

THE EBB AND FLOW OF BANK OF CANADA INDEPENDENCE

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Executive Summary

Governments in industrialized countries have delegated monetary policy to their central banks in varying degrees. Many papers have been written assessing the degree of independence that governments have granted to their central banks using the terms of the legislation that governs them. The Bank of Canada ends up in the middle of the pack in terms of independence. Still, the relationships between governments and central banks may go beyond formal legislation.

This paper describes the evolution of the central bank-government relationship in Canada: a mixture of ups and downs. The downs include times when the relationship becomes strained and threatens the Bank's autonomy. These downs can be initiated by the Bank itself, the government, or by external events. Fortunately, most of the downs have been short-lived while the ups, in contrast, have often led to permanent change.

The positive changes have moved the Bank from ambiguity and opacity during its early years to a more structured relationship with the government that has defined ultimate responsibility for policy, given the Bank a clear mandate, and left operational responsibility to the Bank. The changes have also made it clear that the governor serves under good behaviour while still providing a way for the government to assert its will when necessary. This study shows that the Bank-government relationship has been—and has had to be—dynamic to adjust to changing circumstances and to the deeper understanding of the role of monetary policy.

The paper also demonstrates that the quality of the central bank-government relationship cannot be captured solely by measures based on the framework of central bank law. Major changes have been made through other means. Only the change in the governor's status has been accomplished through legislation. Agreements, understandings, personal interactions and individual values have been vital to the relationship between Canada's government and its central bank.

1. Introduction

The Bank of Canada serves as a tool of government that conducts monetary policy on its behalf. Such delegation is common: governments delegate their powers to their various arms in differing degrees. At one extreme, the Supreme Court has the greatest degree of independence in its job of interpreting the law and determining its constitutional validity. But not even the Supreme Court has absolute power. The “notwithstanding clause” gives the federal and provincial governments the power under certain conditions to allow laws to stand that are at variance with the Charter of Rights and Freedoms. At the other extreme, the least independent arms include provincial highways departments where stretches of smooth, well-maintained roads can be found in areas that support the party in power whereas bumpy roads full of potholes can be found in areas that do not. Central banks are somewhere in between: closer to the courts in most developed economies.

This paper examines the relationship between a government and its central bank. What does central bank independence mean? Why should a central bank be independent? What obligations does independence impose on central banks? On governments? Does actual or effective independence differ from legal independence? This paper focuses on the status of the Bank of Canada and the ways it has evolved since its creation in 1934.

The term independence will be used as a shorthand for the features of the relationship between a government and its central bank. Rather than focusing on measures of independence, this paper will examine those features of the relationship between a government and its central bank, especially those through which a government delegates its responsibility for monetary policy to the bank.

2. Central Bank Independence

The case for central bank independence

The case for an independent central bank arises from the principal-agent relationship between the public—the principal—and the government—its agent.¹ The public would benefit from having the government make and keep a long-run commitment to price stability. Such a commitment reduces uncertainty, allowing workers and employers to establish expectations about inflation. These anchored expectations, in turn, support the commitment.

As in other principal-agent relationships, the interests of government, as agent, may differ from the interests of its principal, the public. Paul Tucker, a British economist and formerly the Deputy Governor of the Bank of England, argues that a government should delegate its functions to an independent agency “only... if there is a problem of credibly committing to a settled policy regime (Tucker, 2018: 589). In the case at hand, a government’s commitment to long-term price stability may not be credible because it may see an immediate advantage in departing from its commitment to price stability. Such a departure may be tempting for a government around the time of an election, hoping that a strong economy will raise its chances of re-election before the resulting inflation becomes apparent to the public. Though having ultimate responsibility for monetary policy in a democratic society, the government needs to escape the conflict between a long-run commitment to price stability and politically motivated short-run opportunism. The delegation of monetary policy to a central bank provides the government with a way to do so. By setting a mandate for price stability for the central bank as its agent, the government’s commitment to low inflation will be more credible. The central

¹ A principal-agent relationship is a situation where one entity acts on behalf of another in an independent relationship. In these situations, one side makes decisions on behalf of the other. These relationships often have to take account of differences of interest between the principal and its agent.

bank can, if properly constituted, be immune to the appeal of short-term opportunism and stick to the long-term plan.

Independence has several dimensions. Goal independence refers to a central bank being able to set its own policy goals. Instrument independence, in contrast, refers to a central bank's ability to choose the measures by which it achieves its goals. These types of independence have different implications for a government. Its delegation of the goals of monetary policy to a central bank does not absolve a government of responsibility. In the words of a former governor of the Bank of Japan, "in a democratic polity, a central bank cannot be a kingdom" (Shirakawa, 2021: 78). On the other hand, instrument independence leaves the practical problem of the choice of the means for attaining the goals up to the central bank.

Measuring independence

Many studies have developed measures of central banks' independence based on their governing legislation. Among the criteria used are the process for selecting the governor; the length of the governor's term; the bank's role in determining its mandate, conditions, and terms of its lending to government; the responsibility for setting interest rate policy; and the role in banking supervision. Among the most comprehensive studies are those by Garriga (2016), who develops measures of independence for 182 countries between 1970 and 2012, and by the team of Laurens, Arnone, and Segalotto (2009) (herein after referred to as LAS) from the International Monetary Fund, who develop measures of political and economic independence for over 100 central banks in 2003.

Table 1 shows Garriga's ranking of the central banks' independence and table 2 shows Laurens, Arnone, and Segalotto's measures of political and economic independence. Canada performs no better than middle of the pack on any of the three measures, trailing the European Central Bank and the Swiss central bank by a substantial margin. Canada's ranking was lowered in the LAS ranking by the government's role in selecting the governor and the board of directors. In addition, the Bank of Canada was downgraded because it was empowered to make advances to the government and lacked any provision for establishing the interest rates on the advances.

Care must be taken in interpreting these rankings. There are issues with respect to distinctions without differences, problems with stale legislation, the possibility of excessive independence, and the fact that legislation is only one element of the influences shaping central bank decisionmaking.

Table 1: Garriga Measures of Legal Central Bank Independence: 2013

European central bank	.80
Switzerland	.73
United Kingdom	.58
Japan	.55
Denmark	.50
Canada	.48
United States	.40
Norway	.38
New Zealand	.35
Sweden	.26
Australia	.25

Source: Haldane, 2020: 7, derived from Garriga, 2016.

Table 2: LAS Measures of Political and Economic Independence of Central Banks 2003

	Political	Economic
European central bank	1.0	1.0
Switzerland	.88	1.0
Sweden	.88	1.0
United States	.63	.88
Denmark	.5	1.0
Norway	.5	1.0
United Kingdom	.38	1.0
Canada	.38	.88
New Zealand	.25	.63
Australia	.25	1.0
Japan	.13	.75

Source: Laurens, Segalotto, and Arnone, 2009: Appendix VIII.

Distinctions without differences appear with respect to the procedures for selecting central bank governors. In cases where governments may not be directly involved in selecting governors, they may still be able to determine the choice at arm's length by selecting those responsible for the appointment.

Stale legislation refers to laws that govern activities that a central bank no longer performs or even never performed. Canada's downgrade with respect to advances is an illustration. Even though Canada's Bank Act does provide for advances to government, such advances show up in the Bank's year end balance sheet for 1935 only; the Bank has not made any advances since. This provision of the Act is effectively inoperative and has been for over 80 years.

The issue of excessive independence refers to the treatment of a government's role in setting central bank goals. As discussed earlier, democratic governments must ultimately remain in control of such a major function as monetary policy. In contrast, Garriga equates central bank independence as "the set of restrictions to the government's influence on the central bank management of monetary policy" (2016: 830). It needs to be recognized that a central bank's independence should not be viewed as an end in itself. Rather, it serves to place central banks in their proper role in society.²

Finally and most importantly, focus on legislation alone concentrates only on part of the framework that governs central banks. LAS recognize that a focus on legal independence may not capture the reality of a central bank's status relative to government (Laurens, Arnone, and Segalotto, 2009: 341). Similarly, LAS acknowledge that Cukierman recognized the difference and used turnover of central bank governors as a measure to reflect actual independence (LAS: 17). Still, the extent to which factors beyond the legal framework may affect the status of a central bank needs to be examined more fully. The remainder of this paper will illustrate the varied influences that have shaped the relationship between governments and central banks by using the Bank of Canada as a case study.

² Laurens, Arnone, and Segalotto recognize this aspect of independence and make a government's setting of its central bank's mandate a positive element of their ranking.

3. Delegation and Responsibility

As we have seen, the delegation of monetary policy to the central bank creates a conflict between the short-term interests of the government and the longer-term perspective of the central bank, the very reason for its existence. The analysis of central bank-government relations through the lens of principal-agent analysis examines the features that govern the relationship. This perspective shows that central bank independence is much richer than the legal framework in which it operates and depends also on agreements, understandings, friendships, and personal values. This section reviews these issues with respect to the responsibility for monetary policy and relates them to the experience of the Bank of Canada.

Ownership and responsibility

At the time of the Bank's founding in 1934, the government and the opposition held quite different views on the type of ownership the Bank should have and the conflicts arising from each. When recommending its creation, the Macmillan Commission declared that the Bank should be privately owned. So too did R.B. Bennett's Conservative government, claiming that such ownership would make the Bank immune from government pressure. The Liberal opposition, led by MacKenzie King, strongly opposed private ownership. There was agreement in Parliament that the Bank should be free from political interference and that the Bank, even if it were to be privately owned, should be "responsive to and act in harmony with government" (Watt, 1993: 20). King, however, worried that "The Bank of Canada starts out on its own, in the world of finance, free to do as it pleases... and this House of Commons... has no power to control whatever over this institution" (Watt, 1993: 10).

The Conservatives were in power and prevailed, making the Bank privately owned. This act may not have appeared as odd then as it would today in that other central banks including the Bank of England and the US Federal Reserve were privately owned at the time. The Conservatives introduced legislation in early 1934 authorizing the Bank to issue shares to the public with safeguards to ensure Canadian ownership and to avoid

domination by any private interest. Additional safeguards avoided undue influence from Canada's banks by providing that no director of the Bank of Canada could be appointed who was a director, officer, or an employee of a chartered bank.

Once the shares were issued, shareholders voted to select the board of directors. Despite there being over 60 contenders, all nine of the victorious candidates came from a slate put forward by the Canadian Chamber of Commerce, thwarting the government's intention to keep the Bank independent of specific outside interests.

Private ownership of the Bank proved to be short lived. Mackenzie King won the 1935 election and got his way. The Liberal government shifted the Bank to public ownership by subscribing enough to the Bank's capital to give it the government majority control. The transition to public ownership was completed in 1938 when the government acquired all the privately owned shares.

Delegation and responsibility

Responsibility for monetary policy became an issue in the late 1950s when the Bank under Governor James Coyne tightened money policy in the face of signs of increasing inflation, provoking a backlash unlike other episodes since World War II. The Bank's policy in this instance relied heavily on transparent measures such as bank rate hikes and open market operations rather than on the directives and moral suasion used in the past.³ This greater visibility and the broader impact of market measures helped fuel widespread opposition to the Bank's policy.

The Bank's monetary policy was not Coyne's only provocation to the Conservative government. At the request of the board of directors, Coyne broke with the Bank's tradition as a "cloistered tower of silence" (Newman, 1963: 295) when he gave eight speeches beginning in 1959 for the purpose of fostering public understanding of monetary policy. However, the speeches strayed well beyond the realm of monetary policy by strongly criticizing then-current government policies, asserting that Canadians were living beyond their means while deploring the twin deficits in government's budget and in the balance of payments.

³ Open market operations refer to the Bank buying and selling short-term securities in financial markets. The Bank pays for the securities it buys by exchanging claims on itself that chartered banks can use as reserves. Similarly, the Bank's sales of securities reduce the reserves available to banks. Bank reserves are the foundation, or base, for the money supply.

As a result, the government's responsibility for monetary policy became a hot potato with opposition parties trying to pin responsibility on the government and the government disowning it. The roles reversed abruptly when the party in power changed. The disowning of responsibility contrasted with the tradition that had been established early in the Bank's history when successive ministers of finance had acknowledged that the government was ultimately responsible for monetary policy and that the Bank governor must resign in the case of disagreement with the government.

The Bank's monetary stance together with Coyne's speeches made the government determined to get rid of him, but in doing so, it used the flimsy excuse of his pension arrangements to attack him with much hostility and rancor. The issue arose from a decision from the Bank's directors, to which Coyne was not a party, to more than double the pensions of former governors following the advice of a prominent pension consulting firm (Powell, 2009: 127). The decision taken at a February 1960 meeting remained apparently unnoticed by the government even though a senior Finance official attended the meeting and a director had given the minister a heads-up in advance. The decision only became an issue over a year later when the government sought to rid itself of an inconvenient governor.

While Coyne was condemned by the government for not overruling the directors' decision to raise his pension, for not informing them of the change, and for not publishing a notice of the change in the *Canada Gazette*, one director later dismissed these concerns as "complete and utter God-damned nonsense" (Newman, 1963: 309). The government's main reason for demanding Coyne's resignation was that his speeches had caused it trouble and embroiled the Bank of Canada in political controversy (Newman, 1963: 308).

To get rid of Coyne, the government introduced Bill C-114 in the House of Commons that declared "[T]he office of Governor of the Bank of Canada shall be deemed to have become vacant immediately upon the coming into force of this Act." The Conservatives used their huge majority to overwhelmingly pass the bill.

The Liberal-dominated Senate was another matter. It immediately referred the bill to the banking and commerce committee where Coyne would have his say. He declared that a vote in favour of the bill would be a guilty verdict and mark him as unfit to hold a high office while a verdict of not guilty would allow him to retire honourably" (Newman, 1963: 319).

The committee found Coyne "not guilty" and the Senate itself confirmed the verdict the next day. Only after the Senate vote did Coyne offer his resignation. In Coyne's opinion the vote "vindicated his conduct, his personal honour, and the integrity of the position of the Governor of the Bank of Canada" (Newman, 1963: 321).

A safety valve

The government's ultimate responsibility in a democratic society requires it to have a "safety-valve" which allows the government to take control of the central bank by issuing a directive or replacing its management, which it can use if monetary policy goes off the rails. Such a device needs to meet a high threshold before it can be used; otherwise the bank will lose its credibility for its commitment to a long-term monetary plan, the reason for its existence in the first place. A former governor has observed that the governor and senior deputy governor of the Bank of Canada serve "during good behaviour" and not "at the pleasure of the government" (Crow, 2002: 29). Good behaviour requires the government to have clear reasons for dismissing the current management.

On accepting the job as Coyne's successor, Louis Rasminsky wanted to make it clear that the government held ultimate responsibility for monetary policy. He repeated these views to the Royal Commission on Banking and Finance and to the House of Commons Committee on Finance, arguing the principle that "in the course of ordinary events, the Bank has responsibility [and] if the government disapproved of the policy... it has the right and the responsibility to direct the Bank as to the policy which the Bank is... to act" (Muirhead, 1999: 176).

Rasminsky proposed a mechanism by which the government could exert its control over the Bank when circumstances made it necessary. That mechanism consisted of three elements. First, government must issue "a written directive to the Governor concerning monetary policy, in specific terms and applicable for a specified period..."⁴ Further, the directive should be made public immediately by its publication in the *Canada Gazette* and be laid before Parliament within 15 days. Finally, the Bank shall comply with the directive. Implicit in the arrangement is that the governor must resign if unwilling to comply. The proposal was subsequently incorporated into the Bank of Canada Act of 1967.

This measure was a major step toward clarifying the division of responsibilities. It achieved a balance by allowing the government to assert its ultimate responsibility when necessary while setting a high threshold for the use of the safety valve by requiring the directive to be public and referred to Parliament. Its use would undoubtedly capture much attention and place the government on the defensive. So far it has never been used, though former Governor John Crow suggests that its use has been contemplated at least once (Crow, 2002: 33). The provision has remained unchanged to the present.

⁴ All references here are to the Bank of Canada Act, Section 14.

4. The Government-Central Bank Relationship: Policy Goals

Mandate

The features of the mandate issued by the government to the central bank will influence the success of its delegation. A clear mandate gives the central bank direction for using its powers for the government purpose while providing the government with a basis for monitoring the bank's performance. Delegation works best when the objectives in the mandate are measurable, avoiding ambiguity about the bank's performance. It may seem obvious, but the mandate should not include objectives that cannot be influenced by the central bank in any significant ways, such as addressing climate change, as their inclusion may raise expectations and cloud views of its performance. In addition, conflicting objectives, such as price stability and employment in the short run, should also be avoided as they cause uncertainty for the bank with respect to the direction of its efforts. They will also blur things, reducing the bank's accountability by raising the question whether failure to achieve an objective resulted from an emphasis on other objectives or the bank's poor performance. Finally, the mandate should avoid responsibilities that are shared with other agencies. Shared responsibilities suffer from a "commons" problem in that each party may limit its efforts, leaving tasks to the other (Murray, 2021: 3). The commons problem would be particularly acute for an agency which has little influence on the objective.

The alternative might be that both parties try to achieve the same objectives using their own tools and generate "overkill."

The preamble

The Bank of Canada Act's preamble formed the basis of the Bank's original mandate, stating

... it is desirable to establish a central bank... to regulate credit and currency in the best interests of the economic life of the

nation, to control and protect the external value of the national monetary unit and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of Canada. (R.S.C., 1985, c B-2. An Act Respecting the Bank of Canada)

Former Governor John Crow describes the preamble as saying

... a lot and rather little at the same time. Indeed, it says little precisely because it says so much, and in broad terms that have no simple definition. (Crow, 2002: 7)

The preamble offers neither guidance to the Bank nor any basis for its accountability to the government by its general vagueness and its coverage of so many issues without prioritization. Still, it remained the Bank's only guiding principle for over 60 years. Any workable objective for monetary policy was left to the discretion of the Bank itself.

The inflation target: a new mandate

In late 1990, less than a year after the New Zealand government had struck a pathbreaking agreement with its central bank with respect to its performance in controlling inflation, Canada's Department of Finance initiated a series of meetings with the Bank of Canada to consider adopting a target for price stability. The meetings resulted in a joint agreement to bring the rate of inflation down from its then current level of almost five percent to three percent by 1995, at which time the agreement would be reviewed.

The agreement effectively replaced the Preamble as the mandate to govern the Bank's monetary policy. In contrast to the Preamble, the agreement specified a single objective, the objective was measurable, and had a specific timeframe for its achievement. While the Bank's mandate up until then had been based on legislation, the change in the mandate became effective through an agreement between the two parties.

The agreement was renewed for another five years in 1995 with the goal revised in light of the achievement of the target for the first period. The new agreement reflected a longer-run stance by setting a target of two percent inflation within a band of one to three percent, a target that has remained unchanged.

The 2021 mandate renewal

In preparation for the 2021 renewal of the agreement, the Bank “ran a horse race” comparing alternatives to its flexible inflation-targeting, in each case based on the continuation of the two percent inflation target (Bank of Canada, 2021: 33). The alternatives included i) average inflation targeting, ii) a dual mandate that targets both inflation and unemployment, iii) targeting nominal gross domestic product and iv) price-level targeting (see Bank of Canada, 2021: chapter 4).

These approaches differ with respect to the treatment of departures from the target and in the choice of the target. The current approach of flexible targeting does not require any offset in the future for failure to meet the target. Bygones are bygones. Average inflation targeting would require the Bank to make up for departures from its target by accepting higher or lower inflation until the departure has been made up. The other approaches differ in terms of the variable to be targeted.

The 2021 agreement between the Department of Finance and the Bank maintained the two percent inflation target as the Bank’s primary target while introducing a new element. It declared monetary policy should support maximum sustainable employment. This element was introduced even though the Bank concedes that “it is not directly measurable and is determined largely by non-monetary factors that change over time” (Canada, Department of Finance, 2021). The statement goes into detail as how this objective would be achieved by using the flexibility of the 1-3 percent range “only to an extent consistent with keeping medium-term expectations well anchored at 2 percent.” The statement ends up by acknowledging the joint responsibility of the government and the Bank for achieving for both the inflation target and maximum sustainable employment.

The change from 2016 to 2021 represents a watering down of the Bank’s mandate by opening the door to a dual mandate in practice. The previous agreements were clear in providing both guidance to the Bank and a basis for the government to assess its performance. This clarity has been lost by introducing an additional objective, especially one that is admittedly ill-defined and determined mainly by forces beyond the Bank’s control. Further, it diffuses responsibility for the objective, leaving responsibilities unclear. The addition may be costly because it unjustifiably raises expectations for the Bank that cannot be realized, reducing the credibility it needs to achieve its prime objective of staying within the target inflation band.

5. The Government-Central Bank Relationship: Operational Accountability

The principal in a principal-agent relationship needs to be assured that its agent is working in its interest. As Oliver Williamson observed, “Surely it is significant that the second and third chapters of Genesis record that where discretion exists it is apt to be exercised and that merely to charge someone to be a good and faithful servant is not adequate to secure his performance (Williamson, 1964: 3). A central bank can be held accountable through their communications policy and through the transparency in their operations.

Communications

Central banks have traditionally combined a mix of high levels of secrecy with obscurity in their communications. Montague Norman, Governor of the Bank of England and the doyen of central bankers from the 1920s to the 1940s set a standard for central bankers that lasted for decades by creating a mystique through his autocratic manner, his aloof demeanor, and his secretive actions. According to one observer, he brought the policy of “never explain, never apologize to a fine art” (Einzig, 1932: 541).

Similarly, the US Federal Reserve has at times also avoided giving the public information about its activities. It held its first press conference only 66 years after its founding (Appelbaum and Hershey, 2019, December 13). Alan Greenspan, one-time Fed chairman, confessed: “Since I have become a central banker, I have learned to mumble with great coherence” (Walsh, 2001, September 7).

The Bank of Canada communicated infrequently until James Coyne embarked on his two-year program to explain monetary policy to the public. As we saw, Coyne ended up discussing matters well beyond monetary policy to criticize government policy, which eventually led to his resignation.

The Bank under Louis Rasminsky, Coyne’s successor, returned to the well-established central bank policy of secrecy. The governor himself

dismissed efforts, even from Royal Commissioners, to obtain information about the Bank's activities. While appearing before the Royal Commission on Banking and Finance, Rasminsky responded to a commissioner's question about the Bank's experience with moral suasion by responding, "if you don't mind I would prefer not to discuss the details" (Chant and Acheson, 1986: 113). Similarly, both the minister of finance and the Bank refused to reveal details about the Bank's designated money market dealers including their identity, the size of their lines of credit, the terms for qualifying for a line, and the criteria for the size of their line. Replying to a question concerning money market dealers, the minister of finance said,

... because of the banker-client relationship that is involved and because of the number of changes from time to time the Bank has not made a practice of publishing the names of such jobbers. (Canada, 1969)

For the Bank's first few decades, as we have seen, aside from Coyne's speaking tour, the Bank communicated with the public through its scant annual reports and infrequent speeches by its governors. Its approach to transparency was to change under Governor Gordon Theissen, who opened the Bank and its operations to the outside world.

Starting in 1995 the Bank took significant steps to improve its transparency by publishing a Monetary Policy Report in May and November accompanied each time by a meeting with media and the appearance by the governor before a parliamentary committee (Bank of Canada, 1995). These reports were comprehensive, covering both domestic and global developments. In addition, deputy governors were dispatched throughout the country to present briefings on the report. From 2000 on, the Bank supplemented the Monetary Report with two updates a year.

The Bank took a further step toward transparency in 2000 when it moved to fixed dates for announcing the target for the overnight lending rate, the rate charged by the Bank for one-day loans to financial institutions (see Parent, Munro, and Parker, 2003: 3). This step replaced a system where rate changes could take place any time the Bank felt a change was needed. Under the new arrangement, the Bank adopted a system of eight "fixed" dates for announcements of decisions with respect to the target for this rate. The new system added one more element: announcements together with explanations would be made even when the overnight rate remained unchanged.

Among the concerns leading to this change were market uncertainty and a lack of focus on the Canadian economy. With the change, uncertainty would be reduced because market participants could "plan ahead

without wondering daily whether the Bank would change its target for the overnight rate” (Parent, Munro, and Parker, 2003: 4).

The change was intended to direct market participants to focus more on the Canadian economy. In the past, the Bank’s rate decisions had often followed the lead set by the US Federal Reserve. Indeed, in the year prior to the change, the Bank followed all the decisions made by the Federal Reserve (Parent, Munro, and Parker, 2003: 4). Under the fixed announcement dates the Bank’s decisions would be spaced away from the Fed’s decisions by at least one week and up to four weeks in some cases (Little, 2000, September 20).

Visibility of operations

The active use of monetary policy through transparent market instruments was not a high priority for the Bank through its first few decades. Starting in the 1950s, the Bank took significant steps to increase the transparency of its operations.

Moving to market measures

The Bank moved to a more active monetary policy in the early 1950s, a change in direction from its policy during the inflationary episodes in 1945-46 and 1950-52 when it relied on directives to the banks and direct controls rather than market methods such as open market operations. Up to then, monetary policy had been viewed as too blunt to fight inflation in the absence of a money market.

James Coyne, first as deputy governor and then as governor, planned and initiated a series of changes in 1954 to develop a money market for 91-day and 180-day Treasury Bills with specialized investment dealers as a step to encourage holdings outside the banks. The development of the money market facilitated the Bank’s use of market measures such as open market operations and bank rate changes, which enabled banks to adjust their reserve by selling Treasury bills in response to tightened policy. These moves also increased the Bank’s accountability by making its policies more transparent to the public.

These changes proved to be short-lived. After Coyne’s resignation the Bank retreated from using market measures. Non-bank participation in the money market dried up, shrinking from as high as 40 percent of the market in 1959 to virtually nothing from 1964 to 1970, leaving banks unable to use the money market to adjust their liquidity (Acheson and Chant, 1973). The Bank also returned to using non-market instruments together

with moral suasion by imposing guidelines with respect to bank finance of finance companies, establishing an agreement on the maximum interest on term deposits and imposing a ceiling on “swap” deposits accepted by chartered banks. Coyne’s attempt to make the Bank more transparent and accountable was effectively undone.

Monetary targeting⁵

Central banks faced difficult times in the 1970s because they had to adapt to the breakdown of the Bretton Woods fixed exchange rate system. Governor Bouey suggested they gave priority to keeping interest rates low to avoid exchange rate appreciation over the risk of future inflation. The resulting surge of economic activity and rise of inflation took central bankers off guard.

In retrospect, the Bank recognized that the rapid expansion of the money supply had preceded the outbreak of inflation in the 1970s, which was marked by both high inflation and high unemployment—stagflation—in the wake of the oil shock. The Bank took a major step in 1975 by announcing its commitment to a monetary growth target as its operating principle. This step was made after considering the accumulated evidence of a close link between changes in the money supply and economic activity. The change followed closely on the heels of the government’s announcement of price and wage controls. Targeting, it was felt, would supplement rather than replace the controls and would avoid an outbreak of inflation once the controls were removed.

The Bank’s approach of pursuing a monetary target, sometimes labelled monetarism, differed substantially from the monetarism identified with Milton Friedman. Even though Friedman’s evidence of a close relationship between monetary growth and economic activity influenced its choice, the Bank rejected his approach to monetarism because it required a fixed monetary growth rate that left no role for central bank discretion. The Bank’s version made monetary growth responsive to economic conditions. Higher inflation would dictate lower growth while lower economic activity would require faster growth. Friedman himself deplored such half-hearted approaches to his fixed growth rate monetarism.⁶ The adoption of an operating rule increased the visibility and accountability of the Bank’s operations. But the experiment with monetary targeting

⁵ This section is based on Bouey (1982), Crow (2002), pp. 147-52.

⁶ See Wapshott, 2021: 193-198 for a discussion of Friedman’s strong criticisms of monetarism “light” as carried out by the Federal Reserve under Volker, an approach like that of the Bank of Canada.

proved to be short-lived. The Bank had used M1 (currency and demand deposits) as its target because it reflected the public's spendable balances, but in time innovations in payments technology allowed other balances to perform the same functions as those in M1, leading to the breakdown in the relationship of M1 with economic activity. The Bank ended the experiment in 1982 when Governor Bouey concluded that "... monetary targets have not, at least in Canada, provided the clear place to stand for which some had hoped" (Bouey, 1982: 17).

Conflicting objectives

To the extent that a central bank has multiple objectives, it faces a conflict between them in choosing its policies when the objectives are not compatible with each other. Such a conflict means that some objectives must be sacrificed in order to achieve others. Episodes of such conflict existed in the immediate post-War period between managing the government's debt and avoiding inflation, and with the renewal of the Bank's inflation-targeting mandate in 2021.

Wartime debt as a restraining force on monetary policy⁷

With the outbreak of the war in 1939, Bank of Canada Governor Graham Towers found himself at the centre of the effort of planning and administering the program to finance the war, arguing strenuously for the use of government borrowing and against the use of inflationary finance. The financial needs were large with defense spending exceeding of 40 percent of GNP in 1943 and remained above 20 percent for the four years from 1942 to 1945.

The government created the National War Finance Committee in 1941 to oversee its borrowing program through the sale of Victory Loans. After the initial head of the committee resigned, the government turned to Towers who accepted the post despite his fears of a conflict of interest that would arise if a need arose for higher interest rates that would push down bond values, harming the holders whom the committee had urged to buy the bonds.

An opportunity to use active monetary policy arose in 1948 when inflation reached a peak of 14 percent. Despite this pressure, the Bank maintained a cheap money policy. The worries that Towers had expressed

⁷ This section is based on Deutsch, 1957.

earlier about the impact of higher interest rates were central to the reluctance to use monetary policy to tackle inflation. The minister of finance threw his support behind the Bank's policies, declaring

A rise in interest rates sufficient to produce results would bring about such a drastic fall in bond prices and create such chaotic conditions that no responsible person would recommend it as a deliberate measure (Deutsch, 1957: 223).

The Bank's role in debt management appears to have caused it to retain its cheap money policies in the face of increasing inflationary pressures.

Dealing with a financial crisis⁸

The financial crisis of 2008 pushed the Bank into new territory through a case of mission creep, if not mission surge. The first signs of the crisis in the US emerged during the summer of 2007, when warnings and ratings downgrades from credit-rating agencies for many mortgage-backed securities were quickly followed by difficulties and even failures of specialized mortgage institutions. By September 2008, many major US financial institutions came under pressure and either required government assistance, were merged with others, or were placed into government conservatorship. However, Lehman Brothers, a major investment bank, was not rescued and was allowed to fail, causing a major blow to confidence. Throughout the autumn, the US government was forced to introduce multiple large interventions including temporary facilities to support the short-term debt market, a broadened range of acceptable collateral for term lending facilities, increased deposit insurance (from \$100,000 to \$250,000), a program that would guarantee the senior debt of financial institutions, investment by the Treasury in preferred shares of financial institutions, and purchase of up to \$800 billion in different types of securities (Bank of Canada, 2008: 13)..

Canadian financial institutions did much better than their US counterparts, but did not escape the financial crisis unscathed. The market value of the Big Six Canadian banks fell by 44 percent in the two years following the start of the crisis. To stem the crisis, the Bank of Canada responded with extraordinary measures (Bank of Canada, 2008: 13). These included increasing the frequency and size of purchase and resale agreements to \$30 billion while introducing new loan facilities for money market participants and members of the wholesale payments system. The

⁸ This section is based on Chant, 2014: 6-7.

Bank also broadened the list of securities it would accept as collateral for loans and the government introduced the Canadian Lenders Assurance Facility, which would guarantee various bank liabilities. The Bank, together with the government, was forced to step into a policy vacuum created by the unprecedented crisis that threatened to cripple the economy. The measures to deal with the stability of the financial system did not at the time conflict with the Bank's achievement of its inflation target. The downturn in economic activity resulting from the crisis required economic stimulus at the same time as the financial sector needed support.

Such a coincidence of needs may not always be present. A build-up of private and government debt during a period of inflationary pressures could discourage the Bank from tightening monetary policy for fear of its impact on borrowers and the depressing effect of higher interest rates on asset values.

6. Credibility

To be effective, the relationship between a government and its central bank must be a two-way street with obligations on both the central bank and the government. The possibility of a rift between the government and the central bank would have the unfortunate effect of damaging the Bank's credibility with the public or with the government.

Such conflict for a central bank could arise from situations where the bank appears to favour either the government or its opposition. One way a central bank could favour the party in power would be if it were to make decisions that could improve the party's chances for re-election. An infamous conflict of this sort took place when Arthur Burns used monetary policy to keep interest rates low to support the re-election bid of Richard Nixon in the United States (see Abrams, 2006). By the same token, the opposition can use central bank criticisms of government policy to attack the government. As we have seen, James Coyne used a series of speeches in the late 1950s to attack the government, much to the delight of the opposition.

While he was deputy governor under Coyne, Louis Rasminsky faced the prospect of a severe conflict and went to great lengths to avoid it. Coyne's possible departure from the Bank put Rasminsky under pressure from the Conservative government well before Coyne's resignation to commit to accepting the job of governor if it became vacant. He was sounded out on various occasions by the deputy minister of finance and even the minister. His acceptance would have provided the government cover from a difficult situation by showing that they had lined up a replacement for Coyne who was well respected domestically and internationally. It would also have helped the government's cause by suggesting that discord existed within the ranks at the Bank. Rasminsky, however, remained adamantly loyal to the Bank of Canada throughout the crisis, putting the Bank's interests before any ambitions he had of being governor. His reply to such overtures was invariably the same: "there is only one governor," and as far as he knew, "Coyne was still it" (Muirhead, 1999: 174).

He showed his character once again after he became governor when he came under pressure from the Conservatives to fire people who they suspected of being Coyne loyalists. Prime Minister Diefenbaker even summoned Rasminsky into his office to discuss the treatment of senior bank

staff including the Bank's secretary, the deputy governor in charge of the securities department, and the senior deputy governor who Diefenbaker viewed with suspicion. Diefenbaker expressly asked how Rasminsky proposed to get rid of the Bank's secretary. Rasminsky responded by expressing confidence in his employees and their dedication to the bank, telling the prime minister that he would accept responsibility if things went wrong (Muirhead, 1999: 177).

Governor Mark Carney failed to follow Rasminsky's example when facing a conflict between the Bank's interests and his own when he was courted by senior Liberals to seek the leadership of their party through phone calls, meetings, and his nearly week-long visit at the home of the Liberal finance critic, a strong supporter of Carney's cause (Le Blanc, Chase, and Taber, 2012, December 15). When questioned about the possible conflict of interest of a government servant actively negotiating with the opposition, Carney said, "I never made an outgoing phone call" (Le Blanc, Chase, and Taber, 2012, December 15). But with the Conservative party in power, such actions threatened to disrupt the Bank's relationship with the government. The Bank's general counsel subsequently undertook a conflict of interest review and ruled the visit not in breach of the Bank's guidelines because "[n]either the Bank of Canada, nor governor Carney have an actual potential commercial or business relationship with Mr. Brison."⁹ Still, the Bank's guidelines reflected a limited view of conflict with an emphasis on commercial relationships (Bank of Canada, 2022). Later, Carney joked, "Why don't I become a circus clown?" (Geddes, 2012). Making this statement suggests that Carney failed to appreciate the gravity of the issue. Seeking a position as a circus clown would not conflict with his obligations as governor to be politically neutral, as other civil servants must be, too. Seeking to become leader of the government's opposition would.

⁹ The Bank's conflict guidelines make general statements about the need to avoid the perception of a conflict but make no provision for an office holder to avoid negotiations with a political party. The same is true for the federal government's Conflict of Interest Act.

7. Conclusion

This paper has described the evolution of the central bank-government relationship in Canada, complete with its ups and downs. The downs include times when the relationship has become strained and has threatened the autonomy the Bank needs to operate effectively. These downs have been initiated by the Bank itself, by the government, or by external events. Fortunately, most of the downs have been short-lived while the ups, in contrast, have often led to permanent change.

Unfortunately, recent experience has been less favourable. The number of demands on central banks has been increasing as they are now expected to deal with things such as climate change, equitable distribution of income, and maximum employment. These concerns may be valid but in each case there will be better ways to achieve them than asking the central bank to do so. Assigning these goals to a central bank may lead to it being distracted and delay its deployment of appropriate measures needed to address the vital tasks for which it is most suited.

The upward steps have moved the Bank from operating in a position of ambiguity and opacity during its early years to a more structured relationship with the government that has defined ultimate responsibility for policy, given a clear mandate to the Bank, and left operational responsibility to the Bank. The improvements have also made it clear that the governor serves under good behaviour while providing a way for the government to assert its will when necessary. The study also shows that this relationship has been and has had to be dynamic to adjust to changing circumstances and to the deepening understanding of the role of monetary policy.

The paper also shows that the quality of the central bank-government relationship cannot be captured solely by measures of independence based on the framework of central bank law. Major changes have been made through other means: only the change in status of the governor has been accomplished through legislation. Agreements, understandings, personal relationships, and individual values have been vital to the relationship between Canada's government and its central bank.

In March 2022 when inflation had reached a 30-year high, the Bank started to push against it by raising its key interbank rate for the first time since 2018 while signaling that further increases will be coming in the future. Experience suggests that the Bank's move to higher interest

rates will be unpopular with households with mortgages and businesses with debt, especially when low interest rates have been the norm for so long. Less obvious are the costs of doing nothing and leaving inflation unchecked. Only people over age 50 have experienced annual inflation of more than five percent during their working lives and even fewer remember the double-digit inflation of the 1970s. In this environment, the Bank must make a concerted effort to make the costs and consequences of inflation clear to the public. The government, too, has a responsibility. It must reaffirm that the Bank of Canada operates under the agreement with the government on inflation targeting and that the targeting has served Canadians well.

References

Abrams, Burton (2006). How Richard Nixon Pressured Arthur Burns: Evidence from the Nixon Tapes. *Journal of Economic Perspectives* 20, 4 (Fall): 177-188. <<https://www.aeaweb.org/articles?id=10.1257/jep.20.4.177>>, as of March 22, 2022.

Acheson, Keith, and John Chant (1973). Bureaucratic Theory and the Choice of Central Bank Goals: The Case of the Bank of Canada. *Journal of Money, Credit and Banking* 5, 2: 637-655.

Appelbaum, Binyamin, and Robert D. Hershey, Jr. (2019, December 13). Paul A. Volker, Fed Chairman Who Waged War on Inflation, Is Dead at 92. *New York Times*. <<https://www.nytimes.com/2019/12/09/business/paul-a-volcker-dead.html>>, as of March 22, 2022.

Bank of Canada (1995). *Annual Report*. Bank of Canada. <<https://publications.gc.ca/site/archivee-archived.html?url=https://publications.gc.ca/collections/Collection/FB1-1995E.pdf>>, as of April 6, 2022.

Bank of Canada (2008). The Macrofinancial Environment. *Financial System Review* (December), pp. 9-17. <https://www.bankofcanada.ca/wp-content/uploads/2010/04/fsr_1208.pdf>, as of March 22, 2022.

Bank of Canada (2021). *Monetary Policy Framework Renewal*. Bank of Canada (December). <<https://www.bankofcanada.ca/wp-content/uploads/2021/12/Monetary-Policy-Framework-Renewal-December-2021.pdf>>, as of March 22, 2022.

Bank of Canada (2022). *Code of Business Conduct and Ethics for Directors*. Bank of Canada. <<https://www.bankofcanada.ca/wp-content/uploads/2018/07/Code-of-Conduct-for-Directors.pdf>>, as of April 6, 2022.

Bouey, Gerald K. (1982). *Monetary Policy – Finding a Place to Stand*. The 1982 Per Jacobsson Lecture (September 5, University of Toronto). Per

Jacobsson Foundation. <<http://www.perjacobsson.org/lectures/1982.pdf>>, as of March 22, 2022.

Canada (1969). House of Commons Debates, 28th Parliament (17 December). <https://parl.canadiana.ca/view/oop.debates_HOC2801>, as of March 22, 2022.

Canada, Department of Finance (2021). Joint Statement of the Government of Canada and the Bank of Canada on the Renewal of the Monetary Policy Framework (December 13). <<https://www.bankofcanada.ca/wp-content/uploads/2021/12/Joint-Statement-of-the-Government-of-Canada-and-the-Bank-of-Canada-on-the-Renewal-of-the-Monetary-Policy-Framework.pdf>>, as of March 22, 2022.

Chant, John (2014). *Keeping the Genie in the Bottle: Grading the Regulation of Canadian Financial Institutions*. SPP Research Papers 7, 8 (March). University of Calgary, School of Public Policy. <<https://journalhosting.ucalgary.ca/index.php/sppp/article/view/42460/30352>>, as of March 22, 2022.

Chant, John (2003). The Bank of Canada: Moving toward Transparency. *Bank of Canada Review* (Spring): 5-23. <<https://www.bankofcanada.ca/wp-content/uploads/2010/06/chante.pdf>>, as of March 22, 2022.

Chant, John, and Keith Acheson (1986). Chapter 6: The Choice of Monetary Instruments and the Theory of Bureaucracy. In Eugenia Toma and Mark Toma (eds.), *Central Bankers, Bureaucratic Incentives and Monetary Policy* (Kluwer Academic Publishers): 107-128. <<https://bunker2.zlibcdn.com/dtoken/90f546fcaa55435e09d2967e5b4243ed>>, as of March 22, 2022.

Crow, John (2002). *Making Money: An Insider's Perspective on Finance, Politics, and Canada's Central Bank*. John Wiley and Sons.

Deutsch, John (1957). The Canadian Treasury and Monetary Policy. *American Economic Review* 47, 2 (May): 220-228.

Einzig, Paul (1932). *Montagu Norman: A Study in Financial Statesmanship*. Kegan Paul, Trench, Trubner and Company.

Garriga, Ana Carolina (2016). Central Bank Independence in the World: A New Dataset. *International Interactions* 42, 5 (October): 849-68.

Geddes, John (2012, October 15). Three Words to Describe Mark Carney Career Speculation: It's a Circus. *Macleans*. <<https://www.macleans.ca/politics/ottawa/mark-carney-career-speculation-its-a-circus/>>, as of March 22, 2022.

Haldane, Andy (2020). *What Has Central Bank Independence Ever Done for Us?* Speech to UCL Economists' Society Economics Conference (November 28). Bank of England. <<https://www.bankofengland.co.uk/-/media/boe/files/speech/2020/what-has-central-bank-independence-ever-done-for-us-speech-by-andy-haldane.pdf>>, as of March 22, 2022.

Laurens, Bernard J., Jean-François Segalotto, and Marco Arnone (2009). *Central Bank Independence, Accountability, and Transparency: A Global Perspective*. Palgrave Macmillan-Economics / International Monetary Fund.

Le Blanc, Daniel, Steven Chase, and Jane Taber (2012, December 15). How the Liberal Party Lost Mark Carney. *Globe and Mail*. <<https://www.theglobeandmail.com/news/politics/how-the-liberal-party-lost-mark-carney/article6414626/>>, as of March 22, 2022.

Little, Bruce (2000, September 20). Bank of Canada Set to Schedule Fixed Rate Dates. *Globe and Mail*. <<https://www.theglobeandmail.com/report-on-business/bank-of-canada-set-to-schedule-fixed-rate-dates/article25471614/>>, as of March 22, 2022.

McIvor, R. (1961). *Canadian Monetary, Banking and Fiscal Development*. Macmillan Company of Canada.

Muirhead, Bruce (1999). *Against the Odds: The Public Life and Times of Louis Rasminsky*. University of Toronto Press.

Murray, John (2021). *Mission Creep and Monetary Policy*. E-Brief (June 22). CD Howe Institute. <https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/e-brief_317.pdf>, as of March 22, 2022.

Newman, Peter C. (1963). *Renegade in Power: The Diefenbaker Years*. McClelland and Stewart.

Parent, Nick, Phoebe Munro, and Ron Parker (2003). An Evaluation of Fixed Announcement Dates. *Bank of Canada Review* (Autumn): 3-11. <<https://www.bankofcanada.ca/wp-content/uploads/2010/06/fade.pdf>>, as of March 22, 2022.

Powell, James (2009). *The Bank of Canada of James Elliot Coyne: Challengers, Confrontation, and Change*. McGill-Queen's University Press.

Shirakawa, Masaaki (2021). *Tumultuous Times: Central Banking in an Era of Crisis*. Yale University Press.

Siklos, Pierre (2010). The Coyne Affair: A Singular Event that Changed the Course of Canadian Monetary History. *Canadian Journal of Economics* 43, 3 (August): 994-1015. <<https://www.jstor.org/stable/pdf/40800725.pdf>>, as of March 22, 2022.

Tucker, Paul (2018). *Unelected Power: The Quest for Legitimacy in Central Banking and the Regulatory State*. Princeton University Press.

Walsh, Carl E. (2001, September 7). Transparency in Monetary Policy. *FRBSF Economic Letter* number 2001-26. Federal Reserve Bank of San Francisco. <<https://www.frbsf.org/economic-research/publications/economic-letter/2001/september/transparency-in-monetary-policy/>>, as of March 22, 2022.

Wapshott, Nicholas (2021). *Samuelson Friedman: The Battle over the Free Market*. W.W. Norton and Company.

Watt, George S. (1993). *The Bank of Canada: Origins and Early History*. Carleton University Press.

Williamson, Oliver E. (1964). *The Economics of Discretionary Behavior: Managerial Objectives in the Theory of the Firm*. Prentice Hall.

Legislation

R.S.C., 1985, c B-2. An Act Respecting the Bank of Canada.

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