



INSTITUT C.D. HOWE INSTITUTE

COMMENTARY

NO. 338

Financial Stability: The Next Frontier for Canadian Monetary Policy

While the Bank of Canada's inflation-targeting regime has proven remarkably successful, the recent financial crisis highlighted the fact that low inflation may not be enough to ensure the stability of the financial system and the economy in general. The goal of achieving and maintaining financial stability has become, in Canada and elsewhere, the next frontier of monetary policy.

Christopher Ragan



THE INSTITUTE'S COMMITMENT TO QUALITY

ABOUT THE AUTHOR

CHRISTOPHER RAGAN

is an Associate Professor of Economics at McGill University and holds the David Dodge Chair in Monetary Policy at the C.D. Howe Institute.

C.D. Howe Institute publications undergo rigorous external review by academics and independent experts drawn from the public and private sectors.

The Institute's peer review process ensures the quality, integrity and objectivity of its policy research. The Institute will not publish any study that, in its view, fails to meet the standards of the review process. The Institute requires that its authors publicly disclose any actual or potential conflicts of interest of which they are aware.

In its mission to educate and foster debate on essential public policy issues, the C.D. Howe Institute provides nonpartisan policy advice to interested parties on a non-exclusive basis. The Institute will not endorse any political party, elected official, candidate for elected office, or interest group.

As a registered Canadian charity, the C.D. Howe Institute as a matter of course accepts donations from individuals, private and public organizations, charitable foundations and others, by way of general and project support. The Institute will not accept any donation that stipulates a predetermined result or policy stance or otherwise inhibits its independence, or that of its staff and authors, in pursuing scholarly activities or disseminating research results.

COMMENTARY No. 338
JANUARY 2012
Monetary Policy



A handwritten signature in black ink that reads "Finn Poschmann".

Finn Poschmann
Vice-President, Research

\$12.00

ISBN 978-0-88806-858-3

ISSN 0824-8001 (print);

ISSN 1703-0765 (online)

THE STUDY IN BRIEF

The monetary policy arrangement in Canada has proven very successful. Despite many and varied economic shocks, the Bank of Canada has established the necessary conditions under which the annual rate of inflation, as measured by the rate of change of the Consumer Price Index, has remained very close to its formal 2 percent target for more than 15 years.

The recent financial crisis, however, has highlighted the fact that low inflation may not be enough to ensure the stability of the financial system and the economy in general. The goal of achieving and maintaining financial stability has become, in Canada and elsewhere, the next frontier of monetary policy.

What is needed is a new Canadian institutional framework to oversee macro-prudential regulation, which would take a systemic approach to safeguarding the financial system as a whole, and clearly define the role of the Bank of Canada within it. It will require the federal government, first, to recognize the importance of the issue and, second, to take the necessary time to assemble the framework with the appropriate parties involved and to assign responsibilities clearly. Doing it right will involve bringing together various policy authorities with different perspectives, specialties, and primary mandates.

This *Commentary* provides the following recommendations for a more effective structure for macro-prudential oversight and policy coordination in Canada:

- The maintenance of financial stability in Canada should be added to the mandate of the existing Senior Advisory Committee, which brings together various departments and agencies.
- SAC should become a legislated committee whose formal minutes should be sent to the minister of finance. Its membership should be expanded to include the CMHC (or perhaps its financial arm) and, if one is created, a national securities regulator.
- The federal government should ensure that all SAC members have the appropriate resources to enable them to understand more fully aspects of the financial system that are beyond their direct concern.
- The Bank of Canada should take a clear intellectual leadership role within SAC, and the governor of the Bank and the deputy minister of finance should co-chair the committee.
- The co-chairs should make clear policy recommendations directly to the minister of finance, who would be ultimately responsible for all policy decisions.

The successful evolution of Canadian monetary policy is not just a reflection of the success or failure of random policy developments. From the mid-1970s onward, policymakers at the Bank of Canada have sought continually to make genuine policy improvements. In like manner, with regard to macro-prudential oversight, the federal government needs to search continually for policy improvements to ensure that we have a strong and stable financial system.

C.D. Howe Institute Commentary© is a periodic analysis of, and commentary on, current public policy issues. Barry Norris and James Fleming edited the manuscript; Yang Zhao prepared it for publication. As with all Institute publications, the views expressed here are those of the author and do not necessarily reflect the opinions of the Institute's members or Board of Directors. Quotation with appropriate credit is permissible.

To order this publication please contact: the C.D. Howe Institute, 67 Yonge St., Suite 300, Toronto, Ontario M5E 1J8. The full text of this publication is also available on the Institute's website at www.cdhowe.org.

Monetary policy in Canada has evolved significantly over the past few decades. Important changes have occurred in the Bank of Canada's explicit objective, its specific operating procedures, and its approaches to communication with both the public and financial markets.

One measure of the success of Canadian monetary policy is that, despite the existence of many and varied economic shocks, the annual rate of inflation of the Consumer Price Index has remained very close to the Bank's formal 2 percent target since 1995, and measures of expected inflation over the past 15 years have rarely deviated far or for long from this target. A related but less formal measure of success is that discussions of monetary policy and inflation, at least until a few years ago, were considerably more "boring" than they were back in the late 1970s and early 1980s — a time when very high and volatile inflation was a headline issue for the public and a major preoccupation for Canada's macro policymakers, both inside and outside the Bank of Canada.

With the arrival of the global financial crisis in 2008 and the major recession that followed in its wake, monetary policy returned to centre stage, where it has been anything but boring. In addition to responding to the recessionary forces with large and sustained reductions in policy interest rates, central banks in Canada and elsewhere developed creative ways to provide much-needed liquidity to financial markets and have also been exploring how best to contribute to ensuring the resilience and stability of the overall financial system. Across the developed world, the goal of achieving and maintaining "financial stability" has become the new frontier in monetary policy.

The purpose of this *Commentary* is to examine this new challenge for Canadian policymakers. I begin with a brief review of the considerable success of Canadian monetary policy since the adoption of inflation targeting in 1991. I then examine the issue of financial stability, with emphasis on two aspects of the problem: conducting monetary policy to "lean" against emerging financial excesses, which, if feasible, is clearly the responsibility of the Bank of Canada; and designing a system of governance to ensure effective "macro-prudential" oversight of the entire financial system, which is the ultimate responsibility of the federal government. The Bank is currently exploring whether and how best to lean against financial excesses (Boivin, Lane, and Meh 2010). On the issue of governance, however, it is not evident that the federal government is exploring the issue thoroughly. I conclude the *Commentary* by arguing that, in order to have effective macro-prudential oversight and policy coordination, the federal government needs to design a system in which the Bank of Canada plays a clear leadership role but in which accountability for policy decisions ultimately rests with the minister of finance.

TWENTY YEARS OF INFLATION TARGETING

After several decades of experience, many shocks from various sources, and plenty of learning about

what works and what does not, central banks in Canada and many other developed countries had converged by the late 1980s on some solid guiding principles for monetary policy. These can be boiled down to two key observations regarding how economies function and how monetary policy operates.

First, there is now a clear recognition that high and variable inflation is costly — not only for individual households and firms but also for the smooth operation of the economy. Not all of these costs are easy to measure or even to quantify in simple theoretical macro models, but they are nonetheless real, and come largely from the uncertainty that high and unstable inflation injects into the workings of the price system.¹ Second, there is an equally clear acknowledgment that the rate of inflation is the single macro variable that monetary policy is able to influence in a systematic manner over the long run. Actions taken by central banks can and do influence a whole range of real and nominal variables over the course of a typical business cycle, but a key insight — argued most influentially by Milton Friedman (1968) — is that these short-run effects typically unwind over the longer run, leaving the permanent effects of monetary policy to fall solely on the level or growth rates of nominal variables.

Given these two underlying principles, it is perhaps not surprising that, in many countries, monetary policy evolved to the point where central banks now explicitly target a low rate of inflation. After all, if high inflation is costly and inflation is the one variable that a central bank can hope to control over the longer run, it makes little sense to target anything else. In 1991, Canada was the second country (after New Zealand) formally to

adopt inflation targeting; since then, many other countries have followed suit. In retrospect, this evolution of monetary policy toward inflation targeting might seem obvious or inevitable, but it would not have happened without the shocks and policy mistakes and learning that occurred over the previous 30 years (Ragan 2011).

There have been many excellent reviews and evaluations of Canadian monetary policy since the early 1990s (see, for example, Crow 2009b; and Laidler and Robson 1994, 2004), so a detailed treatment is unnecessary here. But few deny that it has been a considerable success. In a comprehensive review of the relationship between inflation and many macroeconomic variables — including the dispersion of relative prices, inflation expectations, and output volatility — Longworth (2002) shows that the reduction of inflation and the adoption of inflation targeting appear to have coincided with a general reduction in economic volatility and an improvement in broad measures of performance.² As for the achievement of its stated objective, the Bank of Canada certainly delivered on its principal commitment: the formal inflation target has been 2 percent since 1995, and from then until 2007 the average rate of inflation was remarkably close to the target, though there were brief periods when inflation strayed noticeably.

The past 20 years have also seen a notable evolution regarding the implementation and communication of Canadian monetary policy. Perhaps the most visible changes have been an emphasis on the Bank of Canada's target for the overnight interest rate as its primary instrument, the establishment of eight fixed announcement dates per year, the regular publication of the *Monetary Policy Report*, and an increase in the number and

1 A partial review of the various costs of inflation and benefits of disinflation is found in Ragan (1998).

2 Some debate remains regarding the appropriate stance of Canadian monetary policy during the mid-1990s. For an example of the view that monetary policy was systematically too tight in this period, see Fortin (1996); a response from the Bank of Canada is Freedman and Macklem (1998).

clarity of public speeches by Bank officials. The Bank's communications are now aimed not just at explaining what it is doing and why, but also at the need to keep inflationary expectations anchored to the inflation target.

If a well-functioning policy regime developed to maturity between 1991 and 2007, events since then have revealed the resilience of this regime. When the global financial system began to show its strains in the summer of 2007, which eventually revealed deep and systemic problems, the Bank of Canada was able to respond effectively — by increasing the liquidity available to financial institutions, thus reducing fears of counterparty risk and maintaining the flow of credit — while maintaining its credible commitment to its inflation target.

By the fall of 2008 global financial markets were in full crisis. Even though Canada was far from the epicentre of the crisis, the globalization of financial markets guaranteed that Canada would experience significant tremors. Canadians' well-anchored inflation expectations, together with the Bank of Canada's long-established credibility in returning inflation to target, permitted the central bank to respond aggressively by sharply cutting its target for the overnight interest rate. By the spring of 2009, with its policy rate at its effective lower bound, the Bank was on the verge of implementing quantitative easing and perhaps even credit easing — whereby the Bank would purchase assets directly in financial markets without changing its target for the overnight interest rate. The US Federal Reserve and the Bank of England had already taken these steps, but the economic situation in Canada was then less dire. Though the Bank of Canada explained these policies in its April 2009 *Monetary Policy Report*, they were never implemented. Instead, it tried something less dramatic, but no less innovative: it issued a commitment to hold its policy rate at the effective lower bound until the summer of 2010, conditional on the outlook for inflation. The payoff appeared almost immediately in the form of a reduction in long-term interest

rates (He 2010).

Looking back over the past 20 years, it is difficult not to be impressed with the conduct and achievements of Canadian monetary policy. Confronted with many shocks from various sources, the Bank of Canada has upheld its commitment to keep inflation low and stable. Even the dramatic events of the past few years revealed no substantive deficiencies in the Bank's analytical abilities or operating procedures. This success surely played a leading role in the recent decision by the Bank and the federal government to renew the inflation-targeting agreement in its current form for another five years.

As Laidler (1999) emphasizes, any “coherent monetary order” must have four elements: a well-defined goal; the power and ability of the relevant authorities to achieve that goal; an understanding of the goal by private-sector agents and the expectation that it will be achieved; and accountability of the relevant authorities to the electorate for both the choice of goal and their performance in achieving it. By this standard, Canada's monetary order is clearly coherent. The Bank of Canada and the federal government have agreed upon a well-defined target for inflation; the Bank has the power and the tools to keep inflation close to the target rate; the Bank's inflation target is well known and constantly repeated in the Bank's communications, and private-sector inflation expectations are well anchored to the target; and the Bank is accountable for its actions and for the resulting rate of inflation — through the minister of finance and Parliament — to the Canadian people.

FINANCIAL STABILITY IS THE NEXT FRONTIER

Now, however, the Bank of Canada faces two policy challenges. One is an immediate challenge stemming from current conditions in the Canadian and global economies that it can address with its current collection of policy tools. The second, longer

term in nature, and less openly discussed, will require new policy tools, and is arguably more important for the collective well-being of Canadians.

The Bank's immediate challenge is to determine the appropriate policy route back to "normal" from the highly abnormal events of the 2008/09 global financial crisis and recession. But several factors complicate this path. There is growing recognition that economic recovery following a major financial crisis involves the combination of a fragile banking sector and the striving of households and businesses to reduce their debt loads. As a result, such a recovery tends to be more protracted than a recovery that does not follow a financial crisis (Reinhart and Reinhart 2010). The transmission mechanism of monetary policy is likely to be altered by these special conditions, making it more difficult to determine the policy route back to normality. In addition, the Bank must pay close attention to economic conditions beyond Canada's borders. In the United States and the United Kingdom, significant excess capacity, highly expansionary monetary policy, and the beginnings of large fiscal consolidations could combine with global trends in energy and food prices to produce a dangerous mix of inflation and stagnation. In Europe, high and fast-growing public debt, legitimately skeptical global investors, and the inherent restrictions of a common currency have combined to threaten the political foundations of the European Union and could well lead to a financial crisis in the near future. The policy path forward, including the role to be played by the European Central Bank, remains very unclear. Thus, over the coming months, the Bank of Canada will face the difficult challenge of balancing the need for higher policy interest rates to offset emerging domestic inflationary pressures and the need to keep interest rates low while heightened economic and financial uncertainty abroad continues to hinder domestic confidence, investment, and exports.

The second, and less familiar, challenge for Canadian monetary policy is broader in scope and

potentially far more important to Canadians' future well-being: the pursuit and maintenance of financial stability. The nature of the 2008/09 global financial crisis, with problems in one part of the financial system quickly creating problems in other parts, led to the widespread recognition of the need to place more emphasis on both the interconnected nature of financial institutions and the procyclical nature of the financial system. Although there is no single precise and universally accepted definition of financial stability (Borio and Drehmann 2009b), the financial system needs to be sufficiently resilient to absorb shocks large enough to cause the failure of a small number of financial institutions (Freedman and Goodlet 2007). Put differently, financial stability exists when even large shocks to the financial sector are insufficient to cause changes in interest rates and credit flows large enough to generate significant macroeconomic effects.

The pursuit of financial stability involves central banks in two direct ways: through their "leaning" against emerging financial excesses, and through "macro-prudential" regulation and oversight of the financial system.

"Leaning" Against Financial Excesses

There is a growing consensus that the cause of the 2008/09 financial crisis was a complex combination of many practices, policies, and institutional arrangements, most of which were deep within the financial system. Laidler and Banerjee (2008) and White (2009) argue convincingly that an important part of the problem was that, in the several years prior to the crisis, central banks in many countries — including Canada — were too unwilling to "lean" against growing financial excesses, such as large increases in financial leverage in the household, corporate, and banking sectors. Instead, the central banks' implicit preference was to "clean up" whatever mess was created by eventual financial collapse.

White (2009) argues sensibly, however, that "leaning" should not be thought of as the Bank of

Canada's making its interest rate decisions with the objective of formally targeting a set of asset prices. Not only would it be unclear which small set of prices to target; it would also be unclear how to identify any given price increase as inappropriate or somehow disconnected from the underlying fundamentals. Rather, White's concept of leaning is far less formulaic and more subtle than formal targeting would ever permit: if the Bank chose to lean against financial excesses, it should look broadly at financial markets and use its discretion and judgment carefully, casting its eye over levels of asset prices and financial leverage that are deviating from their long-run trends, and examining the growth rates of monetary aggregates and credit flows that appear to be unusually large (see also Laidler and Bergevin 2010). Indeed — as Borio and White (2004), Borio and Drehmann (2009a), and White (2009) remind us — many financial crises through history have been preceded by the development of financial excesses, and a valuable guiding principle for policy is that careful but significant preemptive policy tightening is more effective than the massive and sudden monetary expansion that typically follows a financial crisis.

The economic and financial events of the past few years have made the arguments in favour of leaning against financial excess less controversial than they were during the relatively prosperous times of the early and mid-2000s. For example, it is difficult to imagine a macroeconomist today arguing that US monetary policy was “just right” in 2005, and that—with the full knowledge of how the next few years transpired—we would not have been willing to accept slightly lower inflation and economic growth during that period in return for a lower probability of a subsequent financial crisis.³

Real world policy actions, however, must be made without such knowledge, and an important

issue in the “lean versus clean” debate remains unresolved: what should a central bank do when different macroeconomic indicators are suggesting different policy actions? For example, suppose that the many usual indicators reviewed in the pursuit of price stability suggest there is little threat of higher inflation in the near future; in this case, the likely policy action by the central bank would be to leave its policy interest rate unchanged. Suppose, however, that some selection of indicators relevant to the pursuit of financial stability suggests an unhealthy build-up of financial excesses, thus indicating a need to lean by increasing the policy interest rate. Should monetary policy be driven by the concern to maintain financial stability, even though that might mean deviating from the inflation target, or should it focus on the inflation target and let the financial excesses follow their own path? Since a central bank has but one instrument, and sustained inflation appears to be determined fundamentally by monetary policy, the possible divergence of these two sets of indicators suggests the need for additional policy instruments.

Recent research at the Bank of Canada sheds light on this issue and also emphasizes the centrality of the potential difference in scope between monetary policy and financial excess. Boivin, Lane, and Meh (2010) develop model simulations in which the best policy response to sector-specific financial excesses might be well-directed regulatory tools rather than monetary tightening. For example, an unusually large and sustained increase in real estate prices might be best addressed with a change in mortgage or mortgage-insurance regulations rather than with traditional monetary tightening. The problem with the latter is that it applies more-or-less uniformly to the entire economy and, if the financial excesses are narrow enough, the monetary tightening might make it

3 Few analyses of history's recurring pattern of financial excess and collapse are more readable than those of Galbraith (1994) and Kindleberger and Aliber (2005). Reinhart and Rogoff (2009) offer a more modern and technical treatment.

more difficult for the central bank to achieve its objectives regarding price stability. On the other hand, financial excesses that exist simultaneously in several sectors of the economy or that can easily spill over from one sector to others might be best addressed with a combination of regulations and monetary tightening and, in this case, the central bank's actions (together with the regulations) might be consistent with enhancing both financial stability and price stability. The key policy question for the central bank then becomes whether the existing financial excesses are large enough and widespread enough to warrant monetary policy action. This line of inquiry and these preliminary findings support Carney's (2009) argument that even well-designed leaning by a central bank is unlikely to be sufficient, and that the country's first line of defence for ensuring financial stability should be reliance on an effective framework of financial market oversight and regulation designed to dampen or offset the effects of significant financial excesses. To the extent that such an effective policy framework exists, the central bank will have greater ability to focus the use of its conventional policy tool on the delivery of price stability. This view is also carefully explained in the background information on the most recent renewal of Canada's inflation-control target (Bank of Canada 2011, section 4). This brings us to the second aspect of ensuring financial stability.

Better "Macro-Prudential" Regulation and Oversight

The interconnectedness of financial institutions means that policymakers need to pay as much attention to the stability of the overall financial system as they regularly pay to the stability of individual institutions within that system. "Micro-prudential regulation" is directed at ensuring the prudent behaviour of individual institutions and protecting their depositors — both while taking the external environment as more-or-less given. Examples of such regulation include setting appropriate loan-loss provisions and reserve and

capital requirements, determining upper limits on financial institutions' leverage, and establishing maximum loan-to-value ratios for residential mortgages.

"Macro-prudential regulation," in contrast, is aimed at guarding against systemic risks and ensuring the overall stability of the financial system. It recognizes not only the kinds of shocks that might occur to the overall financial system and from what sources, but also how the behaviour or collapse of one institution can influence other institutions and, eventually, the financial system. Spillovers and positive feedback loops, and thus the potential for systemic instability, are key themes in the macro-prudential mindset (International Monetary Fund 2011; Longworth 2011).

While micro-prudential regulation and methods of oversight are well developed in many industrialized countries, the long period of relative financial stability following the Second World War probably explains why macro-prudential regulation and oversight were largely ignored, or at least received much less emphasis. A recent Bank of England paper on the role of macro-prudential policy in the United Kingdom contains a statement that applies equally to many economies:

Macro-prudential policy is a missing ingredient from the current policy framework. In the past few decades, there has been too great a gap between macroeconomic policy and the regulation of individual financial institutions. If macro-prudential policy had been able to increase the resilience of the system and to moderate exuberance in the supply of credit to the economy, and especially to the financial system, the crisis would have been less costly. (2009, 3.)

The procyclicality of credit and leverage that is a natural aspect of the economic cycle (Fisher 1933, Borio and White 2004, Geanakoplos 2010) leads macro-prudential regulation to focus on the role of countercyclical policy tools, which typically are time-varying versions of existing micro-prudential tools. Examples include the requirement that either

minimum ratios of bank capital (to risk-adjusted assets) rise or leverage restrictions become tighter during the upswing of the credit cycle or that, under the same conditions, limits on loan-to-value ratios for home mortgages become tighter. A key challenge when using such countercyclical regulations is to determine the appropriate time or conditions for implementing a specific requirement. For example, at what precise stage in the credit cycle should capital requirements be raised and by how much? And what is the tradeoff between raising capital requirements and reducing the maximum loan-to-value ratio? Such questions might not yet have clear answers, though central banks and finance ministries in many countries are now examining them directly.

Given the globalized nature of financial markets, the drive for better macro-prudential regulation understandably has taken place with a great deal of international coordination — both necessary and desirable to ensure that regulations do not inappropriately distort activity across countries. Central banks, including the Bank of Canada, are actively involved in these discussions under the auspices of the Basel Committee on Banking Supervision (within the Bank for International Settlements), which develops policy recommendations. Some suggested reforms regarding appropriate levels of liquidity and bank capital have recently been accepted by the G20 countries and are expected to be implemented in the near future.⁴

The Need for National Institutions

Once better macro-prudential regulations are

designed and passed into law, they still will not contribute to enhanced financial stability unless an effective system of oversight and policy coordination is solidly in place. Though the design of new regulations is taking place through a process of thorough international coordination, oversight and implementation will be left to various national governments, whose efforts will be reinforced by international oversight provided by the Financial Stability Board (which reports to the G20). Each country, however, will be responsible for creating its own system for macro-prudential oversight.

What does such a system require? First, a group of organizations, each knowledgeable about the various parts of a modern financial system and cognizant of the many linkages between these parts, needs to be assembled to monitor developments in the overall financial system. In addition, this group should examine how domestic real and financial markets are linked to markets in other countries. Then, after evaluating conditions domestically and abroad, the group should determine the appropriate time to implement countercyclical policies and the specific policies that are best suited to the situation. Since a range of countercyclical tools is available, this determination should be based on a thorough analysis of the various macro-prudential tools and the tradeoffs among them. The group should also have both the authority and the political will to implement such policies in a timely and effective manner.

The Canadian Status Quo

Does Canada have such a system in place? Since its creation in the 1980s, the Office of the

4 For the Basel Committee's recommendations, see Bank for International Settlements (2010c), which focuses on liquidity, and (2010b), which focuses on capital. For reviews of some of the many possible regulatory changes and their potential economic effects, see Masson and Pattison (2009); Bank for International Settlements (2010a); Bank of Canada (2010); TD Economics (2010); and Longworth (2011).

Superintendent of Financial Institutions (OSFI) has played the leading role in micro-prudential regulation and oversight. Through regular meetings of the Financial Institution Supervisory Committee (FISC), OSFI is brought together with, and receives advice from, the Bank of Canada, the Canada Deposit Insurance Corporation (CDIC), the federal Department of Finance, and the Financial Consumer Agency of Canada. In this way, various policy authorities from different parts of the Canadian financial system can share their views about important issues likely to affect the health of Canada's financial institutions (Le Pan 2009). FISC's mandate, however, is not about ensuring overall financial stability; rather, it is to advise OSFI about its central responsibility for micro-prudential regulation. Moreover, the various provincial securities regulators and Canada Mortgage and Housing Corporation (CMHC) — the country's largest provider of residential mortgage insurance — are not regular members of FISC. Given its specific mandate and representation, therefore, FISC is not well suited to be the central body providing macro-prudential oversight and policy coordination; to ensure Canada's future financial stability, some other institutional body is needed.

Yet there is probably no need to start from scratch. The existing Senior Advisory Committee (SAC), chaired by the deputy minister of finance, brings together the same membership as FISC to discuss legislative and regulatory issues pertaining to the overall financial system. In recent years, SAC has successfully addressed some issues pertaining to financial stability and has developed recommendations regarding changes in mortgage and mortgage insurance regulations; moreover, CMHC was invited to participate in many of these discussions.⁵

Necessary Canadian Improvements

SAC's current structure offers a solid foundation on which to build an effective body for oversight and policy coordination aimed at ensuring Canada's financial stability. Before SAC can perform this role adequately, however, issues must be addressed relating to the committee's mandate and responsibilities; its membership and formality; the appropriate knowledge and skills of committee members; and the committee's appropriate leadership.

First, it would be necessary to expand SAC's mandate to charge it explicitly with ensuring Canada's overall financial stability, while having it continue in its current role of discussing legislative and regulatory issues pertaining to the financial sector, some of which would overlap with the objective of financial stability. Such an expanded mandate would require SAC's being given the authority to make the policy decisions necessary to achieve its objective. It would also require that representatives of all of SAC's members attend meetings and share pertinent information with the rest of the committee — avoiding, in particular, any withholding of information as a result of interdepartmental rivalry. To make this work, it probably would be necessary to add matters of financial stability to the formal mandate of each SAC member. In short, if SAC is to be successful at providing effective macro-prudential oversight and policy coordination, it must be tasked specifically with this job, and its members must share the same objective and be prepared to participate in the process in good faith.

Second, SAC's current informal structure and small size might be important liabilities. Since securities and housing markets played such major roles in the recent financial crisis, no body for providing macro-prudential oversight and policy

5 My description of SAC draws on several conversations with current and former senior officials at Finance Canada and the Bank of Canada.

coordination is likely to be effective unless it includes CMHC and, if one is eventually created, a national securities regulator.⁶ Unlike FISC, which is a legislated committee whose formal minutes are sent to the minister of finance, who then can learn of any substantive disagreements among the members, SAC is a less formal gathering of a smaller set of key decisionmakers. Making SAC a formal legislated committee would help establish responsibilities and accountability. Disagreements among its members, as well as its final policy recommendations, would be recorded in the minutes, a copy of which would be sent to the minister of finance. Such a process would lead individual SAC members to take their deliberations more seriously and help to ensure that important policy issues were discussed in a timely manner. In addition, formalizing the committee and process in this manner would increase the transparency of policymaking and increase the minister's — and hence the federal government's — accountability for maintaining overall financial stability. As Laidler (1999) has noted, transparency and accountability are essential aspects of a coherent monetary order; there is no reason to think that they are any less important for macro-prudential oversight and policy coordination.

Third, it would be crucial for each member of any newly designed SAC to be able to discuss and debate the many cross-cutting aspects of financial stability. Being specialists in their own financial market areas but lacking the ability to analyze and

debate developments in other areas, committee members would be less able to identify possible problems and debate effective policy solutions. As they now stand, the skills of likely members of a reformed and expanded SAC — the Bank of Canada, Finance Canada, OSFI, CDIC, CMHC, and a potential national securities regulator — would be quite unequal for analyzing and debating developments in financial markets, the sustainability of certain financial patterns, and the costs and benefits of various policy actions. For example, the Bank of Canada's ability to analyze key existing macro forces and the linkages between the various parts of the financial system is surely unmatched, while its detailed knowledge of developments in the housing market likely does not match that of CMHC, and its knowledge of financial institutions' common exposures likely does not match that of OSFI. Similarly, while each of CDIC, OSFI, and CMHC is presumably expert in its own domain, each knows far less about the domains of the other organizations. Accordingly, any expanded and formalized SAC should ensure that each of its members has the human capital to allow balanced and fruitful discussions and debates to take place.

Leadership and Final Authority

The final important issue pertaining to a newly designed and expanded SAC is to determine the committee's appropriate leadership. In particular, what should be the appropriate role played by

6 Several reviewers of this *Commentary* have noted that CMHC's broad range of activities — from providing mortgage insurance and creating mortgage-backed securities to developing housing policy and conducting housing research — does not make it a natural member of a body devoted to the maintenance of financial stability. CMHC's unusual combination of activities is reflected in its accountability structure: regulations on mortgages and mortgage insurance are made by the minister of finance, even though the minister of human resources and skills development is formally responsible for CMHC. While I am sympathetic to this view, I note that the scope of mortgage insurance makes it an important consideration for the stability of the overall financial system and that the terms of residential mortgages and mortgage insurance are potentially valuable macro-prudential tools. A possible solution would be to create a new organization that would take over CMHC's financial activities and be under the responsibility of the finance minister, and to make this new organization a member of SAC. A smaller and non-financial CMHC responsible for, say, social housing activities could then continue to operate and be accountable to the minister of human resources and skills development.

the Bank of Canada, and would this involve expanding its existing powers? Should the governor of the Bank be in charge of macro-prudential oversight and control the use of macro-prudential instruments, while using SAC as a valuable but purely advisory body? Or should the Bank merely participate in the deliberations of SAC, along with the other members, while some other organization plays the leading role? Or is there some intermediate position in which the Bank plays a genuine leadership role while leaving the final authority for decisions to some other party?

An interesting by-product of the half-century of relative financial stability that followed the Second World War is the emphasis central banks came to place on the reduction and control of inflation, which — especially during the late 1960s and 1970s — was viewed as the predominant economic challenge. Over time, economists and policymakers alike came to view price stability as central banks' primary — and sometimes their only — task. In a fascinating recent paper describing the extent to which contemporary monetary policymakers have been ahead of the theoretical literature, Howitt (forthcoming) reminds us that many central banks were created largely out of the need to ensure financial stability, with concerns about inflation playing little or no role. The Bank of England came to prominence when a lender of last resort was needed during a series of financial panics in the late eighteenth and early nineteenth centuries. The creation of the US Federal Reserve in 1913 was motivated partly by the financial panic of 1907, which eventually was tamed through a combination of the convening power of J.P. Morgan and the unmatched financial resources of the US government (Johnson and Kwak 2011). The Bank

of Canada opened its doors in 1935 when a toxic combination of financial instability, economic depression, and unprecedented deflation were the challenges of the time.

Respect for this history might lead some to think it only natural that central banks be given the primary mandate for ensuring both financial stability and price stability, including control over the various macro-prudential policy tools. Yet the greater sophistication of financial markets and the associated regulations and regulatory bodies, combined with a greater appreciation for policy transparency and political accountability, makes policy setting today very different from that of a century or more ago when central banks first arrived on the scene. And these differences suggest to some that central banks should be intimately involved in — but not ultimately responsible for — macro-prudential oversight and policy coordination.⁷

In the Canadian context, there is room for debate regarding the leadership of a newly designed and expanded SAC. Some argue that the Bank of Canada should be given primary responsibility for ensuring financial stability (as well as price stability) including control over the full set of macro-prudential tools. With this responsibility, the governor of the Bank of Canada would be the obvious choice to chair the newly expanded SAC, which would then effectively be an advisory body to the Bank. There is some compelling logic for this view. The Bank would have greater expertise on macroeconomics and financial stability than would any other member of the committee, and would be better placed to understand the relationships and tradeoffs between financial stability and price stability; as well, the coordination of macro-prudential tools with more familiar monetary policy

7 See European Central Bank (2001) for a brief review of both sides of this argument for both micro-prudential and macro-prudential regulation and oversight. A more current discussion and review of evolving practises is found in Bank for International Settlements (2011).

tools would be an important policy consideration.⁸ In addition, if new macro-prudential regulations involved countercyclical indicators or thresholds, someone would need to determine when to pull the cyclical “trigger”; since the Bank controls the most important countercyclical tool in the government’s policy arsenal, it reasonably should take the lead in coordinating such policy decisions. Finally, the judicious use of macro-prudential tools sometimes would require policy actions that are politically unpopular in the short run but valuable in ensuring long-run financial stability. The wish to avoid this kind of political tension has led Canada and other countries to create central banks that are operationally independent; the same logic suggests that central banks could be given full responsibility for taking policy actions to ensure financial stability.

On the other side of the debate are those who fear that an expansion of the Bank’s formal powers and responsibilities eventually would erode its valuable operational independence, with negative implications for the Bank’s ultimate ability to maintain price stability. Getting the Bank more closely involved in the regulation of financial institutions and financial markets, they argue, would risk exposing it to excessive political influence and threaten its independence, an asset that can be protected most effectively by keeping the Bank’s formal mandate as narrow as possible.

A related concern involves placing control over various policy instruments in the hands of the Bank of Canada. For example, imagine a contentious discussion within a newly expanded SAC that involved changes to bank capital ratios or mortgage insurance or limits on loan-to-value ratios. It would be one thing for the Bank to argue strongly within SAC that financial market conditions warranted an

increase in capital ratios or a reduction in maximum loan-to-value ratios, but quite another for the Bank to have the power to *require* that such changes be made, perhaps over the disagreement of other SAC members.

According to this view, the final say on such policy decisions should not rest with the Bank. The appropriate role for the Bank in macro-prudential oversight and regulation would then be simply as one member of the committee. All members of SAC would have their mandates expanded to include the maintenance of financial stability, and all would participate in regular discussions regarding oversight and the need to make policy adjustments. In this way, the Bank’s expertise would be available to SAC without creating an undue expansion of its powers.

An intermediate option, which I support, would be for the Bank of Canada to take a clear leadership position in the operation of a reformed and expanded SAC — to ensure appropriate issues are discussed in a timely manner and with adequate attention paid to the often subtle linkages between the various parts of the financial system — but to leave the final authority for policy decisions to the minister of finance (see Crow 2009a). The Bank should also play a leading role in setting the agenda and in directing the overall discussion within the committee; it would then bring its analysis and perspective to the debates and have its views recorded in the official minutes to be reviewed by the minister.

Who should chair a newly designed SAC? The two obvious choices are the governor of the Bank of the Canada and the deputy minister of finance. The Bank’s expertise in matters of macroeconomics and financial markets and its narrower policy

8 While the Bank may have unmatched expertise regarding the pro-cyclical aspects of financial stability, and how they relate to the use of macro-prudential tools, it is likely that expertise regarding the interconnectedness of financial institutions and their common exposures to shocks is most concentrated within OSFI. This distinction, and the separation of the relevant expertise, underlines the collective nature of effective macro-prudential oversight.

mandate suggest that the governor might be best placed to chair meetings, as this would ensure that the appropriate issues are discussed and debated in a timely manner. In contrast, the deputy minister of finance has a much wider policy mandate and manages a department that often needs to be steered carefully to avoid being drawn into the political agenda of the government of the day, and so might be unable to give the committee the close attention it deserved. On the other hand, since SAC would be discussing the use of a potentially large set of macro-prudential policy tools managed and overseen by several different government agencies, matters of political accountability and the need to protect the Bank's independence suggest that the deputy minister might be the most appropriate chair after all.

There is an inevitable tension here that must be accepted, and there is unlikely to be a perfect choice. On the one hand, it is important that the Bank play a clear leadership role in driving the macro-prudential discussion and debate in a timely manner; on the other hand it is crucial to protect the Bank's operational independence so as not to undermine its ability to deliver long-run price stability. On balance, perhaps the best solution is for the governor and the deputy minister to chair the committee jointly and to pass the committee's policy recommendations directly on to the minister of finance. The minister would then be ultimately accountable for the decisions taken, both to the government and, through Parliament, to the Canadian people.

FINAL REMARKS

Canada's coherent monetary order has delivered considerable benefits for many years. What is now needed is to establish an equally coherent order for financial stability. For this task to be completed, however, there is still much work to do. Designing an institutional framework for macro-prudential oversight and policy coordination, and determining the Bank of Canada's appropriate role within it,

is not straightforward. It will require the federal government, first, to recognize the importance of the issue and, second, to take the necessary time to assemble the framework with the appropriate parties involved and to assign responsibilities clearly. Doing it right will involve bringing together various policy authorities with different perspectives, specialties, and primary mandates. Such complexities, however, would be an integral part of any structure devoted to taking a more systemic view of financial institutions and markets.

The successful evolution of Canadian monetary policy is not just a reflection of the success or failure of random policy developments; rather, from the mid-1970s onward, policymakers at the Bank of Canada have sought continually to make genuine policy improvements, and these have resulted in Canada's existing monetary coherence. For example, their search for a "nominal anchor" that would place limits on the behaviour of prices eventually led to the compelling notion of inflation targeting, an idea that clearly has succeeded.

In like manner, with regard to macro-prudential oversight, the federal government also needs to search continually for policy improvements, rather than automatically accept the status quo. Ottawa needs to examine whether the current institutional arrangements for oversight and policy coordination are adequate to prevent a crisis in the face of large future financial shocks. The prudent and responsible action on the federal government's part is to ensure that the difficult questions are being asked, the genuine debates among the relevant parties are being resolved, and the necessary responsibilities are being assigned clearly.

Canada's political leaders have accepted congratulations from around the world for the country's sound financial system. Under the circumstances, it would be embarrassing indeed to discover that the system actually lacked the resilience to withstand a future crisis. No political price would have to be paid for quietly asking the right questions and making the appropriate institutional changes behind the scenes; an almost

unthinkable political price would be paid if the necessary reforms are not taken and a crisis occurred. Like purchasing insurance to protect against possible future costs, a straightforward approach to risk management should lead the federal government to devote the time and financial resources to ensure that Canada's system of macro-prudential oversight and policy coordination is as effective as possible.

The specific policy recommendations I have developed in this *Commentary* relate to the design of a more effective structure for macro-prudential oversight and policy coordination. They can be easily summarized:

1. The maintenance of financial stability in Canada should be added to the mandate of the existing Senior Advisory Committee.
2. SAC should become a legislated committee whose formal minutes should be sent to the minister of finance. Its membership should be expanded to include the CMHC (or perhaps its financial arm) and, if one is created, a national securities regulator.
3. The federal government should ensure that all SAC members have the appropriate resources to enable them to understand more fully aspects of the financial system that are beyond their direct concern.
4. The Bank of Canada should take a clear intellectual leadership role within SAC, and the governor of the Bank and the deputy minister of finance should co-chair the committee.
5. The co-chairs should make clear policy recommendations directly to the minister of finance, who would be ultimately responsible for all policy decisions.

A better system for macro-prudential oversight and policy coordination should not necessarily involve “more” government. Rather, it should be about ensuring that Canada's underlying policies and policy frameworks allow financial markets to operate more or less on their own and to function well in the face of various kinds of shocks. If the policy framework and macro-prudential regulations work well, future shocks will be less likely to lead to economic crises — and there will be less need for government to intervene in large and dramatic ways. In short, a better policy framework now might well permit “less” government later.

Economic crises naturally make government actions easier to justify. A particular policy initiative might or might not be a sensible response to an economic or financial crisis, but the mere existence of a crisis makes it far easier for a government to convince the people of the need for bold action. The unfortunate corollary, however, is that, when crises pass, it is all too easy for a government to move on to other things, secure in the belief that there is no further need for serious policy changes, even though the problems that led to the crisis might still lurk beneath the surface.

That Canada's financial system has fared far better over the past few years than have those of the United States or the United Kingdom could indicate that this country has no serious policy challenges to solve within the financial sector; it could also simply reflect Canada's good luck — or perhaps it is a bit of both. In any event, the federal government would be prudent to hope for the best while planning for the worst, and to view existing challenges as an opportunity to design a policy framework that is sufficiently resilient to meet the inevitable challenges that lie ahead.

REFERENCES

- Bank for International Settlements. 2010a. "An Assessment of the Long-Term Impact of Stronger Capital and Liquidity Requirements." Basel: Bank for International Settlements, Committee on Banking Supervision. August.
- . 2010b. "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems." Basel: Bank for International Settlements, Committee on Banking Supervision. December.
- . 2010c. "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring." Basel: Bank for International Settlements, Committee on Banking Supervision. December.
- . 2011. "Central Bank Governance and Financial Stability." Basel: Bank for International Settlements, Central Bank Governance Group. May.
- Bank of Canada. 2010. "Strengthening International Capital and Liquidity Standards: A Macroeconomic Impact Assessment for Canada." Ottawa. August.
- . 2011. "Renewal of the Inflation-Control Target: Background Information — November 2011." Ottawa.
- Bank of England. 2009. "The Role of Macro-prudential Policy: A Discussion Paper." London. November.
- Boivin, J., T. Lane, and C. Meh. 2010. "Should Monetary Policy Be Used to Counteract Financial Imbalances?" *Bank of Canada Review* (Summer): 23–36.
- Borio, C., and M. Drehmann. 2009a. "Assessing the Risk of Banking Crises — Revisited." *BIS Quarterly Review* (March): 29–46.
- . 2009b. "Towards an Operational Framework for Financial Stability: 'Fuzzy' Measurement and Its Consequences." BIS Working Paper 284. Basel: Bank for International Settlements.
- Borio, C., and W. White. 2004. "Whither Monetary and Financial Stability? The Implications of Evolving Policy Regimes." BIS Working Paper 147. Basel: Bank for International Settlements.
- Carney, M. 2009. "Some Considerations on Using Monetary Policy to Stabilize Economic Activity." Remarks to a symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, WY, August 22.
- Crow, J. 2009a. "A Bank for All Seasons: The Bank of Canada and the Regulatory Challenge." *e-brief* no. 82. Toronto: C.D. Howe Institute. June 22.
- . 2009b. *Canada's Difficult Experience in Reducing Inflation: Cautionary Lessons*. Commentary 299. Toronto: C.D. Howe Institute.
- European Central Bank. 2001. "The Role of Central Banks in Prudential Supervision." Frankfurt am Main. March.
- Fisher, I. 1933. "The Debt-Deflation Theory of Great Depressions." *Econometrica* 1 (4): 337–57.
- Fortin, P. 1996. "The Great Canadian Slump." *Canadian Journal of Economics* 29 (4): 761–87.
- Freedman, C., and C. Goodlet. 2007. *Financial Stability: What It Is and Why It Matters*. Commentary 256. Toronto: C.D. Howe Institute.
- Freedman, C., and T. Macklem. 1998. "A Comment on 'The Great Canadian Slump'." *Canadian Journal of Economics* 31 (3): 646–65.
- Friedman, M. 1968. "The Role of Monetary Policy." *American Economic Review* 58 (1): 1–17.
- Galbraith, J.K. 1994. *A Short History of Financial Euphoria*. New York: Penguin.
- Geanakoplos, J. 2010. "Solving the Present Crisis and Managing the Leverage Cycle." *Economic Policy Review* (Federal Reserve Bank of New York), August, pp. 101–31.
- He, Z. 2010. "Evaluating the Effect of the Bank of Canada's Conditional Commitment Policy." Bank of Canada Discussion Paper 2010-11. Ottawa: Bank of Canada.
- Howitt, P. Forthcoming. "What Have Central Bankers Learned from Modern Macro Theory?" *Journal of Macroeconomics*.

- International Monetary Fund. 2011. *Global Financial Stability Report: Grappling with Crisis Legacies*. Washington, DC. September.
- Johnson, S., and J. Kwak. 2011. *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*. New York: Vintage Books.
- Kindleberger, C., and R. Aliber. 2005. *Manias, Panics, and Crashes: A History of Financial Crises*, 5th ed. Hoboken, NJ: John Wiley & Sons.
- Laidler, D. 1999. "The Exchange-Rate Regime and Canada's Monetary Order." Bank of Canada Working Paper 99-7. Ottawa: Bank of Canada.
- Laidler, D., and R. Banerjee. 2008. *Unstable Foundations: Asset Markets, Inflation Targets, and Canada's 2011 Policy Choices*. Commentary 278. Toronto: C.D. Howe Institute.
- Laidler, D., and P. Bergevin. 2010. *Putting Money Back into Monetary Policy: A Monetary Anchor for Price and Financial Stability*. Commentary 312. Toronto: C.D. Howe Institute.
- Laidler, D., and W.B.P. Robson. 1994. *The Great Canadian Disinflation: The Economics and Politics of Monetary Policy in Canada, 1988-93*. Policy Study 19. Toronto: C.D. Howe Institute.
- . 2004. *Two Percent Target: The Context, Theory, and Practice of Canadian Monetary Policy since 1991*. Policy Study 38. Toronto: C.D. Howe Institute.
- Le Pan, N. 2009. *Look Before You Leap*. Commentary 296. Toronto: C.D. Howe Institute.
- Longworth, D. 2002. "Inflation and the Macroeconomy: Changes from the 1980s to the 1990s." *Bank of Canada Review* (Spring): 3-18.
- . 2011. "A Survey of Macro-prudential Policy Issues." Mimeo. March.
- Masson, P., and J. Pattison. 2009. "International Financial Policy Reform and Options for Canada: Think Globally, Act Locally." Ottawa: Conference Board of Canada.
- Ragan, C. 1998. "On the Believable Benefits of Low Inflation." Bank of Canada Working Paper 98-15. Ottawa: Bank of Canada.
- . 2011. "The Evolution of Canadian Monetary Policy: Successful Ideas through Natural Selection." *In New Directions for Intelligent Government in Canada: Papers in Honour of Ian Stewart*, edited by A. Sharpe and F. Gorbet. Ottawa: Centre for the Study of Living Standards.
- Reinhart, C., and V. Reinhart. 2010. "After the Fall." University of Maryland and American Enterprise Institute. Mimeo.
- Reinhart, C., and K. Rogoff. 2009. *This Time Is Different: Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press.
- TD Economics. 2010. "Financial Regulation Reform: A Myriad of Double-Edged Swords." TD Economics Special Report. Toronto. July 14.
- White, W. 2009. "Should Monetary Policy 'Lean' or 'Clean'?" Working Paper 34. Dallas: Federal Reserve Bank of Dallas, Globalization and Monetary Policy Institute.

RECENT C.D. HOWE INSTITUTE PUBLICATIONS

- January 2012 Robson, William B.P. “Fixing MP Pensions: Parliamentarians Must Lead Canada’s Move to Fairer, and Better-Funded Retirements.” C.D. Howe Institute Backgrounder 146.
- January 2012 Feehan, James P. “Newfoundland’s Electricity Options: Making the Right Choice Requires an Efficient Pricing Regime.” C.D. Howe Institute E-Brief.
- December 2011 Ambachtsheer, Keith P., and Edward J. Waitzer. “Saving Pooled Registered Pension Plans: It’s Up To the Provinces.” C.D. Howe Institute E-Brief.
- December 2011 Laurin, Alexandre, and William B.P. Robson. “Ottawa’s Pension Gap: The Growing and Under-reported Cost of Federal Employee Pensions.” C.D. Howe Institute E-Brief.
- December 2011 Busby, Colin, and William B.P. Robson. “The Retooling Challenge: Canada’s Struggle to Close the Capital Investment Gap.” C.D. Howe Institute E-Brief.
- December 2011 Bergevin, Philippe, and Daniel Schwanen. *Reforming the Investment Canada Act: Walk More Softly, Carry a Bigger Stick*. C.D. Howe Institute Commentary 337.
- November 2011 Dachis, Benjamin, and William B.P. Robson. “Holding Canada’s Cities to Account: An Assessment of Municipal Fiscal Management.” C.D. Howe Institute Backgrounder 145.
- November 2011 Drummond, Don. *Therapy or Surgery? A Prescription for Canada’s Health System*. C.D. Howe Institute Benefactors Lecture, 2011.
- November 2011 Ragan, Christopher. “The Roads Not Taken: Why the Bank of Canada Stayed With Inflation Targeting.” C.D. Howe Institute E-Brief.
- November 2011 Busby, Colin, and David Gray. “Mending Canada’s Employment Insurance Quilt: The Case for Restoring Equity” C.D. Howe Institute Backgrounder 144.
- October 2011 Pierlot, James, and Faisal Siddiqi. *Legal for Life: Why Canadians Need a Lifetime Retirement Saving Limit*. C.D. Howe Institute Commentary 336.
- October 2011 Beach, Charles M., Alan G. Green, and Christopher Worswick. *Toward Improving Canada’s Skilled Immigration Policy: An Evaluation Approach*. C.D. Howe Institute Policy Study 45.
- October 2011 Schwanen, Daniel. “Go Big or Go Home: Priorities for the Canada-EU Economic And Trade Agreement” C.D. Howe Institute Backgrounder 143.

SUPPORT THE INSTITUTE

For more information on supporting the C.D. Howe Institute’s vital policy work, through charitable giving or membership, please go to www.cdhowe.org or call 416-865-1904. Learn more about the Institute’s activities and how to make a donation at the same time. You will receive a tax receipt for your gift.

A REPUTATION FOR INDEPENDENT, NONPARTISAN RESEARCH

The C.D. Howe Institute’s reputation for independent, reasoned and relevant public policy research of the highest quality is its chief asset, and underpins the credibility and effectiveness of its work. Independence and nonpartisanship are core Institute values that inform its approach to research, guide the actions of its professional staff and limit the types of financial contributions that the Institute will accept.

For our full Independence and Nonpartisanship Policy go to www.cdhowe.org.



C.D. HOWE
INSTITUTE

67 Yonge Street, Suite 300,
Toronto, Ontario
M5E 1J8

Canadian Publication Mail Sales
Product Agreement #40003848