It was no surprise that the market seized up. And it was no surprise that significant losses to investors occurred.

There is a clear need for such securitizations—which are basic banking transactions of borrowing short and lending long—to become subject to the same or similar regulations as are applied to banks. There is also a need for such operations to show adequate capital, to show adequate liquidity, and to have secure access to funds from banking or central banking institutions.

What this might mean is that the issuer of ABC paper would be required to have an adequate reserve to back that paper. It would require a liquidity reserve, as well, to provide for the possibility of a difficult time in the market, when sales of the paper might not be available. And it would require an absolute secure lending facility from banks or others to look after the possibility of a market seizure.

The result might be an increase in the costs to the issuing companies because of the need for both capital and liquidity. In addition, the secure lending facility would be more expensive. The bank or banks issuing such secure facilities would charge more, as their own capital requirements would increase. That might mean higher costs to the ultimate borrowers, but the result would be a less unstable financial system.

All such securitized financial transactions should be subject to federal regulation. And that regulation must also require full disclosure to investors of the contents and risks of the loans, leases, or mortgages being placed into the securitized box.

There is need in Canada for new regulation of hedge funds and other private capital financial institutions, and that regulation should be at the federal level, as most of these entities deal across provincial borders. The lack of a national securities regulator is a clear "black hole" in Canada's financial regulatory system.

Proposals to limit Systemic Risk from the Bank for International Settlements

In its 79th annual report, dated June 30th, 2009, the Bank for International Settlements (BIS), a central bankers' bank, suggested a number of proposals to reduce the systemic risk of banks.[16] The BIS-proposed changes to regulation were under three headings: financial instruments, the financial markets, and the financial institutions. The BIS recommends an approval process for all financial instruments. For financial markets, the BIS recommends greater transparency on all purchase and sales of financial instruments by putting all like transactions through organized

regulated exchanges. For financial institutions, the BIS recommends special increases in capital related to the perceived systemic risk of the institution to the financial system, as well as a variable countercyclical capital charge. In examining the various recommendations under each of these headings, one must also consider whether or not the recommendations of the BIS are appropriate for Canada. These are interesting proposals put forth by a renowned institution.

One recommendation, particularly applicable to Canada, is: "No part of the financial system should be allowed to escape appropriate regulation."[17] The recent moves to bring securities regulation under a national regulator should be accelerated and the shadow banking system brought under federal regulation and in the hands of the Office of the Superintendent of Financial Institutions.

Under the first heading of improving financial instruments.[18] the BIS suggests a radical change of requiring every financial instrument to be licensed and approved. It also suggests that there be a three-tiered system of investors, ranging from the average investor to the sophisticated investor to the major "pre-screened" institution, deemed to be able to invest in the newest and most risky of investment vehicles. Each investment instrument, when approved, would be limited to one or more of the three categories.

One problem with the BIS proposal for regulating financial instruments (as the BIS said, "like prescription drugs") is that it was not the individual unsophisticated investor who caused the recent financial fiasco. It was, indeed, the large institutional investors like Citibank, Bear Stearns, Lehman Bros, UBS, Royal Bank of Scotland, and the list goes on and on.

Nevertheless, these recommendations of an approval process for all financial instruments would seem to be appropriate for Canada to consider. One problem would be the cross-border use of financial instruments. Could a Canadian investor buy a U.S.-approved investment vehicle, or would all investment instruments have to be approved by a Canadian regulator? One would think the latter to be the better system. But would it be workable, considering the vast interconnections Canada has with the US? One might also remember the losses that did occur in Canada from the securities based on the highly-rated U.S. sub-prime mortgage securities that later proved almost worthless.

The second set of BIS recommendations involves regulation of financial markets.[19] The BIS recommends that greater transparency is needed, and almost all would agree. Its recommendations include putting all like transactions through exchanges. In addition, the BIS recommends the use of central counter-parties instead of bilateral relationships for instruments not on exchanges. These could be positive recommendations for Canada to adopt, but the cross-border complications occur here as well.

The third set of suggested changes made by the BIS involves improving the safety of financial institutions in a climate of systemic risk.[20] It proposes a "systemic capital charge" related to the degree a financial institution's balance sheet is correlated with the balance sheets of all other financial institutions in the system. Such a "capital charge" would have to apply to all institutions in a nation's financial system. For Canada, this clearly points out the problem of the shadow banking system that is not regulated by the national regulator. It would seem that to make this "capital charge" effective in Canada would require all financial institutions (over a small minimum size) to be regulated by the Office of the Superintendent of Financial Institutions.

The other capital regulation recommended by the BIS regards the pro-cyclicality of financial institutions. The BIS suggests that a "countercyclical capital charge" be instituted. This would require financial institutions to "build up defensive buffers in good times that could be drawn down in bad times." [21] These additional capital requirements might be implemented in the way monetary policy is done. This would mean that, if excess demand for loans was considered a problem, the financial institutions would be required to set aside additional capital. In effect, this would increase the cost of loans and thus dampen the borrower's and lender's enthusiasm. In times of slow loan growth and a slowing economy, these capital requirements would be reduced, thus lowering the cost of borrowing. In other words, it would be an instrument to control the economy in addition to monetary policy, and work in much the same way. It needs to be pointed out that there would have to be a consistent approach by both the monetary authority and the regulator of capital requirements.

The suggested changes by the BIS would use capital requirements in much the same way as reserve requirements were used in the past to control money supply. But in this instance the control would be on the pro-cyclical or the instability effects of financial intermediation.

The BIS also comments on the need to bring the shadow banking system under regulation—another clear message for Canada. The BIS states: "The crisis very clearly exposes the risks created by a shadow banking system that had been spun off by regulated institutions. Therefore, the first order of business in improving the management of capital is to bring all of these entities, including structured investment vehicles and the like, within the regulatory perimeter to ensure that appropriate capital is held against all financial institution obligations. This will give managers, investors, and supervisors a more accurate picture of an institution's exposures at the same time that it raises the total amount of capital in the financial system."[22]

One must also remember that policymakers and regulation can only do so much and that the private sector must also change. Risk management and compensation are two areas that the financial institutions need to examine more carefully. Jaime Carauna, General Manager of the BIS, stated: "The risk management function in financial institutions has to receive the highest priority at the highest level and not be subordinated to the business functions. Improved compensation schemes are essential."[23] In Canada, the Superintendent of Financial Institutions has already stated that her office will look at compensation schemes in the banks to ensure that they do not encourage too much risk-taking. That same question should be examined for all other financial institutions.

This is not merely a question of executive compensation, but rather an examination of compensation schemes that encourage excessive risk-taking in financial institutions. The public policy concern is not just the excessive bonuses paid to a few employees. This concern, however, has been clearly documented in the U.S., where it outraged many American taxpayers whose money helped stave off the financial collapse of a number of large financial institutions, including large banks. What needs to be examined is the incentive system that offers huge rewards for employees to take substantial risks that might put the financial institution and the whole financial system in jeopardy. Effective risk management and compensation schemes for employees who take only reasonable risks are key elements to a stable financial institution and overall financial stability.

One might remember the push by several Canadian banks to merge in the late 1990s. Now, however, Canadians have seen the failure or bailout of many very-large merged financial institutions in the U.S. and elsewhere, and one must be appreciative of the government's decision not to allow Canadian major bank mergers.[24]

The BIS has this comment on the size of financial institutions: "Officials must insist that institutions be comprehensible both to those who run them and to those who regulate and supervise them. And, in the future, a financial firm that is too big or too interconnected to fail must be too big to exist."[25] If two or more large Canadian banks were to merge, they would certainly fit this description.

Challenges and Actions Recommended for Canada

The following are recommendations that flow from the foregoing discussion and analysis. There are undoubtedly many more things to be considered by legislators, policymakers, and regulators. Their proposals and the suggestions of others will need to be carefully considered by the Canadian public as new legislation is produced.

At this point, with the recent financial fiasco and the resulting recession clearly in both the public's and policymakers' minds, changes should be both possible and are urgently needed. In examining the recent proposals by both the U.S. Administration and the BIS, the following courses of action are seen as needed to reduce the instability and systemic risk in Canada's financial system.

The first action is to very quickly accelerate the recent federal government proposal to bring about a single national Canadian securities regulator. There will always be resistance from the provinces to such a scheme, but the present climate of economic strain gives the Finance Minister his best opportunity to revise the historic error of placing money and banking under federal jurisdiction and not also including the

regulation of all financial institutions, markets, and instruments.

The second step should be to set up an authority under OSFI to approve all financial instruments that are available to investors in Canada. The authority could come under the acts that regulate financial institutions federally. Those acts could require approval of all instruments handled by federally regulated financial institutions. When the Canadian securities regulator is set up, all financial instruments could be included. The approval process should be quick and might apply, as the BIS suggests, to a three-tiered system of investors. This would be a way to require full transparency of financial instruments and a way to keep very risky and inappropriate instruments out of the hands of the general public. It would also rule out those instruments that are inappropriate for even the most astute and knowledgeable financial institutions. As we have seen in the recent past, mistakes can be made by the very large and supposedly astute investors, as well.

It seems very unlikely that the U.S. would follow the BIS plan and set up a comparable set of regulations to cover the operations of all U.S. financial instruments. Thus it should be the responsibility of the Canadian authority to approve all investment instruments available in Canada to Canadians.

A third proposal would evolve when the new Canadian securities regulator was in place. Then the capital needs of all financial institutions could be addressed. With all under federal regulation, capital rules similar to the banks and federally-regulated insurance companies could be applied to all. The possibility of using a "systemic capital charge" or a "countercyclical capital charge" should be examined. Such a new system of capital charges would need to be carefully examined by regulators, market participants, and legislators. At first glance, it would seem that the "countercyclical capital charge" would be a reasonable first step for Canada.

The credit rating agencies operating in Canada should come under close scrutiny. It is worth noting that these agencies were a significant part of the problem with the issuing of securities backed by sub-prime mortgages in the U.S. In Canada, high ratings were given to ABC paper, which resulted in serious problems here. Credit rating agencies operate with clear conflicts of interest, as they are paid by the issuers of the securities being rated. These conflicts are at the core of the problems in both the U.S. and Canada. One system is suggested in a recent Canadian Centre for Policy Alternatives paper which would make ratings a public good and avoid conflicts of interest.[26]

Payment by credit card has become the largest method of consumer payment and a major part of retail operations. This business in now dominated by two independent and largely unregulated companies: Visa and Mastercard. It is suggested, for both prudential and consumer-interest reasons, that these companies be required to have their Canadian operations operate as federally-regulated financial institutions.

Mortgage lending in Canada is largely not the same as the U.S. system of "originate-to-distribute" model. Canada has thus avoided much of the U.S. problems. since most mortgages here are held by the institutions that granted them. This system both makes lending more responsible, as the granter of the mortgage will have to collect it, and makes it much easier to negotiate changes rather than move immediately to foreclosure. Canada has much lower rates of foreclosure than the U.S. Canada should retain its mortgage-lending model and not follow the U.S. "originate-to-distribute" model. Regulators and regulation should encourage this and discourage the U.S.-style model.

Conclusion

No set of regulations is ever a complete panacea for irrational panics, such as we have seen recently. But careful regulation can give a country a more stable financial system with clear benefits to the nation.

The recent set of financial institution proposals put forth by the U.S. Administration, as well as the proposals of the Bank for International Settlements, pose considerable challenges to Canada. The U.S. wide-ranging proposals will, if passed into law, alter the regulatory environment in the United States. The BIS proposals will be debated for some time and will influence the regulatory environment worldwide. Canada should be examining its financial institution legislation and regulation to bring it to a level to insure against the risks of instability and systemic risk.

Notes

1. Dr. Peters is the former Chief Economist of The Toronto-Dominion Bank. Dr. Donner is a Toronto Economic Consultant.

2. Douglas D. Peters, The Stability of Bank Deposits, University of Pennsylvania, 1969.

3. Jaime Caruana, General Manager's speech to the Annual General Meeting of the Bank for International Settlements, Basel, Switzerland, June 29, 2009, p. 6

4. Bank for International Settlements, 79th Annual Report, June 30, 2009

5. Testimony of Dr. W. Edmund Clark before the United States Senate Committee on Homeland Security and Government Affairs, Hearings on "Where were the Watchdogs? Financial Regularity Lessons from Abroad", May 21 2009

6. For a discussion of this issue see: Arthur Donner and Doug Peters, "Rating Canada's Credit Rating Agencies", in Behind the Numbers Vol. 10 Number 3, Canadian Centre for Policy Alternatives, June 2009.

7. See Arthur Donner and Doug Peters, "Rating Canada's Credit Rating Agencies", in Behind the Numbers Vol. 10 Number 3, Canadian Centre for Policy Alternatives, June 2009.

8. As Visa Inc.'s web site states in its Corporate Overview: "Visa does not issue cards, set cardholder fees or interest rates, or make loans to cardholders. The cardholder relationships belong to our network of financial institution clients and are managed by them. Visa Inc. derives revenue primarily from fees paid by our financial institution clients based on payments volume, transactions that we process and other related services we provide."

9. Visa Inc. 2008 Annual Report, with attached 10K filing, June 30, 2008.

10. Ibid.

11. Baltimore Sun, "Ex-employees claim racism in Wells Fargo subprime loan push," June 4, 2009

12. TD Economics Special Report, "Canada's Housing Boom Comes to an End," June 26, 2008, p. 3

13. Ibid.

14. Ibid, p.2. The Chart shows US sub-prime mortgage loan past due or in foreclosure in 2008 at almost ten per cent of total sub-prime mortgages while the Canadian figures for the same time were less than two per cent.

15. Testimony of Dr. W. Edmund Clark before the United States Senate Committee on Homeland Security and Government Affairs, Hearings on "Where were the Watchdogs? Financial Regularity Lessons from Abroad", May 21 2009

16. Bank for International Settlements, 79th Annual Report, June 30, 2009

17. Ibid., p.125

18. Ibid., p. 126–7

19. Ibid., p. 127–8

20. Ibid., p. 128–35

21. Ibid., p. 131

22. Ibid., p. 132

23. Jaime Caruana, General Manager's speech to the Annual General Meeting of the Bank for International Settlements, Basel, Switzerland, June 29, 2009, p. 7

24. See Douglas D. Peters and Arthur W. Donner, "Bank Mergers: The Public Policy Challenge" , Sixth Annual Policy Conference, Laurentian University, September 12, 1998

25. Bank for International Settlements. 79th Annual Report, June 30, 2009, p. 120

26. Arthur Donner and Doug Peters, "Rating Canada's Credit Rating Agencies", in Behind the Numbers Vol. 10 Number 3, Canadian Centre for Policy Alternatives, June 2009.

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