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Practical Experiences in Reducing Inflation

The Case of Canada

John Crow

This discussion is in two parts because there are two stories. The first looks at the experience with inflation from the early 1970s up to 1987. The second examines what happened in the years after, focusing mainly on what happened during my seven-year term as central bank governor, from early 1987 to early 1994. I should add that I was at the Bank of Canada from 1973, and for a few years before that was working on Canada for the International Monetary Fund (IMF). So this account reflects considerable direct knowledge of, and substantial involvement in, what happened throughout this period and the reasons why. It is also, of course, unofficial.

The Period to 1987

For many years up until 1987 the Bank of Canada, and from time to time the Federal government, were preoccupied with struggling over, and pushing back, an escalation of inflation. This escalation stemmed from bad luck, compounded by policy misadventures. The bad luck was twofold: first, in the late 1960s being tied under Bretton Woods to the US economy as inflationary demand pressures accumulated there; and second, being the recipient, like everyone else, of two oil (mostly) shocks in the 1970s. The misadventures were: first, while taking the bold step of moving to a floating exchange rate in early 1970 and seeing it appreciate, not taking in the end advantage of its inflation protection properties; and second, compounding this lapse by pursuing demand policies (particularly fiscal policies) that helped propagate

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the relative price shocks generally and cumulatively. Monetary policy, while always concerned over inflation, was imbued with a spirit of gradualism when it did address inflation directly. Put another way, the Bank of Canada was largely in a reactive mode to what turned up, whether in terms of what the Federal government thought could or should be done by Canada about inflation, or in terms of what happened in the United States regarding inflation control.

It should be added for completeness that in the early 1970s there was genuine uncertainty as to the amount of slack in the economy. This arose mainly because of changes to the economic meaning of the unemployment statistics—a change brought about by increases in the incentives to remain unemployed stemming from substantially improved terms for unemployment insurance that were introduced in 1971 and 1972. The general assessment of the likely growth of Canadian productivity (about 2 percent) also turned out to be over-optimistic. However, these difficulties for analysis and forecasting were a secondary factor in the general, somewhat tentative and episodic, approach to inflation control taken in that period. The basic rule was that whatever was to be done regarding inflation, there was to be no recession on this account. So policy in general, and monetary policy in particular, was fighting inflation with at least one hand behind its back.¹

Floating for What?

When Canada in 1970 broke the Bretton Woods rules by floating, it contended that this was done to gain better control over its money supply. But interestingly enough, while the Bank of Canada (of course) supported the government's decision to change the exchange rate regime, it did so with a touch of reluctance. My interpretation of this is that the bank was going to lose the fixed exchange-rate anchor for monetary policy, and did not really know what to put in its place. The bank also appeared to believe that there was more scope for Canadian monetary policy to affect domestic demand under the fixed-rate regime than in fact there was. In any case, then and in the years following, the bank was continually looking to coordination with governmental actions to control inflation. In short, monetary policy was a follower.

However, governmental attention to inflation was episodic. With a close to 10 percent rise in the currency as an early result of the float, pressure from government switched from any focus on monetary control to one of avoiding further appreciation.

This bias continued even as the grain-oil shock hit from 1972, and was

^{1.} The focus in this discussion is on inflation reduction, not prevention. However, it is worth emphasizing, on a cautionary note and in a more contemporaneous context, that the amount of slack (or recession) that monetary policy might need to produce to *prevent* inflation is surely less than what it takes subsequently to reduce it.

compounded explicitly by fiscal policy. By way of illustration, in early 1973, just as my predecessor entered office, the federal minister of finance, in his budget speech, declared himself ready to run the risk of still higher inflation as a trade-off for lower unemployment. He also congratulated the Bank of Canada for running a monetary policy sufficiently expansionary to ward off Canadian dollar appreciation.²

From then until 1987, inflation developments in Canada basically mirrored inflation flows and ebbs in the United States—but with somewhat more inflation overall in Canada. This situation should not be taken to imply that Canada gave up trying to do something about inflation through domestic policies. But what it did mean was that in reflection of this difference in inflation outcomes, the Canadian dollar had a pronounced tendency to depreciate bilaterally after the mid-1970s. This tendency was also something that the bank had continually to struggle with, lest the decline of the currency gather its own momentum and also feed into domestic interest rates, which already seemed far too high to most people.

Giving Monetary Aggregate Targets a Chance

In 1975 Governor Bouey delivered a speech that came to be known as the "Saskatoon Manifesto." In it, he stated that "whatever else may need to be done to bring inflation under control, it is absolutely essential to keep the rate of monetary expansion within reasonable limits."

The context for these remarks, seen as dramatically Friedmanesque by many in Canada but as simply practical at the Bank of Canada, was two-fold: first, work had been done at the bank for several years on monetary aggregate targeting in response to the burgeoning academic literature, and there was pressure on the governor from senior staff to apply it; second, there was in 1975 a need for the bank to put something quantitative and of a decelerating nature in the policy shop window to go along with soon-to-be-announced governmental prices and incomes controls. The general plan was to use interest rates to generate a progressive slowing in monetary expansion that was in line with the implicit control targets for inflation of 8 percent for the first year, 6 percent for the second, and 4 percent for the third (Sargent 2005). This was taken to mean annual growth rates for narrow money (M1) within a 10 to 15 percent range for the first year (but biased toward the lower end of that range) and declining year-by-year thereafter to approach a rate consistent with "price stability." The prices and incomes controls came into

2. The way it was actually put was that "monetary policy . . . encouraged Canadians to borrow in domestic rather than in foreign markets." Two and a half years later, in June 1975 and with inflation much higher still, the minister noted in his budget speech that "the faster rise in costs in this country than in the United States is casting a shadow over our economic future." However, in the same speech, he rejected "again, and in the most categorical manner . . . the policy of deliberately creating, by severe measures of fiscal and monetary restraint, whatever level of unemployment is required to bring inflation to an abrupt halt. . . . The cost would be much too high. In human terms for me it would be unthinkable."

force in 1975 and were taken off in 1978.³ However, the bank stayed with money targets until the early 1980s.

Others will delve into the advantages or otherwise of monetary aggregate targets, or indeed how exactly to look at "money" (or "credit") besides other things, for useful policy information. Here it should be sufficient to note that because of the strong interest elasticity of demand for checking balances and the increasing substitution of interest-bearing checking deposits for noninterest ones, the M1 aggregates slowed drastically even as inflation was accelerating in the latter part of the 1970s. The targets were increasingly ignored both within the bank and outside, and finally dropped in 1982. Or, as Governor Bouey put it soon after: "We didn't abandon M1, M1 abandoned us!" The bank pondered for quite some years after the possibility of using a broader, less interest-elastic and by definition more inclusive, monetary aggregate as a target. But neither Mr. Bouey nor I ever felt sufficient confidence in possible successors to M1 to take that plunge a second time.

Forced Back to the Exchange Rate

The Bank of Canada's attempt to use a money target to slow inflation, whether as a worthy attempt to generate a decelerating path for nominal demand in line with the wage–price objectives of controls or on a standalone basis, was in any event preempted by the great US disinflation, beginning in 1979. As already noted, inflation in Canada was tending then to run at least as high as in the United States.

What was the bank to do in the face of the dramatic rise in US short-term interest rates? At first, it aimed basically to match those increases, with the immediate goal of avoiding a dive in the currency. But this did not stop the Canadian dollar from weakening sharply and threatening to cause yet more inflation. Accordingly, the tactic shifted to one of squeezing domestic liquidity harder and forcing Canadian interest rates somewhat higher than US rates at the short end, so as to provide a more persuasive story to savers and investors. This reaction mitigated the impact on the currency, though it did not stop it out completely. Canada was by no means targeting the exchange rate, either bilaterally or in terms of its effective (G10) exchange rate. However, it might be fairly said to have had (for want of something better, i.e., a clear domestic anchor) a de facto "crawling peg" for the Canada–US exchange rate, and thereby a dragging monetary anchor on inflation.

As interest rates escalated, there were many calls for a "made in Canada" monetary policy. This was accompanied by strong questioning as to what the bank thought it was up to through the regular consultations "on monetary

^{3.} The author was seconded from the bank to the body administering the controls for a few months, beginning in late 1975.

^{4.} To assist the process, the bank moved from a fixed to a floating bank rate.

policy and on its relation to general economic policy" that the governor is required to undertake with the minister of finance under the Bank of Canada Act. It was in this tense domestic context that the Bank of Canada made its concerns, indeed fears, known forcefully at one of the regular G10 governors' meetings held at the Bank for International Settlements (BIS). By Governor Bouey's informal oral account, he emphasized there that without an easing in the US policy stance on monetary expansion, "we will all be shoveling out money soon by the bucketful to save failed businesses," or words close to that. In any event, US policy backed off somewhat beginning in 1982, to the significant relief of the Bank of Canada.

A Temporary Peace

In the mid-1980s and up to 1987, Canadian monetary policy was essentially running in neutral—paying some attention still to the exchange rate but not being particularly preoccupied by much else. This was in part perhaps because the bank was coping with the fallout from the twin failures in 1985 of two small banks, an event that had the shock value of being the first such event in Canada since 1923. In any case, as monetary conditions eased in the United States, so did they in Canada. And inflation eased off as well. By early 1987 inflation in Canada was down to about 4 percent—and somewhat less than it had been when Mr. Bouey entered office fourteen years earlier.

By way of a conclusion for this part of the account and as a lead-in to the next, I want to note Gerald Bouey's key remarks in his 1982 Per Jacobssen Lecture, "Finding a Place to Stand." There, he made a point of observing that "monetary policy must therefore give high priority to the preservation of the value of money," and concluded by saying that "economic performance over time will be better if monetary policy never loses sight of the goal of maintaining the value of money." My own thinking was that since this was true, the important question still to be faced was how the Bank of Canada should go about having these sensible observations be not only true but also more real. This meant that we needed to test further the meaning of the phrase "high priority."

What Happened After?

Monetary policy for several years after 1987 affords some contrast with the earlier period. The bank set out its stall early, and pursued the objective of inflation reduction with consistent focus—a single-mindedness that at the time seemed praiseworthy to some and noxious to many. Inflation did come down significantly (though not easily), and from about 1992 inflation in Canada, as measured by the Consumer Price Index (CPI), has stayed around 2 percent. That is to say, there have been no further reductions in inflation, and therefore the subsequent years lie outside the mandate for this review.

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Bank of Canada's Authority to Act

This is territory that is both tricky and sensitive. Judging by its statutory mandate as set out in the preamble to the Bank of Canada Act, the bank has considerable scope to set the course of monetary policy. This scope is subject to "regular consultation" with the minister of finance and, ultimately, a ministerial directive. However, it should be emphasized that regular consultation is not the same as taking instructions, although it surely does mean listening very carefully. And if it did mean taking instructions, there would be no need for the explicit provisions in the Bank of Canada Act under which the minister may issue a directive to the bank on the specific policy to be followed, provided the directive is published forthwith. No directive has ever been issued. (For specifics regarding the bank's mandate as set out in the preamble to the Bank of Canada Act, and also the consultation/directive provisions in the act, see the appendix.)

That being said, it can be taken for granted that however these provisions are read, the governor will always wish to get along with the minister of finance and his officials, and in particular to find common ground regarding the monetary policy to be pursued. In my time, Michael Wilson (the minister of finance for most of the period) was fundamentally supportive of the clear anti-inflationary stance taken, because he thought that this was the way the world was going, and also the way it needed to go. However, some of his senior officials clearly were not so supportive, government in general was manifestly ambivalent, and the Opposition openly hostile. However, and contrary to the earlier period, it is worth noting that in this one the Federal government said relatively little about inflation. Thereby, it emphasized at least implicitly the bank's responsibility for both monetary policy goals and instrumentation. At the same time, the bank itself said a great deal, in speech after speech of the governor's.

That is to say, and since I was concerned not to leave a policy vacuum that others might seek to fill, I was quick to set forth publicly my views that the central purpose of Canadian monetary policy was to promote confidence in the future value of Canadian money by establishing and maintaining domestic price stability. Salient features of that publicity program were a lecture in early 1988 at the University of Alberta (Crow 1988b) that folk afterwards termed the "Edmonton Manifesto," and a follow-up speech in

^{5.} As is well illustrated in the recently published memoirs of Prime Ministers Chrétien (2007) and Mulroney (2007). Paul Martin, minister of finance for quite a few years from October 1993 on, is about to publish his.

^{6.} It is also worth noting, and somewhat contrary to tendencies often prevailing elsewhere, that the bank did not cast aspersions on fiscal policy. One important consideration here, besides the fact that the minister of finance knew very well that he had issues, was that it would not be useful to leave any impression that monetary policy might be pushed off its anti-inflationary path by problems with other policies.

the spring at the annual meetings of the Canadian Economics Association (Crow 1988a). There, my remarks were met with particular interest—though with more attentive curiosity than general enthusiasm. The thoughts being expressed were not, it seemed to me, very different in substance from those enunciated by my predecessor in his Per Jacobssen lecture, but there seemed to be a sense around that more monetary policy action to implement them was in store.

So What Is "Price Stability"?

Everyone at this conference probably knows, and central bankers certainly do, that it is much easier to talk about price stability than to define it. And at no point did the bank volunteer a numerical price stability target—although early on I did, in response to a media question, indicate that as regards a desirable rate of inflation, "three is better than four, two better than three, one better than two, and zero better than any of them." In any case, for the earlier part of my term inflation was, notwithstanding anything the bank said or did, moving up as a result of general demand pressures—not a single inflationary supply shock in sight. So the bank could hardly be faulted that severely for raising interest rates, and then keeping them up. However, what was made clear even then was that as far as the bank was concerned, "price stability" would be distinctly less than 4 percent inflation (where we had started) and that zero inflation was not being ruled out. It also became clear that the bank insisted on being judged on how it did regarding inflation and regarding progress toward price stability.

While no timetable for progress was set, it soon was evident that the bank was setting about fighting inflation in a more vigorous way than before. In regard to its monetary operations, one difference that showed up prominently for several years from 1987 was a wider spread of Canadian short-term interest rates over US ones. Traditionally, Canadian short rates had stayed close to US equivalents—almost always above, but not by a great deal—a percentage point or two. But in my time they moved up progressively to some 5 percentage points above US rates by the end of 1990—and without any apology from the central bank as it tried to turn the tide in inflation to a better direction. This was done basically by having Canadian rates go up, but more, as US ones rose in 1987 and 1988, and, by keeping a tight rein on central bank liquidity, not letting ours go down nearly as much when US rates declined. This change in the "rules of the game"—this "made in Canada" policy, or decoupling—got widespread attention, especially because the Canadian dollar was moving up also.

^{7.} Just to note here that when the "Edmonton Manifesto" was being drafted, a point of considerable discussion between myself and Charles Freedman, a deputy governor, was whether the goal should be termed "price stability" or, rather, "very low inflation." My preference on terminology prevailed. I leave it to others to decide whether what exists now in Canada as an inflation target—namely, 2 percent—is "low" or "very low" inflation.

Overlap with Other Policies

Fiscal Policy

The relationship between fiscal policy (both federal and provincial) and a focused anti-inflationary monetary policy was a contentious and awkward issue throughout the period. Governments had not taken advantage of earlier, stronger, economic conditions to improve their fiscal situations. So difficult fiscal debts and deficits only worsened as monetary policy fought inflation with interest rates that went higher than anyone was counting on, and that shifted down only in a cautious manner as economic activity weakened beginning in 1990.

The fact that inflation initially was tending to move up not down, strengthened the Bank of Canada's arguments for its policy position in one sense but made it awkward in another. The minister of finance, in pressing in Cabinet for action to deal with the federal debt and deficit (this had been publicized as a source of serious concern by the government as early as 1985), apparently would point out that fiscal tightening would lead to an easing in interest rates. This was correct as far as it went. The difficulty was that it meant only that interest rates would be lower than otherwise, and not necessarily lower than they were at the time—because Canada was in a situation where, despite monetary policy's initial efforts, inflation pressures were persisting. In short, for this reason at least, there could be no compelling grand bargain between monetary and fiscal policy in regard to interest rate relief—at least, not one that those unfamiliar with ceteris paribus conditions would readily understand.

In point of fact, strong action on the fiscal front was a long time coming. Federal fiscal policy did not make a sharp turn in that direction, with major expenditure cuts, until early 1995, and then as a direct consequence of the "Hudson Bay peso" confidence crisis that was provoked by the Mexican financial crisis that started in late 1994, and a consequent heightened awareness in markets that Canada had a serious fiscal problem. This was after my watch (which ended in early 1994), but it is worth noting that the turn did occur in an environment where inflation was already way down and interest rates (apart from the immediate crisis-induced effects) were much lower.

Finally, it can be noted here that a change in tax policy did come to play a triggering role in the birth of the inflation-targeting regime in early 1991. That development will be addressed a little later.

Trade Policy and the Exchange Rate

As already noted, the widened short-term interest rate differentials sponsored by the bank exerted upward pressure on the Canada–US dollar exchange rate—the bilateral rate that matters far above all others for Canada. This appreciation was bound to be unpopular among exporters. But it also came under more widespread criticism, including in government

circles, because at that time Canada was heavily engaged in promoting and negotiating its bilateral Canada—US Free Trade Agreement, and subsequently working to conclude the North American Free Trade Agreement (NAFTA) upon the inclusion of Mexico in the negotiations.

However, there was one sense in which the bank's stance eased the negotiation of the free trade agreements—something that Canada sorely wanted. It was evident that one of the sticking points on the US side was concern among its domestic constituencies (particularly, it seems, US labor) that Canada, with its floating currency, would engage in competitive depreciation, thereby undermining the short-term US economics behind the deal. But while Canada's currency had in fact depreciated significantly after the earlier burst of appreciation upon its 1970 float, the bank was able to demonstrate that because of Canada's greater inflation from 1973 on, this was not reflected particularly in the real bilateral rate. Furthermore, the US Treasury could hardly hold that Canada's monetary policy stance in the late 1980s was contrary to the US immediate trade bargaining interest.

More broadly, the bank took an attitude of what might be termed "benign neglect" toward the currency. For one thing, this meant that we stayed out of currency entanglements such as the short-lived and unlamented Louvre exchange-rate accord of February 1987, notwithstanding Canada's burning desire to be seen as a full-fledged participating member of G7. My express concern at the time was that this would stop Canada from doing the right thing with its monetary policy, for fear of upsetting a prepackaged US-Canada dollar exchange rate—that is, going back to the late 1960s. For another thing, in terms of ongoing policy, we did not adjust interest rates either to try to bring the currency down or to hold it up (except at times of confidence crisis). And in fact the currency did behave in a broadly appropriate way from the viewpoint of desired monetary policy results. It moved up during the time that inflation was being battled, and subsequently (the latter part of my term) moved down as inflation came under better control, but without provoking renewed inflation. Canadian short-term interest rates, of course, also adjusted upwards and then in a downward direction over the period in question.8

Getting on Top of Inflation

In terms of drama, political economy implications and interest among other policymakers and monetary economists generally, the big event in the period from 1987 to 1994 was introduction of inflation reduction targets (yes, inflation *reduction*) in early 1991.

8. On a mildly technical plane, it can be noted that for a number of years the bank attempted to "measure" monetary policy through the use of a monetary conditions index—a weighted average of interest rate and exchange rate changes. However, this approach was finally discarded, essentially because exchange rate changes were not provoked solely by interest rate developments, thus making the index a challenge to interpret from a monetary point of view.

This is not the occasion to examine the pros and cons of such targets. In any event, when Canada adopted them there was no literature available except through the example shown by New Zealand about a year earlier. Rather, what is done here is to note some features in the early Canadian experience that may be of broader interest.

First, the adoption of targets was the result of an approach by the minister of finance to the governor, in the fall of 1990. While I can only speculate on the reasons for this approach, I am inclined to believe that it was the product of two things. On the one hand, the government's decision to introduce a value added tax would by itself push prices up by about 1 1/2 percent. On the other, the bank had already made clear that, while conceding this first-round effect, it would move determinedly against any knock-on effects; that is, through wages. This latter likelihood seemed real enough, inasmuch as the tax was not at all popular and powerful union leaders were claiming 7 percent wage increases to offset, as they chose to see it, the 7 percent Good and Services Tax, or GST. (Coincidentally with introduction of the targets and the tax, the government also froze the salaries of all federal public servants. This would increase their interest in a good inflation outcome, although it is unlikely that the government did it for this particular reason.)

Second, the fact that the Federal government took the initiative because of its pressing GST problem put the bank in a good position to bargain for more ambitious targets for inflation reduction than the Department of Finance originally envisaged. These included getting specific targets for inflation lower than 3 percent, and including commitments to inflation reduction for a longer rather than shorter span of years. The bank did this in recognition of the very fact that in signing on to such an agreement, it would itself be committed with government in decisions over monetary policy in a way that it had not been before. Such commitment was fine, as long as it was on the basis of strong anti-inflationary numbers that government was also committed to, and that had a decently lengthy policy horizon. The result of some strenuous negotiations was a series of announced targets that foresaw a reduction in inflation over four years from the early 1991 year-to-year peak (with the GST effect) of close to 7 percent, to 2 percent by 1995.

Third, while this was as far as matters could be pressed at that time in terms of specific targets, the bank also obtained agreement that 2 percent was not necessarily the endpoint, though admittedly further work needed to be done to establish what would constitute price stability. Also, it was declared, the experience gained over the time that it was expected to take to get to 2 percent, should itself be expected to produce evidence on what more might, or might not, be done. In other words, the bank was trying

^{9.} For some reason, the term "VAT" was unpopular in Canada and shunned by government.

very hard to embed a long-term and progressive commitment from both parties.

Fourth, while inflation targets these days are principally seen as a means of *anchoring* inflation expectations, as initially employed in Canada they were supposed to steer expectations, along with inflation itself, in a *downward* direction.

Fifth, while refinements such as the concept of flexible inflation targeting came much later, it is worth noting that the Canadian set-up made explicit provision for coping with adverse inflation shocks (such as another hike in the GST, for example). Specifically, provision was made for an agreement between the bank and the Department of Finance as to what would be an appropriate path back to the inflation target in the event of a shock of sufficient magnitude. What would be "sufficient magnitude"? At my news conference upon the announcement on the targets, when questioned as to what size shock would qualify for special treatment, I told the media (to their evident disappointment) that we would know a shock of sufficient magnitude when we saw one. None has, to date, been identified as large enough to merit such treatment.

Sixth, the fact is inflation dropped rapidly, and more rapidly than provided for.

Seventh, the fact is there was already a store of disinflationary pressure from monetary policy.

Eighth, and not least important for the longer run, it was recognized by the Federal government then, and since then apparently also, that not only was the Bank of Canada the agent responsible for inflation performance, but it was also to play a central role in the design and further development of the targets. This means that the Department of Finance has limited itself to approval or otherwise of Bank of Canada initiatives in regard to targets. However, this has also included approval as to the extent to which there should be any officially-sponsored, publicly disseminated, discussion of those targets. The latter might well be seen as a monetary policy transparency issue, and one that is deeper than the kinds that central banks and the financial markets customarily focus on.

The one occasion when government's role became active, except for the start, was in late 1993 when, coincident with the appointment of a new Bank of Canada governor, the government in a joint communiqué with the Bank of Canada announced that the target would now be 2 percent (midpoint of a 1 to 3 percent range), at least until 1998. Also, the government and the Bank of Canada, earlier, in 1991, agreed commitment to "price stability" (and to "price stability" being a rate of inflation "clearly below 2 percent" as the probable eventual goal) was expunged. While the incoming minister of finance (Paul Martin) was not, at least initially, a fan of inflation targeting, he may have considered that the arrangement was too risky to drop wholesale. The obvious question he faced, especially for an economy such

as Canada's, was what to say instead of inflation targeting that would pass muster with holders of claims on Canada, whether domestic or foreign. ¹⁰ Since that time, inflation has stayed broadly consistent with the official Bank of Canada goal, currently, of low and stable inflation. The term "price stability" virtually disappeared from the bank's lexicon in later years.

Finally, in a more positive vein, note might be taken that the bank (with a sign-off from the current minister of finance) announced in November 2006, after many years of promising to undertake a review of the inflation targeting framework, began a wide-ranging program of research designed to reexamine many aspects of it. This reexamination is going to go so far as looking at the value of lowering the current 2 percent inflation target, as well as at *price level* targeting—something that was quite recently advocated, but not actually tried, for Japan.

Lessons

This discussion has contrasted two experiences with inflation reduction—the drawn out Canadian battle over the period from the early 1970s to 1987, and the shorter one from 1987 to 1992. Shorter is clearly better. But was that shorter, sharper, campaign even necessary, when the end result was a mere 2 percentage points off inflation? That is to say, critics of the second campaign (a war of continuation?) might argue that it was not needed—that the "great inflation" was over by 1987 and that 4 percent inflation was good enough.

However, the question that would then still remain was what monetary policy was going to do in regard to inflation. And that was, and is, a crucial question for a central bank. In this regard, I did not think that 4 percent was a credible goal because I did not believe that economic agents would believe that the authorities would stick to a number that promised, essentially, "inflation." That is to say, if 4 was okay, why not 5, why not 6, and so on? And why would policy then fight to bring it down when it moved up? The test here may be whether it can be demonstrated that strong expectations regarding an unchanged future course of inflation are likely to form at a rate as "high" as 4 percent. My own view is that we would discover that there is no such demonstration, and that only generating a number appreciably closer to "price stability" would provide an adequate basis for expectations that buttress the objective. The Canadian experience, while not as ambitious as it might well have been from 1994 on, does not, at least, disprove that view.

^{10.} Canadian monetary policy had become a political issue, at least for the Opposition. What, then, was the alternative? The new government, when in opposition, had announced in the fall 1993 election campaign that its "two-track policy of economic growth and fiscal responsibility will make possible a monetary policy that produces lower real interest rates and keeps inflation low, so that we can be competitive with our partners." However, no one explained what that meant in terms of monetary policy actions, and I have been unable to either.

My second observation is that the Canadian experience supports the maxim that "inflation is always and everywhere a monetary phenomenon" in the following particular sense. What that experience suggests is that there will not be a fully convincing stance against inflation, whether prevention or reduction, unless the central bank takes a prominent role, or better still the lead, through its monetary policy actions and through a clear articulation of its monetary policy priorities. Relying on general government to give sufficient focus to inflation control, whether through income controls or fiscal policy, is inherently and demonstrably implausible. This is because of both the multiplicity of governmental objectives and the speed with which governmental objectives and priorities are inevitably shuffled. It is, of course, helpful if government recognizes this, and thereby recognizes that the central bank has to take the lead as regards to what is done and also, quite likely, what has to be done. That is essentially the difference between the second period and the first. Those who, as is commonplace in Canada, place the big change in inflation performance in Canada on the introduction of inflation targeting in 1991, overlook the way monetary policy laid the groundwork in the years before. That is to say, without downplaying the contribution of government, monetary policy was decisive for a remarkably successful entry into those targets.

Another lesson that may be worth broader attention is that while Canada is now (as I have emphasized many times here) a relatively small and very open economy, it has, in the end, been able to turn in a very decent domestic inflation performance on the basis of its homegrown monetary efforts. This is not to say that external conditions do not matter, but on the Canadian evidence to date they cannot be taken to be decisive.¹¹

Finally, and as a variant on the abovementioned, an encouraging development has been the broad appropriateness of the behavior of the Canadian dollar exchange rate as an adjustment mechanism. This allows, among other things, Canadian monetary policy to focus properly on the value of the Canadian dollar within Canada. Whether a floating rate regime is truly the best system for Canada is a topic that surfaces periodically, but one that is not central to this conference's agenda. However, what can be said with some assurance is that Canadian monetary policy can work appropriately under such a regime, inasmuch as it can in the end deliver a decent domestic inflation outcome as a contribution to domestic economic well-being. Put another way, if Canada were to move to some other exchange-rate regime, it would not be because its monetary policy cannot, in practice as well as in theory, deliver the goods on inflation.

^{11.} It would be fascinating, of course, to stress test this proposition further by repeating the experience of the late 1970s and early 1980s, with the same US conditions and monetary policy as in that period, but with the more robust Canadian domestic monetary policy stance that has developed since then. However, it is also to be hoped that nothing like this is in the works.

Appendix

Selections from the Bank of Canada Act

1. Preamble¹²

WHEREAS it is desirable to establish a central bank in Canada 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.

Government direction

Consultations

(1) The minister and the governor shall consult regularly on monetary policy and on its relation to general economic policy.

Minister's directive

(2) If, notwithstanding the consultations provided for in subsection (1), there should emerge a difference of opinion between the minister and the bank concerning the monetary policy to be followed, the minister may, after consultation with the governor and with the approval of the governor in council, give to the governor a written directive concerning monetary policy, in specific terms and applicable for a specified period, and the bank shall comply with that directive.

Publication and report

(3) A directive given under this section shall be published forthwith in the Canada Gazette and shall be laid before Parliament within fifteen days after the giving thereof, or, if Parliament is not then sitting, on any of the first fifteen days next thereafter that either House of Parliament is sitting.

^{12.} This appendix is a reproduction of portions of the Bank of Canada Act (R.S.C., 1985, c. B-2). Taken from the Department of Justice, Canada, website: http://laws-lois.justice.gc.ca/eng/acts/B-2/page-1.html#docCont.

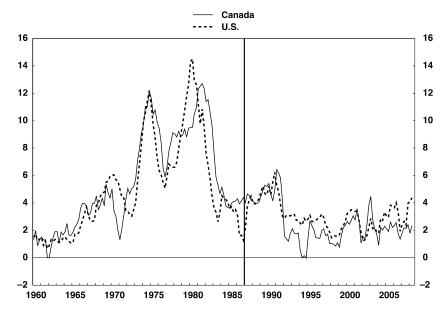


Fig. PI2.1 Consumer Price Index (quarterly year-over-year percentage change)

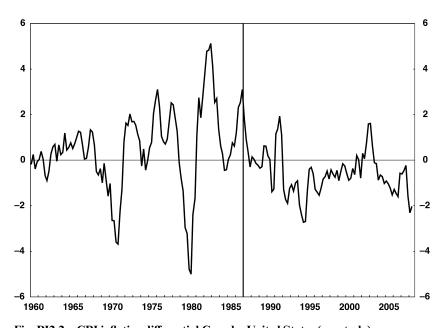


Fig. PI2.2 CPI inflation differential Canada–United States (quarterly)

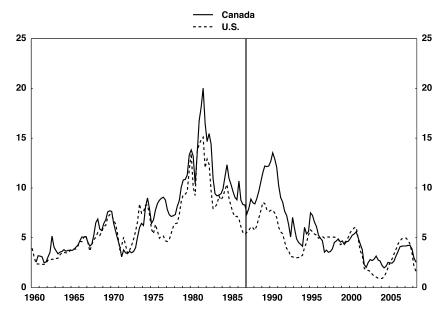


Fig. PI2.3 Three-month Treasury bill rates (quarterly)

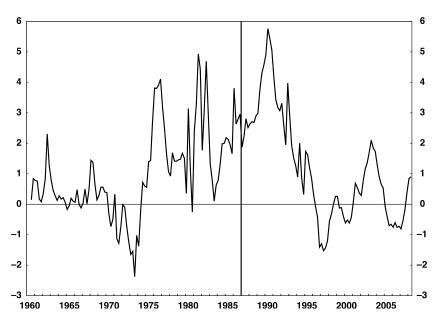


Fig. P12.4 Three-month Treasury bill rate differential Canada–United States (quarterly)

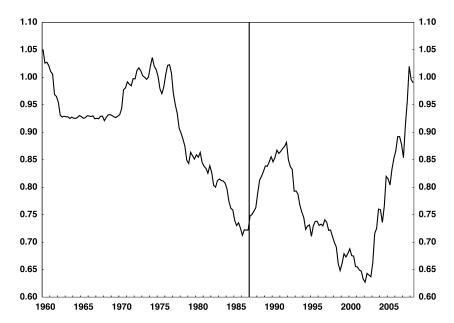


Fig. PI2.5 Canadian dollar/US dollar exchange rate (quarterly)

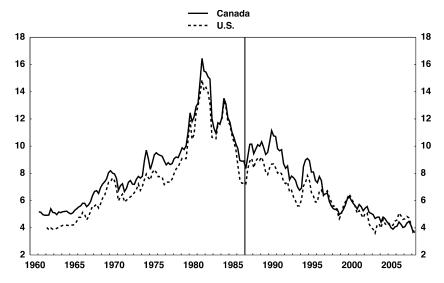


Fig. P12.6 Ten-year government bond rates (quarterly)

Note: Prior to June 1982, gov. of Canada Bond Yield Averages (excl. extendible)—ten years and over.

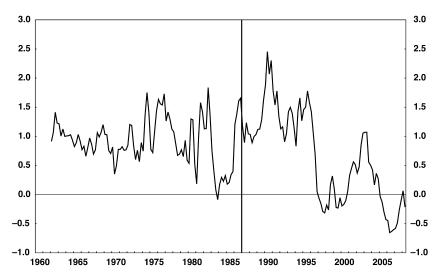


Fig. PI2.7 Ten-year government bond rate differential Canada-United States (quarterly)

Note: Prior to June 1982, gov. of Canada Bond Yield Averages (excl. extendible)—ten years and over.

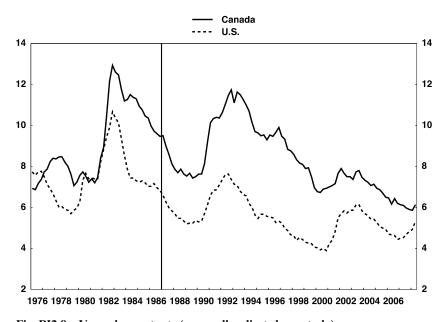


Fig. PI2.8 Unemployment rate (seasonally adjusted, quarterly)

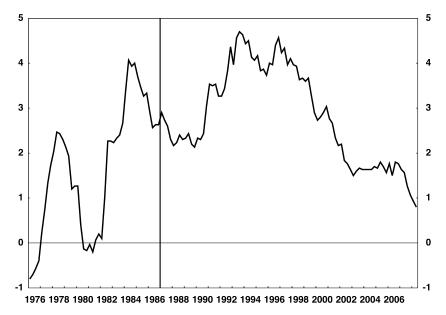


Fig. PI2.9 Unemployment rate differential Canada–United States (seasonally adjusted, quarterly)

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