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COMMENTARY

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What Governments Should Do in Mortgage Markets

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In this issue...

The federal role in mortgage insurance is more prominent than it needs to be.

The Study in Brief

The Author of This Issue

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Governments' role in mortgage markets is pervasive. An active role is often justified on the ground that home ownership is a fundamental good that governments should promote, and can do so through active engagement in mortgage markets. However, critics worry that government agencies may encourage excessive lending risks in the consumer marketplace, potentially creating unmanageably large risks in financial markets.

The Canada Mortgage and Housing Corporation, CMHC, is the domestically dominant residential housing policy vehicle. The Crown agency sells mortgage insurance, which federal law requires be purchased by borrowers with downpayments of less than 20 percent of a home's value. CMHC's mortgage insurance book now backstops mortgage lending equivalent to more than 30 percent of gross domestic product. While the net exposure is less than this, the arrangement subjects Canadian taxpayers to large, ill-defined risks.

This *Commentary* makes the observation that there is no reason for federal taxpayers to be exposed to large mortgage insurance liabilities. On the other hand, private insurers are able to manage such exposures, provided that they are adequately capitalized, prudently managed and regulated, and able to access liquid financial markets. Private insurers currently compete on the margins of the mortgage insurance business, which is dominated by CMHC.

Accordingly, this *Commentary* recommends:

- That federal policy should limit public exposure to mortgage lending risks, by winding back CMHC's role in the provision of mortgage insurance, and allow private providers to take on a larger role. The agency's capital and staff would be well employed in reinsurance and securitization functions that backed private market insurers.
- Independent of whether Ottawa pursues the first recommendation, Parliament should adopt legislation that formally requires CMHC to comply with, and report on, compliance with OSFI guidelines, so that market participants compete on level footing.
- Finally, Parliament should adopt legislation that would support covered bond issuance by domestic financial institutions and clarify creditor arrangements in the event of the bankruptcy of a federally regulated deposit-taking institution. Such legislation would allow those institutions to more readily compete for low-cost capital in the international bond market and better serve the domestic mortgage lending market.

These proposals would not affect the federal government's ability to pursue financial stability objectives, such as by setting guidelines on the terms and conditions of mortgage issuance, or requirements for mortgage insurance. Nor would they constrain the government's ability to intervene in mortgage bond markets, as occurred during the recent financial crisis. This implies that a range of federal policy objectives may be pursued without incurring financial exposure for taxpayers through direct participation in mortgage insurance.

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INDEPENDENT • REASONED • RELEVANT

Governments' role in housing and, specifically, mortgage markets has recently become pervasive – and more controversial than ever. As a result, in Canada and the United States, there are continuing concerns over the housing market activities of Crown agencies and government-sponsored enterprises. The concerns range from whether these agencies and enterprises have done enough over the years to enhance housing affordability, and sustain the flow of mortgage lending to homebuyers, to whether they have done too much. Those in the "too much" camp argue that the agencies and enterprises have built up excessive lending risks in the consumer marketplace, contributing to the creation of price bubbles that inevitably burst. The critics add that the agencies and enterprises have also created unmanageably large risks in the broader financial marketplace.

This *Commentary* leans toward the view that state involvement in housing markets, while perhaps inevitable in the political sense, creates large risks that need to be suitably managed – and have often not been in the past and present. I trace the government role in housing finance and show how the risks to taxpayers have increased significantly in dollar terms and relative to the economy. Beyond the presumed benefits of promoting home ownership, these activities have had some clearly harmful and well-understood consequences as well as other less well-understood but also harmful consequences in world financial markets.

The rationale for government intervention in housing markets lies largely in the view of shelter as a human necessity. For social welfare reasons, governments may wish to ensure that individuals lacking in resources are able to find some form of shelter. Government involvement in housing, however, goes well beyond financial support for the less well off. Many western countries have public policies that support home ownership on the grounds that homeowners contribute to a stable society through positive ties to community, family and work.

But governments' activities in housing markets have contributed to distortions in the economy and greater risks in the financial sector, with potentially large costs to the public. Specifically, governments have stimulated more mortgage lending than markets would otherwise demand and have deliberately extended that lending – particularly in the United States – to households who clearly could not sustain it.

That said, the events of 2007 and 2008 reminded governments that significant correlated (or undiversifiable) financial market risks and shocks do arise, originating in housing markets, and that they may be beyond the capacity of domestic financial institutions to absorb. This arguably establishes the case for governments' backstopping or reinsuring those risks, as they do with deposit insurance, and as central banks do when they act as lender of last resort. They would in so doing offer a limited safety net for the financial intermediation activities that diversify or insure others' lending risks, while ensuring that private insurers bear costs that are proportional to the risks they choose to underwrite.

Hence, in the wake of the recent financial market disaster and with a cautionary eye on past housing finance crises in Canada, I make several recommendations. They include steps to reduce taxpayers' exposure to the risks associated with mortgage lending, improve oversight of the key agencies involved, and to modernize the legislative

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environment so that the competitive market may more efficiently provide mortgage lending on relatively safe commercial terms. One key step would be for the Canada Mortgage and Housing Corporation (CMHC) to wind back, over time, its mortgage insurance book.

Such a shift would leave a role for CMHC to backstop, or reinsure – for a risk-adjusted price – the financing arrangements that support the insurance contracts that cover the risk of ordinary lending defaults. It would also limit government policy to its more clearly justifiable economic role – assisting in the managing of undiversifiable risks that markets on their own, in times of financial crisis, may not be able to manage well. Further, this approach would leave unfettered the ability of the federal government to regulate minimum prudential standards for mortgage lending and insurance. At the same time, it would not interfere with governments' abilities to purchase mortgage assets when financial crises emerge, as during the 2008-2009 period.

Background

Federal support for residential homebuyers evolved in similar directions in Canada and the US over the course of the 20th century, in each case beginning with the creation of agencies intended to help low-income families to buy homes.[1] And, in each case, the new agencies became significant and persistent institutional features of the mortgage lending, insurance and securitization marketplaces.

The Canadian Context

In Canada, the federal role in housing manifests itself primarily through what is now called the Canada Mortgage and Housing Corporation, established as the Central Mortgage and Housing Corporation in 1946 to facilitate housing for returning war veterans. As with most organizations, CMHC's interpretation of its mandate – or the expectations the agency's political masters placed on it – has steadily grown and its activities expanded. The agency began by assisting in the direct provision of low-cost rental and social housing and other subsidy programs. In 1954, CMHC entered the mortgage insurance business on the belief that doing so would lower the cost and enhance the availability of housing finance (see MacGee 2010 and Box 1 for a description of Canadian mortgage underwriting and insurance rules and practices).

The agency's activities in social housing greatly expanded in the 1960s and 1970s. When CMHC in the past encountered financial trouble, it was primarily a result of direct assistance for home ownership. The 1968 federal budget, for example, significantly increased funding for CMHC's direct lending program in support of owner-occupied housing.[2] In 1970, Ottawa announced a $200 million low-income housing program, and increased CMHC's scope for direct mortgage lending "due to insufficient private funds" (Hulchanski 1988).

The low-income housing program gained a sister fund in 1970, the $100 million Assisted Home Ownership Program (AHOP). Alongside several income tax initiatives,[3] the federal government introduced in 1975 and later that year expanded funding for the Assisted Rental Program (ARP), aimed at increasing the supply of rental housing; funding for the AHOP increased as well. Ottawa increased ARP funding again in 1977, and both programs were terminated in 1978.

This brief history is pertinent because, although the numbers appear small now, the programs affected many individuals' borrowing and housing choices and exposed taxpayers to losses. Those

1 In this *Commentary,* I focus on policies keyed to supporting homebuyers. I ignore direct and indirect support for low-income housing construction and mostly leave tax-policy measures as matters to be discussed elsewhere.

2 Political oversight for these programs was the responsibility of then prime minister Pierre Trudeau and his first two housing ministers, Paul Hellyer and Robert Andras. See Hulchanski (1988) on which the history described here relies in part.

3 Among them were the Registered Home Ownership Savings Plan and the Multiple Unit Residential Building program. Both were eventually terminated (in 1982, for RHOSP) and (1981 for MURB) and viewed retrospectively as expensive failures.

choices were made in the context of a rising inflation rate – whose consequences were poorly understood at the time – and a directly related rising interest rate environment. The commitments families entered into, under AHOP in particular, therefore became routinely untenable, in part because of the 1980 to 1981 recession. After a change of government in 1984, CMHC announced that, primarily owing to defaults by participants in the then-shuttered AHOP and ARP schemes, its mortgage insurance fund showed an actuarial deficit of nearly $800 million, a large exposure for federal taxpayers at the time.[4]

Multiple and conflicting objectives routinely have attached themselves to CMHC policy. In the 1970s, for example, the agency's managers used the terms and conditions under which mortgage loans would be guaranteed as macroeconomic management tools, on the belief that macroeconomic fine tuning was an activity compatible with the ordinary business of insuring residential mortgage loans against borrower defaults (Dodge 2008).[5]

The motivations for these housing market interventions were many. They have included concerns about the wellbeing of low income families. Underlying it all, however, was the notion that housing is either a fundamental right, or fundamentally good, which are related but different things. The former notion best conveys the spirit of post-War social activism, which carried through to the antipoverty schemes of the 1960s and onward.[6]

A Caveat on Home Ownership

The concept of home ownership as creating net benefits to society beyond those enjoyed by the homeower, as distinct from a social right or a value-free market outcome, is not well accepted by economists. While acknowledging that home ownership is associated with positive characteristics, such as community attachment, the likelihood of voting, and local school and institutional support, home ownership also introduces labour market frictions. For example, the social and community ties that bind and the search and transaction costs associated with buying and selling houses militate against job search when job prospects are poor locally as opposed to elsewhere. This raises the cost of unemployment and unemployment insurance, and lowers productivity generally, because human resources are not as tightly matched to opportunity as they could be, if people were more mobile.

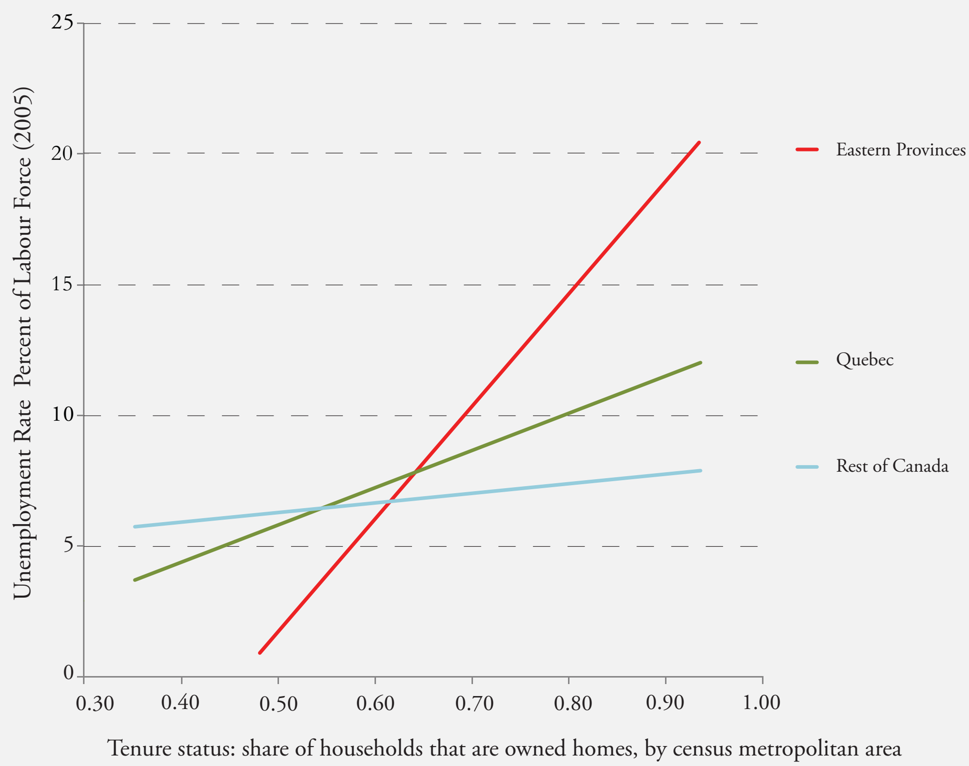
An extensive labour economics literature that examines job mobility and unemployment duration shows a range of labour market frictions associated with home ownership (e.g., Green and Hendershott 2002). The most common finding is that home ownership imposes the costs associated with reduced labour mobility, such as increased unemployment (see Figure 1 for an illustrative relationship, which highlights the correlation between home ownership and unemployment in Canada's regions). Home ownership, while conveying or associated with known social goods, also conveys economic costs.

4 Much of the actuarial deficit was in practice recoverable.

5 A more current example of policy reflecting conflicted objectives is CMHC's "green refund" program, which since 2005 has cut the cost of mortgage default insurance for borrowers who pursue energy conservation at home. Using the price of mortgage default insurance to achieve environmental or energy policy goals, as well as to deliver the thing itself (mortgage default insurance), is an example of what economists call the Tinbergen problem (1952); meaning that to attach multiple goals to a single policy tool, in the expectation that more than one goal will in fact be suitably addressed, makes suboptimal outcomes more likely than otherwise.

6 In 1973, housing minister Ron Basford declared housing to be a social right of Canadians and stated that CMHC would work in partnership with the private sector and individual Canadians to maintain the high rate of housing starts that were characteristic of the early part of the decade, as well as to increase the ability of low-income families to purchase homes. Basford also said that AHOP aimed "to show how, through ownership, low-income households would improve their housing, and develop a greater stake in the community." (Commons Debates 1973 and Moscovitch and Germain 2006).

Figure 1: Tenure Status: Correlation with Regional Unemployment



Source: census data, author's calculations.

Current Objectives and Activities

Mortgage default insurance now forms the largest part of CMHC's activities, and the agency dominates the domestic insurance market. Dominating the market in Canada means that as of 2010, CMHC insures mortgages worth approximately $500 billion, almost the entire Canadian mortgage insurance market.[7] These guarantees expose taxpayers to the amount of the insured mortgages less any recoveries through foreclosures and deficiency judgments against defaulted borrowers. While 100 percent of CMHC's mortgage insurance exposure is backed by the credit of the Government of Canada, to preserve a form of managed market competition, the federal government backs 90 percent of the private competitors' insurance exposure.

The impact of CMHC's dominance of the mortgage insurance field, or the lack of competition within it, is twofold. First, the range of consumer choice is limited, clearly with respect to choice of supplier, and also with respect to price and the range of products offered (Mohindra 2010 discusses mortgage insurance offerings in jurisdictions whose insurance markets are not dominated by government suppliers; Londerville 2010 discusses the impact of competition on price).

The second aspect of this market concentration is that a large proportion of the market risk associated with housing finance becomes centred on CMHC's balance sheet. This is an issue, or could readily become one, owing to the high correlation of housing price trends among major Canadian markets. The impact on taxpayers' potential liabilities of a correlated negative housing price shock depends entirely on CMHC's

7 Two private competitors remain on the fringe of the Canadian market (see Box1).

insurance risk management practices, rather than the diverse business models a competitive market could produce.

While a significant part of CMHC's business is aimed at social housing, the agency's other prominent activity is its mortgage purchase and securitization programs (see Box 1). Under the Canada Mortgage Bond program, initiated in 2001, the agency issues bonds, with principal and interest guaranteed by the Government of Canada, and uses the revenue from those bond sales to buy mortgages from a range of domestic issuers.

More recently, under the Insured Mortgage Purchase Program, designed in response to the 2007-08 financial crisis, the Government of Canada bought, from approved financial institutions, pools of mortgage-backed securities representing loans that CMHC already insured. Accordingly, CMHC's mortgage insurance exposure and mortgage securities exposure are not directly additive. (Figure 2 indicates the scale of federal mortgage guarantees relative to national income in Canada and, in the US, mortgages owned or insured by the relevant agencies, which are discussed below).

The mortgage purchase program[8] was aimed at improving the market perception of the quality of assets held by domestic financial institutions by moving pools of mortgages directly from financial institutions' books onto those of the federal government. Banks and other financial institutions would then more easily and cheaply lend to each other and to nonfinancial institutions. Market participants generally regard the program as a success (Smith 2010, personal communication).

The United States Context

The US government's role in housing finance has, more than in Canada, played out through income tax policy, such as mortgage-interest deductibility (MacGee 2010), yet government agencies there have a longer history and even larger role in the financial marketplace than they have had here.

Large, too, is the scale of the risks and the harm to federal taxpayers and the financial marketplace. The primary reason has been the US Congress' explicit desire to expand the securitization marketplace to enhance the flow of funds to mortgage borrowers on the assumption that this would lower the cost to borrowers of home ownership, which tends politically to be seen as good. To see how this happened and why it became such a large problem requires some institutional and political history.

The key US federal agency, the Federal National Mortgage Association, or Fannie Mae, is a product of the Great Depression and president Franklin Roosevelt's New Deal response. Chartered in 1938, Fannie Mae's two central aims were to express a "national commitment" to housing and redress:

> the inability or unwillingness of private lenders to ensure a reliable supply of mortgage credit throughout the country. The primary purpose of Fannie Mae was to purchase, hold, or sell FHA [Federal Housing Administration]-insured mortgage loans that had been originated by private lenders. After World War II, Fannie Mae's authority was expanded to include VA [Veterans' Administration]-guaranteed home mortgages.[9]

During the agency's early decades, the mortgage market continued to be financed mainly through household sector bank deposits. This changed in 1968, when the US Congress divided Fannie Mae into the Government National Mortgage Association (Ginnie Mae), which bought FHA and VA guaranteed mortgages, and a reconstituted and shareholder-owned Fannie Mae, which bought pools of other mortgages. This change toward conscious development of a secondary mortgage market, or the development of a market in securities backed by pools of residential mortgages, was bolstered in 1970 when Congress (through the agency known as the Federal Home Loan Bank Board) created the Federal Home Loan Mortgage Corporation, or Freddie Mac, which buys mortgage loans from member institutions of the federal bank board (summary liabilities through these agencies appear alongside

8 The program was initially capped at $75 billion and later increased to $125 billion, not all of which has been drawn on.

9 The Veterans Administration part of this home loan initiative matches CMHC's origins. See www.fanniemae.com/aboutfm/charter.jhtml?p=About+Fannie+Mae.

Box1

Panel A: Mortgage Default Insurance

Mortgage default insurance backstops residential mortgage lenders: if an insured borrower defaults on a mortgage, the lender may force a foreclosure and sell the underlying asset (a residential property). If the proceeds of the foreclosure sale do not cover the lending loss, the mortgage holder may recover its losses from the mortgage insurer. In Canada, numeric regulations set the general terms of mortgage insurance: federally regulated lenders are required to insure loans where the borrower's downpayment is less than 20 percent of the purchase price. Current regulations also require that buyers put forward minimum downpayments of 5 percent of the purchase price (although this amount may be borrowed) and limits mortgage amortizations to lengths of 30 years or less.

CMHC, an agent Crown corporation, dominates mortgage insurance in Canada. There are competitive entrants in the marketplace, such as, at present, Genworth Financial Canada and Canada Guaranty Mortgage Insurance Company. These private insurers are able to compete at the edge of the market, owing to a federal government guarantee of their obligations, less a deductible equal to 10 percent of the principal amount of the loans they insure. This guarantee enables private insurers to raise capital at a cost similar to, but not lower than, CMHC, which enjoys 100 percent backing by the Government of Canada. Details of these arrangements and their potential impact on the cost of mortgage lending and insurance appear in Mohindra (2010) and Londerville (2010).

Panel B: Securitization

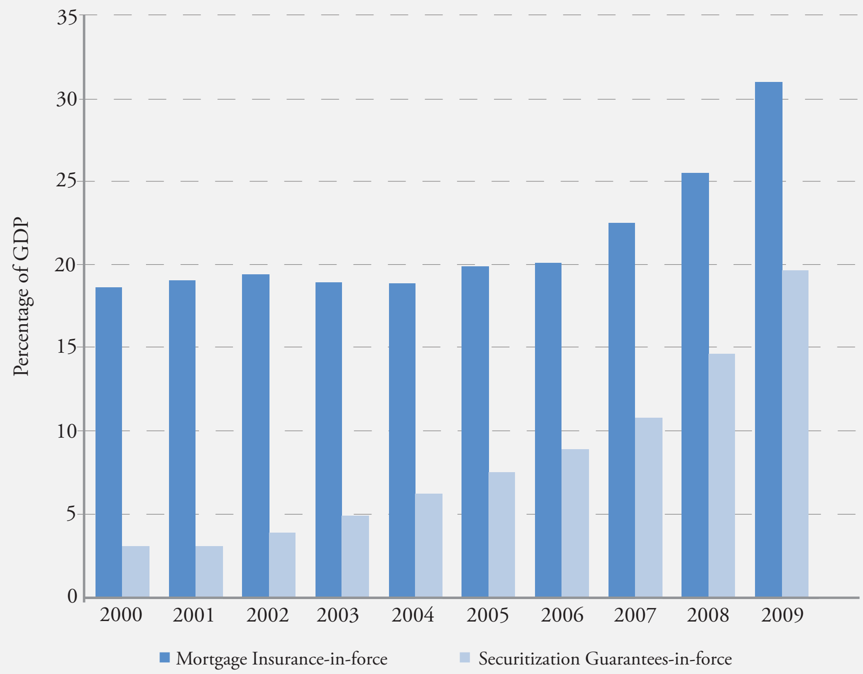
The aim of securitization is to finely segment and better price the risks associated with lending. One way is to issue financial instruments whose returns of interest and principal are backed by a parcel of loans made by the securities' issuer. One common structured securitized product is a financial instrument comprised of slices of claims on other financial assets. These assets could be, for example, credit card receivables held by a financial institution or pools of mortgage loans issued by a bank, trust company or other lenders.

Securities are often divided into tranches, wherein potential losses created by defaults associated with the underlying assets are borne, up to a limit, by the first tranche and up to another, higher, limit by the second tranche. In theory, this structure would leave the largest, core tranche with little likelihood of bearing any losses. That is what enables large quantities of securities, based on a stream of income derived from risky assets, to receive high (AAA) investment-grade ratings, thereby delivering funding to borrowers at lower interest rates than otherwise possible.

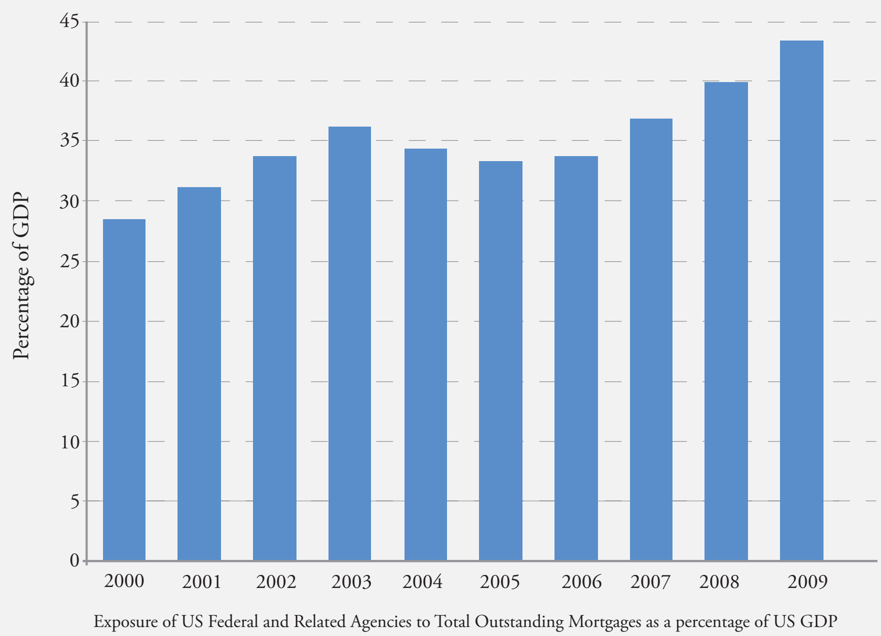
Segmenting risk in this way enables better pricing and therefore arguably deeper and more liquid financial markets and, by better allocating capital, should expand an economy's production possibility frontier. Note that an appropriately structured security, while improving the pricing of risk, also helps financial intermediaries diversify risk across regions, across asset types, and across time, in the last case by allowing the creation of securities with terms to maturity that suit market demand for financial assets. Financial institutions are then able to lend more at low cost, while – in principle – prudently protecting capital and better dispersing risks among lenders who choose to bear them.

Figure 2

Panel A: Canada – CMHC's Exposure to Housing Market Rising Relative to Canadian GDP



Panel B: United States – Government Housing Market Exposure Rising Relative to GDP



Source: CMHC, Board of Governors of the Federal Reserve System, author's calculations.

Notes: Securitizations are comprised of mortgage liabilities CMHC already insures. Includes Government National Mortgage Association (GNMA or Ginnie Mae), Federal Housing Administration, Veterans Administration, Farmers Home Administration (FmHA) and Federal Deposit Insurance Corporation. Also includes US-sponsored agencies such as Federal National Mortgage Association (FNMA or Fannie Mae), Federal Land Banks, Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), Federal Agricultural Mortgage Corporation, Federal Home Loan Banks and mortgage pass-through securities issued or guaranteed by GNMA, FHLMC, FNMA, FmHA or Farmer Mac.

Canada's in Figure 1; the history I describe relies on Gerardi et al., 2007.)

Subsequent moves by Congress enacted a number of accounting rule changes, primarily relaxing regulations regarding how financial assets were marked (on balance sheets) to market prices. It also changed how banks and trust and loan companies were regulated. In the wake of those changes, coupled with new information technology that facilitated the all-but-automatic processing of mortgage loan applications, as well as changes in the financial marketplace's understanding of how to price securities, the secondary mortgage market, and the securitization business based on it, blossomed.

These changes, however, were or are not sufficient to explain the past three decades' explosion in US mortgage lending activity, or its pursuant implosion. That process required also the influence of the political dimension, as is familiar from Canada's experience. US federal legislation, for instance, compelled deposit-taking institutions to lend fixed percentages of deposits in the form of mortgage loans, back into the regions from which the deposits were absorbed.

This social activism in federal policy dovetailed with the view that home ownership was, by itself, a social good, because its responsibilities would encourage better behaviour on the part of residents who owned their homes and were responsible for paying mortgages that would allow them to stay in those homes, and encourage stronger community commitment (e.g., DiPasquale and Glaeser 1999).[10]

This confluence of political interests, combined with the financial incentives facing the company managers who originated home mortgages, packaged them or resold them or securities based on them, muted the market signals that might otherwise have mitigated the expansion of risk in the financial system. And even when risks started to emerge, as they did during the 1998 Asian financial crisis, the political process suppressed attention to risks and, instead, increased them, contributing to the financial implosion that has been detailed at length elsewhere.

On continuing risks from federal home mortgage insurance, for instance as offered through the Federal Housing Administration and discussed above: the FHA's most recent actuarial review (International Financial Engineering 2010) found no likely near-term deficiencies in the ability of the US government, through the FHA, to service the mortgage loans it has guaranteed. An outside review, however, found that the agency had underestimated the number of borrowers who were in economic trouble and likely to default, underestimated likely future mortgage delinquencies, and did not take into account how many of its recent loans had been extended with downpayment assistance – a class of loan that is especially likely to default (Aragon et al., 2010). In other words, the likelihood of more trouble in US mortgage markets remains high. Whether these results are definitive, the case is clear that US government agencies' roles in housing finance have generated uncertain benefits while creating large costs and continuing risks to taxpayers.

None of this is to suggest that the financial market risks present among the US GSEs (government-sponsored enterprises), and which have shown themselves previously in Canada, are everpresent domestically. Mortgage lending and housing finance markets, along with the institutions that support them, differ in Canada and the United States (MacGee 2010). What is clear is that the scale of the housing market's financial risk is potentially large – what is less clear is the degree of risk to which Canadian taxpayers are potentially exposed. As I discuss later on, little publicly is known about the specifics of the loan quality that CMHC insures, and the agency is subject to little formal monitoring. The questions for Canadian policymakers are whether the costs and risks are fully understood and whether future risks might be more tightly monitored and limited, while delivering on our housing policy goals.

10 I will not discuss this literature for space reasons and because it extends to the theory of crime, clearly beyond the scope of this brief. The question, never properly answered to my knowledge, is whether personal characteristics precede home ownership or, to put it another way, tenure status can affect personal characteristics.

The Continuing Case for Securitization and Credit Default Insurance

Notwithstanding its checkered history, securitization can play a valuable role in connecting saving with investment. That is because when financial market risks can be accurately assessed, and sold on to investors who are willing to bear those risks in return for a premium that suits them, the volume of financial capital and the liquidity with which it is delivered to those who need it is larger than otherwise (Box 1). Securitization allows financial risks to be distributed regionally, sectorally and over time, improving the productive efficiency of a given amount of capital, and making it more readily available and cheaper.

Redistributing and pricing risk is the essence of what financial markets do, and intervention in them necessarily imposes costs. Conversely, when markets that might manage a given class of risks do not emerge, that too is a signal. One lesson from the US housing market experience of the past half-century is that when governments intervene where risks do not seem to be priced correctly, they may impose costs that are as large as or larger than the perceived market failure (Stiglitz 1981).

Likewise, when markets contain asymmetric information, such as when mortgage lenders and borrowers may profit from the other's incorrect assessment of a proposed transaction's credit risks, the potential for moral hazard exists. Such moral hazard may lay the foundation for policy intervention to impede or encourage transactions of different types (Akerlof 1973). However, it is unsafe to assume that policy intervention, such as a government tax on a transaction or a subsidy to encourage its consummation would improve social outcomes (Dixit 1989).

Consider the generic question of whether banks should sell off loans completely (as when issuers sell pools of mortgages to institutional investors or state agencies) or retain the loans on their books and instead insure them against default. Even in the presence of uncertainty about the quality of those loans, or in the presence of moral hazard, good social outcomes and profitability may be achieved if well-capitalized banks are able to insure loans and less well-capitalized banks may sell them (Thompson 2007).[11]

What Canada Should Do

Housing finance markets present significant and undiversifiable risks that regularly have harmed the broader economy, suggesting that an economic case exists for some level of government participation to achieve financial stabilization. What I have sought in the foregoing is to establish the existence of mortgage market risks to which taxpayers are ultimately exposed and to highlight previous Canadian and American failures to properly manage those risks, with harmful consequences. In the remaining section, I make suggestions about how domestic policymakers might do what is needed.

Wind Back on Mortgage Insurance

The Canadian mortgage default insurance market includes domestic competitors and international entrants, as discussed in Box 1. The corollary observation is that the mortgage insurance market is one that under normal conditions private providers can serve. And the message from the Canadian and US experience is that while federal guarantees against mortgage default may facilitate lending, that guarantee socializes risks that are larger than they would have been absent a government role.

The best way forward, therefore, is for CMHC to limit growth in its mortgage insurance book, the better to insulate taxpayers against risks that they might neither wish nor need to share in. Credit markets have moved closer to their normal

11 This observation leads to doubt as to whether regulations that would require financial institutions to retain risk on their balance sheets, with respect to loans that might otherwise be sold on or fully insured in credit default markets, would necessarily improve markets' functioning (IMF 2010, for example).

functioning since 2008, as evidenced for instance by the declining spreads between the interest rates at which major financial institutions borrow and lend (IMF 2010). Accordingly, there is no reason to assume that financial markets will not develop to serve the credit-default insurance market. Policy direction from the federal government should, therefore, telegraph a phased withdrawal from the mortgage insurance market so that private providers may position themselves to serve emergent market gaps.

It would be neither practical nor reasonable, however, to suggest that CMHC vacate the insurance market immediately or entirely. The housing market has evolved in lockstep with the financial institutions that support it. And potential market risks are large, relative to any individual firm that lends or insures home mortgages. Moreover, lenders', borrowers', and insurers' risk assessments inevitably will be coloured by the same information sets, meaning that at any point they will have similarly rosy or cloudy views of the likelihood of financial market trouble, and will therefore mutually reinforce procyclical borrowing and lending choices – fuelling booms and busts.

Given this reality, prudent government policy would direct CMHC to build itself only as a federally backstopped reinsurer. The private sector analogues are large reinsurance firms that reinsure, among other things, trade, credit and similar counterparty risk, including those involving financial assets. At the same time, CMHC would let its direct mortgage insurance and underwriting book shrink through attrition. In other words, the agency's capital (and the skills of its managers) would be deployed as a supplement to the private mortgage lending and securitization markets. As well, CMHC would enhance its capital by collecting risk-adjusted reinsurance premiums from the mortgage insurers who would grow to serve the Canadian market and disperse the associated risks more broadly and outside the banking sector.

In economic terms, CMHC would fulfill the public function of taking on the undiversifiable systemic risks that inevitably reside in large financial markets such as the mortgage lending and insurance business. In this scenario, CMHC would not disappear – in fact, its capital might grow – but its role would more clearly be limited to securitization markets and diminish in significance when domestic residential homebuyers make their housing and borrowing choices.[12] CMHC would for the time being continue its direct engagement in the securitization market by way of the Canada Housing Trust. The securities it issued would be comprised of bundles of privately insured mortgages, and CMHC's role would continue to be to ensure timely payments defined by the terms of the securities. The overall securitization role would be re-evaluated after the financial marketplace had digested the other changes described here.

The participation of more mortgage insurers would introduce to the housing finance market multiple risk management models. The mechanisms that they chose in assembling their insurance books would introduce a layer of diversity which, in the face of correlated market shocks, should reduce the impact of those shocks on taxpayer liability. Moreover, more participation from foreign insurers, as occurred after Australia liberalized its mortgage insurance marketplace, would help diversify financial market risks well beyond Canadian borders, and the scope of domestic undiversifiable risk exposure would in fact shrink.

Meanwhile, the change in CMHC's role could enhance financial market stability, because the reinsurance premiums that the agency collected would be risk adjusted to match the loan quality that insurers underwrite. Reinsurance premiums could be set on a sliding scale that reflected the risk profile of a firm's assemblage of insured mortgages: likely characteristics would be loan-to-value ratios, the term structure of the mortgages (fixed versus floating rate), and the average credit scores of borrowers.

Accordingly, mortgage insurers that wished to raise capital cheaply would retain appropriate

12 The agency's other social policy (social housing) functions would need to be taken up under a different governance structure so that social objectives did not interfere with meeting financial ones with respect to market depth and liquidity.

incentives to carefully limit the risks associated with their lending so as to keep down their insurance costs. They would have a larger market to serve as the CMHC insurance book shrank.

Market forces and sound prudential supervision would ensure that private market insurers adequately manage risks. Concern over the past riskiness of the securitization marketplace could be addressed by requiring issuers to place a subordinated class of securities with a third party (Allan and Bergevin, 2010).

Domestic implementation of international standards with respect to capital adequacy, as such rules apply to insurers, can provide the safety and soundness Canadians expect from their financial system. Appropriate capital adequacy requirements, would eliminate the need for the federal government's 90 percent solvency guarantee for private mortgage insurers.

The obvious example of a successful government retreat from the mortgage insurance market is Australia (Mohindra 2010), which neither backstops private insurers nor requires all high loan-to-value borrowers to purchase mortgage insurance. Nonetheless, many lenders request that borrowers obtain insurance, which drives a vibrant mortgage insurance market, and a securitization business subsequently has grown in Australia, based in significant part on insured mortgages.

Options for Implementation

Several options follow regarding for the shape of CMHC's future support for the mortgage insurance market.

First, the agency would for the present continue its program of purchasing bundles of mortgages and selling bonds and securities based on them.

Subsequent steps would focus on maintaining a vibrant securitization market. The agency's familiarity with the mortgage bond and securitization market would enable it to serve as a central clearing party for those securities.

Ultimately CMHC would stand as a clearing house, or market-maker, for credit-default obligations that stand behind mortgage-backed securities. The goal would be to introduce layers of protection, or to lay off, to private markets, more of the credit risk associated with housing finance. In so doing, less credit risk – of the type now embedded in CMHC's direct mortgage insurance book – would redound to taxpayers in the event of a negative housing market shock.

Indeed, the concept of developing of a centralized counterparty, or clearing house for standard derivatives such as credit default obligations that hedge mortgage-backed securities, is part of the financial stabilization agenda that arose out of the recent round of G-20 meetings, and would be consistent with Canada's implementation of that agenda (Koeppl 2011, forthcoming). With such a counterparty in place in Canada, CMHC's active participation in the securitization market would subsequently be encouraged to wither.

Formalize OSFI Oversight

The federal government's main financial regulator, the Office of the Superintendent of Financial Institutions (OSFI) does not oversee CMHC. CMHC reports on the dollar value and the characteristics of the pools of mortgages it buys and securitizes, the revenue generated by its mortgage insurance business and the extent to which it manages impaired loans. (Impairments eventually affect the agency's net income). With respect to capital set aside to manage losses on its assets, CMHC reports that its holdings exceed what OSFI would demand of similar businesses that it does in fact regulate (CMHC 2010). CMHC also regularly presents financial statements that are audited by the Auditor General for Canada, certifying that it operates programs that are intended to address its organizational mandate and does so within the financial authority Parliament votes to it.

So far, so good. However, the Canadian public neither has, nor can have under current reporting arrangements, a complete understanding of the risks to which they are exposed by way of CMHC's mortgage lending or insurance activities. Other mortgage lenders and insurers must by law comply with OSFI oversight and regulation with respect to capital adequacy, for example; CMHC does not. OSFI officials are granted, as a courtesy, access to CMHC's financial arrangements (CMHC 2010) and the potential risks to which they are exposed are said to be manageable even in the event of severe financial market stress (personal communication, 2010). However, Parliament and the voters to whom it answers have no formal documentation of the way these exposures are calculated or managed.

The resolution is simple: whether CMHC does or does not wind back its direct mortgage insurance operations, as I recommend above, it should be required by legislation to comply with OSFI oversight and regulation, including establishing through public data disclosure that its capital adequacy, with respect to mortgage insurance activity, meets or exceeds the levels demanded of privately operated insurers.

Introduce and Pass Covered Bond Legislation

Supplementing the securitization market to support new, competitive funding avenues is also something Canada should support. For example, Finance Minister Jim Flaherty's March 2010 federal budget included a paragraph introducing the possibility that the government would table legislation that would support, on a competitive basis, the issuance by Canadian financial institutions of bonds whose principal and interest were fully covered by the stream of interest income and principal repayments associated with a pool of residential mortgages (Canada 2010).

The idea sounds unremarkable, and hardly different from what financial institutions here and elsewhere already do, yet it is very important. Such a "covered" bond is backed by the full faith and credit of the financial institution that issues it. Further, in the event that the issuing financial institution went bankrupt or was wound up, covered bondholders would have priority not only over other lenders and shareholders, as might be expected, but also over domestic deposit insurance providers. Financial institutions are able to borrow money at very low cost, for that reason, and to finance more and cheaper mortgages than they otherwise could.[13]

The reason for taking this step is that it would improve the ability of Canadian financial institutions to raise low-cost capital in markets that demand surety of repayment beyond what corporate bonds otherwise offer. The covered bond concept also answers directly to the perceived risks sometimes associated with lengthy chains of financial intermediation (Shin 2010).[14]

Objections

The sort of mandate retrenchment I describe here, with respect to CMHC, might face several objections.

The first is that facilitating and encouraging home ownership is a social good that requires direct government participation in the marketplace. However, the evidence on this point is weak. The activities certainly have generated significant risks to the taxpayer and, at times as in the US, large, centralized risks to overall financial stability.

Moreover, to the extent that affordable home ownership is a social good and one that requires the availability of mortgage insurance, it does not follow that government needs to provide it directly. Rules governing the availability of mortgages and requirements for mortgage insurance can exist in regulation and legislation, as they do now, without requiring that the government stand ready to be the direct mortgage insurer.

13 This dual recourse means that during the recent financial crisis, for example, covered bonds in the US and in European markets did not face as wide spreads or the same incidence of ratings downgrades as did other bonds and similar securities (IMF 2009).

14 "Securitization was meant to disperse credit risk to those who were better able to bear it. In practice, securitization appears to have concentrated the risks in the financial intermediary sector itself. If securitization leads to the lengthening of intermediation chains, then risks become concentrated in the intermediary sector with damaging consequences for financial stability. Covered bonds are one form of securitization that do not fall foul of this principle." (Shin 2010). Note also that covered bonds do not suffer maturity mismatch – the term of issuance generally matches the term structure of the issuer's lending.

A second objection is the worry that private mortgage insurers might be disinclined to serve rural and remote areas. As discussed earlier, promoting home ownership in rural areas is likely not a health policy stance, owing to the mobility costs it potentially creates. However, if the availability of mortgage insurance is a political imperative, the question policy should address is why private markets might fail to serve rural areas. It may be because sparse regions are costly to serve, or because regional risk characteristics make some insurance markets unattractive. If sparseness is the cause, then technology and online validation and sales tools may be part of the answer. If the problem is low profitability for risk reasons, another resolution would be to impose performance mandates on mortgage insurers when they obtain from OSFI their licenses to operate, or insurance offered in rural and remote areas could be subsidized by CMHC. Again, this would not require CMHC directly to provide the insurance.

A third potential objection is that the recent financial crisis has demonstrated the requirement for significant government engagement in mortgage markets, owing mostly to their size. Such government involvement, so the argument goes, permitted agencies to purchase mortgage assets directly from financial institutions in an effort to enhance credit market liquidity by improving the asset quality of those private institutions. In other words, CMHC ought to exist as currently constituted because it contributed to financial stability at a time of crisis. However, even if all the steps I recommend here are taken, nothing would stop a government from undertaking similar asset purchases in future, should the need become apparent. It certainly would not require the federal government to be directly engaged in providing mortgage insurance.

The last concern, with respect to covered bonds, is the risks associated with their potential liabilities and the fact that if covered bondholders stand at the front of the line in the event of the bankruptcy of the issuer, others, such as deposit insurers, will bear larger costs. However, the risks and potential costs can be made very small, by requiring covered bond pools to be overcollateralized, and by creating them using only uninsured, low loan-to-value ratio mortgages – making their credit ratings very high and the likelihood of their failing to repay very low. This is what international financial markets are already producing and, accordingly, covered bonds trade with very low risk premiums.

Conclusions

This *Commentary*'s message is simple: the Canadian and US experience illustrates some of the large financial sector problems and taxpayer risks associated with government agencies' participation in the mortgage lending market. As a practical matter, however, the Government of Canada is unlikely to withdraw its direct and indirect support of mortgage markets. In the face of these facts, clear recommendations follow.

Federal policy should limit public exposure to mortgage lending risks, by winding back CMHC's role in providing mortgage insurance, and allowing private providers to take on a larger role. The agency's capital and staff would be well employed in a reinsurance function that backed private market insurers.

Independent of whether Ottawa pursues this recommendation, Parliament should adopt legislation that formally requires CMHC to comply with and report on compliance with OSFI guidelines.

Finally, Parliament should adopt legislation that would support covered bond issuance by domestic financial institutions and clarify creditor arrangements in the event of the bankruptcy of a federally regulated deposit-taking institution. Such legislation would allow those institutions to more readily compete for low-cost capital in the international bond market and better serve the domestic mortgage lending market.

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