



December 2010

What Can Be Learned from the Financial Crisis in the U.S. and the Much Milder Crisis in Canada?

By Douglas Peters and Arthur Donner

"Fee-hungry bankers broke the origination end of the [U.S. mortgage-backed security] scheme...bankers ceased to be concerned about the quality of loans they were creating, since if they turned bad, someone else (the investors in the securities) would suffer."

— Yves Smith, *New York Times* October 31, 2010

"The objective of expanding home ownership is, I believe, a worthy one, but clearly the market route has not worked well—except for the mortgage brokers, originators, and investment bankers who profited from them."

— Joseph E Stiglitz, *Freefall, America, Free Markets, and the sinking of the World Economy*

What Lessons Can We Learn?

Canadians, their policymakers, and government officials have a right to feel somewhat pleased these days. This is because the long-standing Canadian policies regarding maximum mortgage length, securitization of mortgages, mortgage interest deductibility, and other specific mortgage rules have laid the ground rules for a much more stable mortgage lending system. In contrast, the American mortgage policies seem endlessly mired in political bickering and unreality. The result has been a better performing Canadian economy coming out of the recent U.S.-led financial fiasco and the Great Recession.

Canada lost relatively fewer jobs than the United States during the Great Recession, and since then Canada has restored all of the jobs which were lost. The United States, in contrast, lost some 7.5 million jobs since the last peak in employment in December of 2007 and has restored only about one fifth of the jobs lost during the downturn. In both countries, however, unemployment remains far too high and both countries are far from fully recovering from their recessions.¹

The Great Recession was really caused by a financial crisis in the U.S., which quickly spread to other industrial countries. What lessons can U.S. economic policy makers learn from Canada's much milder financial crisis over the past few years? Similarly, are there any lessons for Canadian officials from the disastrous U.S. experience in their financial markets?

The Recent Financial Crisis

The United States experienced a massive financial sector meltdown in 2008, which quickly spread around the world. The financial meltdown was triggered by the collapse of the U.S. housing bubble which ultimately led to the deepest and longest recession that the U.S. has experienced since the 1930s.

Thankfully, a global depression was averted by the concerted actions of the major governments. Fiscal policy was aggressively used and government deficits soared practically everywhere. In the G-7 world, central

bank interest rates were reduced to practically zero, and banks and investment banks were rescued and shored up with public and central bank funds.

In output terms the U.S. housing sector peaked in 2006 and is still subtracting from economic growth in 2010. In tangent, American house prices plummeted between 2007 and 2009, mortgage finance dried up and house foreclosures soared.

The financial and real consequences from the American housing sector collapse quickly spread to Europe, and a global economic downturn followed. During the recession credit tightened virtually everywhere and international trade declined.

Questions regarding bank solvency, declines in credit availability, and damaged investor confidence had an impact on global equity markets, which experienced deep losses in late 2008 and early 2009. Major governments and their central banks were forced to respond with unprecedented fiscal stimulus programs, easy monetary policies (and zero interest rates), and institutional bailouts.

With the benefit of hindsight it is clear that credit agencies and investors failed to properly assess the risk involved with the proliferation of mortgage related financial products and other new financial instruments which emerged during the preceding boom phase. As well, governments did not adjust their regulatory practices to address the risks associated with all of this. In particular, there was insufficient recognition of the importance of the shadow banking system in the United States, which far outpaced in size the regular banking system which was protected by regulation, albeit weak, and by a central bank.

Shadow banks (such as investment houses²) are non-bank financial intermediaries which were largely unregulated and which were also able to dramatically leverage the size of their balance sheets. The shadow banks avoided regulation primarily because they were not traditional bank deposit gathering institutions. As a result, many of the shadow banks and the financial instruments which they promoted were able to employ higher market, credit and liquidity risks, and did not have capital requirements commensurate with those risks.

When the financial crisis hit, the shadow banks were unable to obtain investor funds to support their mortgage-backed securities or their asset-backed commercial paper. Since last year the activities of the shadow banks have come under increasing scrutiny and regulations.

Despite all of the complex forces at work in causing the financial meltdown, there is little doubt that the bursting of the U.S. housing bubble and the collapse of mortgage finance was at the forefront of the financial crisis in the U.S. Consequently the focus of this paper will be on lessons both countries can take with respect to the organization of the mortgage market and in the regulation and use of securities in the financial intermediation process.

Key Differences in the Mortgage Markets

a) Mortgage Interest Deductibility

There are several major differences in the mortgage markets in the U.S. and in Canada. Home ownership in the U.S. has always been promoted more strongly than in Canada.³ A key difference is that, in the U.S., home ownership has been promoted through a policy which allows a tax deduction for mortgage interest payments on a primary residence. This represents a significant incentive to home ownership in the U.S. and is a major source of revenue loss to the government. (Economists describe this method of promoting home ownership as a tax expenditure.)

Despite this major public policy boost to American home ownership, which has no counterpart in Canada, home ownership in Canada appears to be just as high, or even higher, than in the U.S.

According to a recent paper published by the American Enterprise Institute, 67.8% of occupied housing units in the U.S. were owned in 2008.⁴ Although the data may not be perfectly comparable, 68.4% of Canadian households owned their own homes in 2006 according to a Statistics Canada⁵. In discussing the Canada and U.S. mortgage markets Alex J. Pollock of the American Enterprise Institute noted: "Two very different housing finance systems, one, as it turned out, much riskier than the other, produced virtually the same ownership rate."⁶

We also question whether this huge tax-expenditure in the U.S. has been really effective in increasing home ownership. It seems that, rather than increasing home ownership in the U.S., the tax break is a huge bonus to both the mortgage business as well as a windfall to mid- and upper-income individuals. And besides, as Gregory Mankiw observed, “(t)his subsidy to homeownership is neither economically efficient nor particularly equitable.”⁷

The effect of the tax deductibility of mortgage interest in the U.S. is to encourage individuals to borrow on home mortgages, whereas in Canada the incentive is to pay down mortgages as quickly as possible. The obvious result is a much more stable housing market in Canada, and a highly levered market in the U.S. Accordingly, the U.S. homeowner is more likely to default on a mortgage than is his or her Canadian counterpart.

b) Differing Government Agencies to Address Mortgage Financing

In Canada the Canada Mortgage and Housing Corporation (CMHC) is the principal government agency dealing with housing and mortgage financing and it is a wholly owned crown corporation. Its principle operation is in guaranteeing mortgages but it also deals in low-income housing financing.

In the U.S. there are multiple agencies which regulate and supervise the housing sector, including the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), Government National Mortgage Association (Ginnie Mae) and the Federal Housing Agency (FHFA). Ginnie Mae operates as part of the U.S. Department of Housing and Urban Affairs. Until the recent mortgage fiasco both Freddie Mac and Fanny Mae were publicly trading companies, but of course were taken over by the U.S. government during the recent collapse of the mortgage market. Both Freddie Mac and Fanny Mae were considered pseudo-government agencies as they were originally set up by Congress as government-sponsored enterprises or GSEs.

Pollock of the American Enterprise Institute comments “in contrast to the American GSEs, at least CMHC’s status is completely clear and honest. It is 100 % government-owned and controlled corporation. Its government guarantee is explicit... It provides

housing subsidies which...must be appropriated by Parliament.”⁸

In Canada CMHC’s mandate includes providing mortgage insurance for homeowners; it provides for the securitization of its guaranteed mortgages; it provides research on housing policy for governments and sets out rules for its mortgage guarantees. CMHC did lower its down payment requirements just before the recent financial crisis but it quickly reversed course when the financial meltdown in the U.S. became apparent.

c) Longer-Term Mortgages in the U.S., Shorter-Term in Canada

The third major difference between the mortgage markets in the two countries relates to the average term of the mortgages. In both countries mortgages are amortized over 25 to 40 years. But in Canada the interest rate on a mortgage is usually set at a maximum of five years.

Indeed, it is a curious fact that in Canada the effective maximum term for household mortgages is five years, whereas in the U.S. 30 year mortgages and longer are quite common. Canada does not ban longer than five year mortgages, but it has created a major obstacle to mortgage lenders which effectively does the same thing.

Section 10 of the Canada Interest Act spells out the mortgage rate renegotiation options. The rule imposes a maximum penalty of 3-months’ interest on repaying any loan over 5 years, after 5 years have passed. In effect, the penalty to a borrower is quite tiny and it would only take a small decline in interest rates to make it worthwhile for a borrower to exercise his or her option to renegotiate under Section 10.

In other words, lenders are significantly at a disadvantage offering any mortgages longer than 5 years which could be renegotiated. This is why few such loans are offered.

The Result Is a More Balanced Mortgage Market in Canada

Thus the effective term of mortgage payments in the U.S. is for the whole term of the mortgage, but in Canada the payments are usually fixed for a maximum

of five years. Because mortgage finance is such a large part of both financial systems, this difference has major implications for the safety and solvency of mortgage lenders in both countries.

To explain this, we have to back up a little and discuss how lenders and borrowers manage their liquidity and safety needs. Few companies or financial institutions have perfect matches between the average term of their assets and their liabilities. In particular, the mismatch between the maturities of banks' deposits and loans makes banks which concentrate on mortgage loans particularly vulnerable to mis-match. Banks have substantial long-term assets (such as fixed rate mortgages) but short-term liabilities, such as bank deposits or guaranteed investment certificates or GIC's. That is, they tend to borrow short term (deposit interest rates, GICs, etc.) but lend long term. In plain words, the term mismatch is greater in American mortgage lending institutions than in Canadian, because Canada's average term of the mortgages is much shorter than in the U.S.⁹

One such effect is the need by mortgage lenders for very long-term money in the U.S. The further result is that, in the U.S., most mortgage lending ends up in mortgage-backed securities. In Canada, because of the much shorter term, mortgage lending usually stays with the bank that originates the mortgage. At present about the only institutions in the U.S. with this kind of patient money are the U.S. government and its agencies—Fanny-Mae, Freddy Mac, Ginnie Mae, the Department of Veterans Affairs loan-guarantee programme and the Federal Housing Administration.

Mortgage Market Differences and Securitization Led to a Collapse in the U.S. Housing Market, But Only a Shallow Drop in Canada

The *disconnect* between the demand for long-term mortgage funds and investors' desire to hold short-term securities is a major problem in the U.S. financial system. Either there will have to be much more patient money found or mortgage terms will have to reflect the reality of the term structure of the U.S. financial market.

In an article in the New York Times, Hubbard and Mayer¹⁰ suggest that the U.S. could advise the U.S. government agencies to "direct loan servicers to send short applications to all eligible borrowers promising to

allow them to refinance" the interest on the mortgage at the present low interest rates. Their proposal would greatly reduce mortgage payments for many U.S. homeowners and in that way help the economic recovery. Interestingly this proposal highlights the *disconnect* between the demand for mortgage funds and the supply of patient money. The Canadian mortgage market is much more flexible as mortgage interest rates turn over every five years at least.

One attempt to bridge the gap in the U.S. financial structure was the securitization of mortgages. The lending-long/borrowing-short paradigm is, of course, the essence of banking. But the conduits which were created by Wall Street investment banks to purchase mortgages were not really banks. The conduits, as shadow banks, lacked the liquidity and the capital of a reasonably set up bank-like institution. As well, unlike real banks, the conduits did not have the protection of a central bank, even though they operated with bank like risks.

Of course by now the sad story is well understood—sub-prime mortgages were promoted with less than usual due diligence by mortgage originators, the lender risks were managed by securitizing the loans or passing them off to other entities.

Indeed, for a while all was well until the American housing boom collapsed. Before the Great Recession the rascals on Wall Street (which may be too gentle a description) tried to not only make silk purses out of sows' ears in converting sub-prime mortgages into A-rated securities, but in addition, they claimed to convert long-term mortgage debt into marketable securities. The result was, of course, a disaster—a world-wide recession. (In the 1980s the S&L crisis was also built on the excess funding of long-term mortgage debt with short-term funds.)

The end result was the massive failure of American lending institutions, which had to be rescued by the U.S. government. Had the originators of the securitizations been well capitalized and able to buy back a large portion of their securitizations, the system could have survived. Instead, however, many of the firms producing the securitized debt were themselves far too highly levered and were rather high risk debtors even before the crash happened.

Canada was not exempt from the problems created by securitization. The \$32-billion non-bank asset-backed commercial paper fiasco showed that similar problems existed in Canada. Most of the so-called assets that backed this commercial paper were not the usual automobile leases or other consumer debts, but turned out to be such toxic products as credit default swaps and even some securitized sub-prime U.S. mortgages.¹¹ The result was a freezing up of the whole short-term money market in Canada. And the full and satisfactory resolution for the original investors in these securities has yet to be realized.

One lesson that should be learned from the financial crisis is that securitization is not a complete answer to the shortage of long-term capital either in Canada or in the U.S. It also points out that serious regulation is needed in both countries of the securitization process.

Money and Money Markets Provide Political Power in the U.S. Political System

One additional difference between the U.S. and Canada is the extent to which financial firms support political parties and candidates in the two countries. In Canada companies, including banks, and labour unions, are prohibited from contributing funds to federal political parties or candidates. By contrast, in the U.S., vast amounts of funds have been contributed to political parties and candidates by the various financial institutions.

This is often cited as one of the spurs to the large-scale deregulation of U.S. banks over the past several decades. This may also have contributed to the lack of effort towards strong regulation in the recent period after this great financial disaster.

Some Proposals for Change in the U.S. Financial System

Several short-term proposals have been put forth in the U.S. to manage the extensive problems in the mortgage market, particularly the problems in mortgage-backed securities. Foreclosure rates have skyrocketed and the problems with documentation are almost commonplace. In the mortgage-backed security market "investors are becoming concerned that the value of their securities will suffer"¹² as foreclosures are difficult or not possible because of documentation problems.

One proposal is to allow homeowners with mortgages to renegotiate the interest on their mortgages which would lower mortgage payments since current interest rates are at historic lows.¹³ Another proposal is to set up "a process for major principal modification for viable borrowers,"¹⁴ meaning the write down of their mortgages to a level at which the borrower could repay. Both of these proposals would be very costly to banks and holders of mortgage-backed securities. But they would partially repair the huge gap in and avert the possible collapse of the U.S. mortgage system.

Another suggestion by Professor Joseph Stiglitz involves using a combination of low interest loans for a portion of outstanding mortgages and for partial loan reductions through a type of consumer bankruptcy proceeding like the Corporate Chapter 11 bankruptcy but just for the mortgage debts of consumers.¹⁵

It would seem reasonable that, as the U.S. Federal Reserve is willing to lend banks at practically zero interest rates, some of the cheap money should trickle-down to homeowners. Rather than lending a small proportion of mortgage debt as Stiglitz suggested why not allow all homeowners to renegotiate the terms of their mortgages to the present low interest rates. That would keep the principal values of the mortgages constant but greatly reduce most mortgage payments and would very likely greatly reduce foreclosures, allowing American families to keep the ownership of their homes.

Another of the long-term problems in the U.S. mortgage market that is mentioned by Stiglitz is whether the current allocation of resources to housing, which is distorted to benefit upper-income homeowners, is appropriate. The United States allows mortgage interest and property taxes to be tax-deductible, and in doing so, the government pays a large fraction of the costs of homeownership."¹⁶ He suggests reducing the deductibility to 25 per cent. It would seem that for the long-run stability of the market an elimination of the deductibility would be appropriate. We argued earlier that this tax expenditure seems more of a benefit to the mortgage business and upper incomes than to expanding home ownership. Perhaps limiting the tax deductibility to those households with incomes below \$100,000 would be a start.

It is interesting that in its recent draft report the U.S. President's bipartisan deficit commission recommended the phasing out of the tax deductibility of mortgage interest as a measure to reduce the U.S. fiscal deficit. The draft proposals were met with great resistance indicating that it will be extremely difficult to ever be enacted in a Congressional budget.

The long-term problems in the U.S. mortgage and financial system would still remain. The gap between the desire for long-term mortgage funds and the desire of investors for short-term liquid securities remains. Some form of intermediation that bridges the gap needs to be found. Either an intermediary with sufficient capital and liquidity must emerge or there must be some adjustment to the conditions of mortgages or the relationship of initiators of mortgage-backed securities to the holders of those securities.

To adjust the mortgage security one might consider some form of limiting the interest and other costs of early mortgage repayment. To adjust the relationship of security holders to those entities issuing the mortgage-backed securities one might require a mandatory buy-back system.

Another important reform for both Canada and the U.S. would be to improve the documentation process. That is, to insure that each mortgage is fully and properly documented and to provide full disclosure of the quality of all assets in any asset-backed security, especially mortgage-backed securities.

An additional lesson for Canada would be that the securitization of mortgages is definitely not a panacea for either promoting home ownership or for financial markets. There is a need to very carefully monitor and regulate the securitization process. It should be noted that the rating agencies have failed to do their jobs in rating these complicated securities. And investors worldwide were asleep in their own assessment of the U.S. mortgage-backed securities and that includes some of the most well-known banks and other financial institutions. It is clear that the system of incentives involved in U.S. housing finance were geared to short-term profits, not to maintain the long-term viability of the banks and other financial institutions.

Some have suggested that Canada should follow the U.S. example and revoke the Section 10 of the Canada Interest Act so that Canadians would have the same

security of payment over the whole term of mortgages. We do not agree with this notion. The severe problems in the U.S. mortgage market indicate that this would result in just the kind of troubles that have occurred in the U.S. In other words it would be a very bad idea.

Closing Comments

The disaster in the U.S. housing financing has shown that the system is dysfunctional. Policy makers in the U.S. will have to find substantial sources of long-term financing for housing or will have to look for some measures to shorten the term of housing mortgages.

Do U.S. homeowners really need to have the security of set mortgage payments for 25 to 40 years? Or would a shorter set of terms give sufficient security? One method to shorten mortgage terms would be to pass legislation setting maximum penalties and fees for early repayment of mortgages. If such penalties and fees were relatively small for mortgages outstanding for say five or six years or more the result would likely be much shorter term mortgages but with the same amortization over 25 to 40 years. The result would be to allow local banks that originate the mortgages, to fund such mortgages locally. This would avoid the problems of a lack of interest in the quality of mortgages that would be sent on to be securitized by the Wall Street banks, where it seems no one adequately assesses the mortgage documentation or the mortgage risks.

The securitization process is a problem in itself. The trusts and conduits that are set up to hold the mortgages or other debts act as pseudo-banks, adding financing to the economy but without a bank's capital or liquidity. To correct this, the issuing bank should be required to issue an obligation to repurchase the securitized debt instrument. This would keep the financing on the books of the issuing bank and that bank would be required to have sufficient capital and liquidity to meet these obligations. Such rules would apply to all securitizations including asset-backed commercial paper (ABCP), mortgage-backed securities and other collateralized debt obligations (CDOs).

Three clear lessons seem to arise from our review.

- One lesson that should be learned from the recent financial crisis is that securitization is not a complete answer to the shortage of long-term capital either in

Canada or in the U.S. Better regulation and oversight of the securitization process is needed in both countries.

- Secondly, and this criticism flows more against the American system than the Canadian, is that a means should be found to ensure that the original mortgage lender holds the mortgage on their books, rather than be encouraged to sell them off to other, unregulated financial entities.
- Finally, if the mortgage lending institutions in the U.S. continue to operate like banks (i.e. lend long and borrow short), then they should be offered equivalent bank like protection, much as the Federal Reserve provides for the commercial banks. In turn, they should also be required to meet bank-like equity and capital requirements, so to ensure liquidity in periods of financial stress.

In the U.S., the mortgage problems will continue to fester until there is some political will to change the tax rules as well as alter the structure of mortgage financing. Without significant changes to the U.S. mortgage financing system, another U.S. financial crisis is an accident waiting to happen.

(Douglas D. Peters is the former Chief Economist of The Toronto-Dominion Bank and former Secretary of State (Finance) in the federal Liberal government. Arthur W. Donner is a Toronto-based economic consultant and has been an advisor to both federal and provincial governments.)

Notes

1. In October 2010 the U.S. unemployment rate was 9.6 per cent and in Canada it was 7.9 per cent. The more broad unemployment rate, which includes discouraged workers and temporary workers looking for full-time jobs (the underemployed), in the U.S. was 17.0 per cent and in Canada was 10.0 per cent.
2. Most of the investment houses that issued the sub-prime mortgage-backed securities have, since the financial crisis, either become banks or have been forcibly taken over by the U.S. major banks. They have thus gained access to the help of the Federal Reserve. But at the same time the concentration in the U.S. financial system has increased and the market power and influence of the major banks has increased as well.
3. It should be noted that both countries promote home ownership through the non-taxation of the investment in owner-occupied homes. If an individual rents and invests in stocks and bonds that person must pay tax on the income earned. But if an individual invests in buying a home the imputed rent on the home is not taxed. In effect the home owner has a distinct tax advantage over the renter and renters are usually lower-income individuals. In addition both countries have government and quasi-government agencies that promote home ownership. In Canada there is the Canada Housing and Mortgage Corporation; In the U.S. there is Fanny Mae, Freddy Mac, the Federal Housing Administration and others.
4. Alex J. Pollock, *Comparing International Housing Finance Systems*, American Enterprise Institute for Public Policy Research Article 102664, October 11, 2010.
5. Statistics Canada, the *Daily Report*, June 4, 2010.
6. Pollock, *Ibid*.
7. N. Gregory Mankiw, *The Blur Between Spending And Taxes*, Sunday Business New York Times, November 21, 2010
8. Pollock, *Ibid*.
9. In financial terms the average time it takes to repay a bond, loan or mortgage is called its *duration*. Because a mortgage has a constant monthly payment its duration varies with the interest rate. The higher the interest rate the longer would be the duration. A 30-year five per cent mortgage would have duration of approximately 11.4 years. A Canadian 5-year five per cent mortgage would have duration of about 4.2 years. A portfolio of 5-year mortgages that matured in equal amounts each month would have duration of about 2.1 years. As one can see such a portfolio would be easily financed by a local bank with relatively short term deposits.
10. Glen Hubbard and Chris Mayer, *How Underwater Mortgages Can Float the Economy*, The Sunday New York Times, September 18, 2010
11. Some of the names chosen for the conduits might have set of alarm bells, for example, Apollo Trust, Comet Trust, and Rocket Trust. In the event all seemed to crash.
12. Yves Smith, *How the Banks Put the Economy Under Water*, The Sunday New York Times, October 31, 2010
13. Hubbard and Mayer, *Ibid*.
14. Yves Smith, *Ibid*.
15. Joseph E. Stiglitz, *Freefall; America, Free Markets, and the Sinking of the World Economy*, W. W. Norton and Company Ltd., New York and London P.103-05
16. Stiglitz, *Ibid*, p. 105.