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Monetary Policy

Better Late Than Never:

Towards a Systematic Review of Canada's Monetary Policy Regime

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In this issue...

The Bank of Canada has announced that its inflation-targeting regime, in place since 1991, is at last to get a thorough review. The issues needing examination include whether to move to a "price stability" program, which might be both feasible and desirable.

The Study in Brief

When Canada adopted a 2 per cent inflation target in 1991, it did so in anticipation that, after further study, there would be a move to "price stability" beyond 1995. While inflation targeting has created a low-inflation environment, with good effects for Canada's economy, price stability has slipped from the agenda. The objective was postponed in 1993, and it subsequently disappeared altogether. The Bank of Canada, however, in 2006 made a new promise to study all aspects of inflation targeting, as a prelude to possible reform of the current program at renewal time in 2011. Research must cover technical matters, but it should also re-open the price stability question. Switching to this goal would require careful preparation, so it needs early study.

Price stability would have two key features. Instead of the current 2 percent, 1 percent CPI inflation would be the likely target, and, instead of treating inflation performance, when it overshoots or undershoots the target, as a bygone in deciding on future policy, policymakers would aim to correct its effects on the price level's path. Such a regime should lead to better economic decision making at longer time horizons. But its potential for bringing about productivity gains is likely to be small, because significant productivity effects of the monetary stability experienced since the early 1990s have been hard to identify. And though goods and labour markets are now more flexible, achieving those gains might still involve noticeable transition costs.

However, distributional considerations — who loses and who gains from inflation — could tip the balance in favour of a stable price-level goal. Inflation, even at 2 percent, has corrosive effects on savings and fixed money incomes. It reduces the purchasing power of a dollar to less than 80 cents in a decade. As the population ages, and the ranks of the retired swell, this corrosive effect on savings will affect more people, and might encourage political support for price stability. International considerations could play a supportive role as well. Inflation abroad is lower now than in 1991, and the US, too, might adopt inflation targets. These factors have implications for Canada's exchange rate, and though this matter is more political than economic, it nevertheless requires careful thought.

This *Commentary* identifies the main policy issues that need early and thorough examination, including: whether the achievement and maintenance of price stability would bring gains in economic efficiency relative to the status quo; whether moving to it would entail significant costs; and whether there is any prospect of political support for monetary change. At present, the right choice for 2011 remains unclear, but systematic research undertaken well before then will ensure that, after 20 years, Canada's monetary policy regime will at last be the outcome of a carefully considered choice.

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anada's macroeconomic situation has not looked better since the mid1960s, but this very fact should prompt a little reflection. Low inflation
and economic stability seemed to be well established then as well, but
soon after, they began to come apart, and a full quarter-century passed
before they were restored. What happened once can happen again, because
satisfactory macroeconomic performance, if it is to be sustained, requires the
support of a coherent monetary order. Just because Canada's current inflationcontrol program has coped well with the stresses of the recent past does not mean
that it is proof against those that it has yet to encounter, or that it reflects the
current state of the art in such arrangements. Even, or perhaps particularly, in
what seem to be good times, a little attention to these matters can go a long way
towards enhancing the chances that those times will persist.

The Importance of Public Support for Monetary Stability

William Robson (2007) recounts how Canada's post-war monetary order, while always fragile, collapsed in the 1970s and 80s. He suggests that much of the credit for the country's improved economic performance over the last 15 years or so should go to the restoration of coherence in monetary policy since the early 1990s. Specifically, he reminds his readers that a 2 percent inflation target, agreed on by the Bank of Canada and successive ministers of finance, has been pursued by the Bank without further political interference, and has also been supported by responsible fiscal policy. He argues that this policy regime has provided a foundation for steady employment growth; reasonably peaceful labour relations; a slow expansion of incomes that has nevertheless modestly outpaced increases in the cost of living; as well as predictable and manageable interest rates on mortgages and consumer loans. Only a large exchange rate swing has given any cause for concern.

The Dangers of Success

Monetary policy in Canada is nevertheless not a solved problem, because a few warning signs have appeared recently that public understanding and support for the current monetary order might be dissipating. Last year's renewal of the inflation-control program until 2011, for example, attracted little attention. Of course, the very fact that the population at large no longer worries continually about inflation as it conducts its day-by-day business is a sign of inflation targeting's success, but such success has its dangers. Policy proposals capable of undermining monetary stability can easily appear attractive to an electorate that

This *Commentary* follows on from a one-day conference on the future of Canada's Inflation Targets held at the C. D. Howe Institute on March 29, 2007, and was heavily influenced by its deliberations. Nevertheless, it does not claim to be a conference summary, and those who participated in the event are responsible neither for its contents nor its omissions. Charles Freedman, the conference rapporteur, kindly provided the author with a written summary of its proceedings, and also commented on an earlier draft of this paper, as did Robin Banerjee, John Crow, Don Drummond, Paul Masson, Finn Poschmann, Bill Robson, Pierre Siklos and reviewers at the Bank of Canada. None of these, however, is thereby implicated in the views expressed here.

has grown used to stability, and lost sight of the need to maintain the policy regime that has delivered it. Witness, for example, the recent popularity of arguments that the Bank of Canada should hold interest rates down in order to protect exporters of manufactured products from an appreciating currency.

In any event, the inflation-targeting regime, introduced in 1991, has never been subjected to a comprehensive review, so the Bank of Canada's (2006) promise to undertake one between now and 2011, and to encourage public participation in it, is extremely welcome. This announcement, long enough in coming to warrant a "better late than never" response, provides the raison d'etre for a new initiative on Canadian monetary policy from the C. D. Howe Institute.

Issues to be Discussed

The Bank of Canada's announcement proposes a wide-ranging agenda, dealing with technical issues concerning the execution of policy, as well as with broader matters of principle. Many of the former, important though they are, can be addressed within the terms of the agreement currently in place between the Bank and the minister of finance. Not so the latter, however, and this *Commentary* addresses two of the more pressing matters at hand. First, whether the target rate of inflation should be lowered from 2 percent; and second, whether policymakers should continue to treat past inflation performance, when it has under- or overshot their target, as a bygone in their deliberations on future policy, or should rather attempt to cancel out its effects on price levels.

These two issues will be discussed here as a package because, though it would be possible to make either change without the other, their joint implementation would in effect shift Canada's monetary order from a *low inflation* to a *price-level stability* goal, a prospect that requires early analysis and debate if it really is in the cards for 2011.

To begin with, smooth implementation of such a change will require the ground to be prepared well in advance, but even more important at the current juncture, the pros and cons have not yet received the systematic examination and public discussion they require. That is why this *Commentary* identifies issues that need further attention rather than making firm recommendations.

Specifically, the following questions will be raised below: whether the achievement and maintenance of price stability would bring gains in economic efficiency relative to the status quo; whether moving to it would entail significant costs; whether even our current low inflation rate has effects on the distribution of income and wealth that would be worth eliminating; whether developments abroad, and particularly the US, might in any way narrow the scope of Canada's monetary policy choices; and whether, finally, there is any prospect of political support for monetary change.

Among these are: the extent to which the behaviour of markets for financial assets and housing should be taken into special account in policy decisions; the time horizons for which and over which policy decisions are made; the role of core inflation as an indicator variable, and even as a potential alternative to CPI inflation as a policy goal; and the amount of information about its own forecasts that the Bank should publish.

As we shall see, the experience of the last 15 years has already generated answers to some of these questions that are different from those we might have expected in the early 1990s, even if some remain tentative, and not all point in the same direction. Thus, low inflation proved more easily sustainable than was widely believed when it became a policy target, and its achievement has done much to promote improved economic performance. Even so, at least in the light of experience to date, it is hard to argue that further efficiency gains to be had from a move to price stability would be large enough to warrant incurring the costs of achieving it. But distributional considerations — who loses and who gains from inflation — could conceivably tip the balance in its favour. Along with international considerations, they might also emerge as sources of political support.

The View From 1991

Monetary policy was already controversial in Canada in 1991, but that year's implementation of an "inflation reduction program" was as much prompted by the short-run problem of how to forestall a wage-price spiral threatened by the impending introduction of the GST as by any longer term considerations.²

Inflation Targeting Since 1991

The 1991 program set a gradual downward path for inflation, which was to reach 2 percent in 1995. It envisaged further progress thereafter towards "price stability," whose characteristics — apart from an inflation rate "clearly below" 2 percent — were left unspecified pending further study. But in 1993, with the advent of a new government and a new Bank of Canada governor, a decision about "price stability" was deferred until 1998. And in 1998, what by then had become an "inflation control target" of 2 percent per annum (plus or minus 1 percentage point) was renewed for a further three years. There have been two further renewals of this 2 percent target since then, and along the way, the possibility of aiming at price stability has simply disappeared.³

It is hard to criticize the caution exercised in 1991, and the later reluctance to rock the boat when things seemed to be working out reasonably well. In 1991, the

² The Bank of Canada had begun to propose "price stability" as a policy goal in 1988 (See John Crow 1988), but had neither quantified it nor specified a timetable for achieving it, and the Bank's policies encountered serious credibility problems in international markets in early 1990. The tone of the debate at that time is well exemplified in two C. D. Howe Institute publications, Richard Lipsey, ed., (1990) and Robert York, ed., (1990). On the factors that prompted the introduction of targets, see Charles Freedman (1994) and Crow (2002).

³ This is not to suggest that there have not been significant developments in the monetary policy area since 1991. On the contrary, there have been many: the adoption of fixed decision dates for setting the overnight rate target in 1999; experiments involving the Monetary Conditions Index in the mid-1990s that tried, but ultimately failed, to find a significant and systematic place for the exchange rate in the policy framework; analysis of the role of "core" inflation measures as guides to policy; etc. However, these have all concerned the implementation of a policy whose basic goals have remained essentially unchanged. Much of this material is discussed in Laidler and Robson (2004).

authorities were under pressure to "do something" to define their intentions for monetary policy in a difficult environment. There was no recent experience of how the economy was likely to behave in conditions of sustained low inflation, let alone price stability. Moreover, Canada was only the second country (after New Zealand) to adopt inflation targets in 1991. Sixteen years later, we know a great deal more about how low inflation economies work, not just from local experience, but from international evidence too, because no fewer than 24 countries, amounting to about a quarter of the world economy, now have such programs in place (see Andrew Rose 2006). Furthermore, if those arguing for the adoption of formal inflation targets in the US have their way, the international environment will be changed even more.

All of these factors add to the case for a thorough review of the basics of Canada's monetary policy regime. This is not to prejudge matters by saying that the status quo is seriously defective. However, a comparison of the regime's characteristics with some state-of-the-art benchmark is long overdue, and some thought also needs to be given to how it fits into a changing international environment.

Efficiency and Price Stability

Peter Howitt's masterly (1990) survey of the effects of inflation on economic efficiency retains its relevance today. Inflation inhibits the smooth workings of market mechanisms by making the signals emanating from individual price changes harder to read, and making the planning of consumption and production more error prone. It also distorts accounting standards, developed on the assumption of price stability, and tax systems built upon them. These effects differ in their intensity across activities and hence further undermine the economy's ability to allocate resources efficiently. Inflation's rapidity intensifies such problems, moreover, because its variability increases as it rises, causing time horizons in capital markets to shorten and making long-term investments more difficult to plan and finance. These efficiency effects vanish only when the price level is stable, which is surely one reason why, in 1991, the 2 percent target was presented as only an interim goal.⁴

Policymakers did not spell out just what price stability would look like in 1991. But on the reasonable assumption that the Consumer Price Index (CPI) was to remain the relevant measure of the price level, Laidler and Robson (1993, Ch. 11) speculated that pursuing stability would likely have to mean targeting a rise of 1 percent instead of 2 percent per annum. Such a goal, then as now, allows for the fact that the CPI provides a slightly upward-biased measure of changes in the true "cost of living." It also provides all- important policy clarity, based on the pursuit of a "round number" inflation rate for a widely understood cost-of-living measure.

⁴ It should be noted that academic literature dating back to the inter-war years identifies certain potential gains from mild deflation. George Selgin (1997) discusses these ideas, which however do not at present command wide support among either academics or policymakers and will not be discussed further here. However, a full review of Canada's monetary policy goals would pay some attention to them.

As well, they suggested that price stability might involve aiming at the time path of this price index itself rather than its inflation rate.⁵

Perhaps it is not surprising that this goal attracted little support at the time, when even 2 percent inflation seemed over-ambitious to many commentators. Though this inflation rate was quickly reached in the wake of the 1990-91 recession, it was uncontroversial, even among the new policy's supporters, that keeping it there would very likely be at the cost of at least slowing down temporarily the then-incipient recovery. Since any incremental long-term benefits of lowering inflation further were expected to be small, 2 percent inflation must have seemed like a reasonable place to stop, at least for a while. There was also a danger, in the view of policymakers, that, as the economy recovered from recession, even this target might be overshot quite often, and as a corollary, that a policy based on a time path for the price level would imply a commitment to drive inflation significantly below 2 percent with some frequency to compensate for such errors. Given then-prevailing doubts about the feasibility of doing this at any reasonable cost, it was easy to defend letting bygones be bygones in the wake of such overshoots.

Today's Perspective

Our current regime is thus much more the legacy of compromises, made in the early 1990s by cautious politicians and central bankers, than the outcome of careful calculations about what the optimal goal of monetary policy should actually be. The 2 percent target is now firmly embedded, however, despite the fact that 2 percent inflation has been so clearly sustainable that it is now hard to believe that something lower is not also within reach. And this fact also suggests that doubts were also exaggerated about the costs involved in creating shorter bouts of even lower inflation, which counted against targeting a time path for the price level in 1991.

Some Pros and Cons of Price Stability

We now understand, as we then did not, that a price-level target has potentially important short-term advantages. If and when, as a result of some shock to the

As noted above, an inflation target allows bygones to be bygones when it is missed, and thus has the potential to introduce drift into the price level's time path. Hence, it preserves an element of expectational uncertainty that makes long-term saving and investment decisions more difficult, a problem that is eliminated by targeting the time path of the price level itself. A reading of John Crow (2002) suggests that it was "price stability" of the sort just discussed that he had in mind as the ultimate aim when, as governor of the Bank of Canada, he first began to use the phrase systematically (see Crow 1988). The term resurfaced in 1991 to characterize the inflation reduction program's post-1995 goal.

And this is not to mention the work of Akerlof, Dickens and Perry (1996), which suggested that the existence of downward money-wage stickiness, over and above anything that could be attributed to expectation effects, might also make it wise to aim for a noticeably positive inflation rate in any economy. For discussion of these issues in a specifically Canadian context, see the contributions of Howitt, Fortin and Parkin in Laidler, ed. (1997). A recent, general discussion of these issues, is to be found in Francesco Giavazzi and Frederic Mishkin (2006).

financial system, there is a threat of falling prices, such an arrangement requires not only that policy react to prevent this, but that it becomes sufficiently expansionary to induce enough temporary inflation to get the price level itself back on track. Such expansion, which would not be called for under inflation targeting, and anticipations of it among the general public in particular, would provide a much-needed antidote to the real stagnation that many fear can be created in such circumstances. In such an event, conventional monetary policy responses are also limited by the fact that interest rates cannot be reduced below zero. The probability of encountering such eventualities obviously rises as the long run goal for inflation falls, which makes price-level targeting attractive as a component of any policy package that would see Canada's current 2 percent target inflation rate cut to 1 percent.⁷

Even so, not everything we have learned since 1991 favours the case for a price-stability goal. Granted, as Laidler and Robson (2004) documented, most of the specific benefits that were supposed to flow from lower inflation were subsequently realized — easier decision making for consumers and firms, more cordial labour relations, a restoration of activity in the long end of the capital market, and so on. But the apparent effects of these gains on the overall level and rate of growth of Canada's productivity were disappointing. Things did look up on the productivity front from the early 1990s onwards, but once the effects of the FTA (and later the NAFTA), not to mention of the replacement of the Manufacturers' Sales Tax by the GST, are allowed for, there seems to be precious little left over to attribute to lower inflation.

This evidence should surely be carefully re-examined as part of any review of Canada's monetary policy regime. But, as things currently stand, it would seem that, if there were few productivity gains as inflation fell from the 4-to-5 per cent range to a highly credible 2 percent, little is to be expected from a further one percentage point reduction. Furthermore, though in principle price-level targeting makes the time path of that variable more certain at longer horizons, and hence reduces the risks attendant on long-term saving and investment decisions, it is not clear that this consideration has been important in practice. Since 1995, though the price level has swung around a 2 percent rising time path, there has been no tendency for it to drift systematically away from it over time, and the inflation rate has averaged almost exactly 2 percent per annum. Furthermore, the long end of the capital market has become well re-established under the current regime, and interest rates show no sign that savers are demanding significant premiums to lend at terms of even 10 years or longer.⁸

⁷ The lower the target inflation rate, the greater is the danger of a policy undershoot generating actual deflation, which many believe creates particularly difficult circumstances for monetary policymakers. Lars Svensson (1999) provides a particularly compelling analysis of the beneficial effects of price-level targeting, which include the possibility of generating, under some circumstances, less variability in inflation for a given amount of variability in real output. Svensson's results, however, are heavily dependent on the assumption that the public forms its expectations in a "forward-looking" way, using a sophisticated understanding of how the policy regime works. Forward-looking expectations are discussed further, below.

Nevertheless, the relevant evidence needs further examination before firm conclusions about future policy are drawn, because what we are describing here are *ex post* outcomes for price-level and interest-rate behaviour, rather than *ex ante* expectations about them, which might have been rendered more secure by having a price-level targeting regime in place. Giavazzi and Mishkin

The Costs of Reducing Inflation

Economic life with a 2 percent inflation target is surely easier than it was when inflation was running at about 4 to 5 percent and no-one was sure where it would go next. It is hard to believe that the much greater real economic stability experienced since 1991 — a period in which the economy has seen no recession — has not had a lot to do with the new regime as well. There is no economic case for relaxing the 2 percent target, therefore, let alone abandoning it. But with no signs of significant efficiency gains there for the taking, an important part of any economic case for lowering it further is missing. This is a particularly telling point if the costs of doing so might be significant.

It is a well-understood theoretical possibility that, if agents act on the basis of "forward looking" expectations — if they understand the intentions of those making monetary policy and use this understanding as a basis for acting in anticipation of its consequences — a credibly pre-announced tightening of monetary policy will have fewer disruptive side effects on output and employment. Such analysis underpinned the hopes of a few, even in the early 1990s, that disinflation might be achieved with relatively mild transitional costs once the inflation reduction policy was announced.

There is, however, no good reason to believe that either the 1991 announcement or the renewal of the program in 1993 had any such effects. Instead, some evidence, notably the fact that longer term nominal interest rates did not fall significantly until the mid-90s, suggests that they did not. It was thus only after targets had been regularly and visibly hit (or undershot) for a few years that private sector expectations seem to have adjusted and become consistent with the goals of monetary policy. This is not surprising. By 1991, policymakers had been announcing their good intentions for two decades without delivering, so evidence was needed that promises were at last being kept before they were likely to be believed. But further questions about the nature of the credibility that was established in the 1990s remain, and are relevant both to the likely costs of further inflation reduction, and of adopting price-level targeting too.

What Agents Have Learned Since 1991

At one extreme, it may be that individuals and businesses have learned since 1991 that policymakers can be counted on to keep their promises. If credibility of this sort has indeed now been established, then this would amount to saying that expectations have now become "forward looking." This, in turn, would hold out some hope that a future pre-announcement of a change in the configuration of the monetary policy regime could influence behaviour in anticipation of its implementation, thus facilitating a smooth transition. And, as already noted above, such forward-looking expectations would also enhance the short-run stabilizing properties of price-level targeting, particularly perhaps at very low inflation rates.

footnote 8 cont'd

⁽²⁰⁰⁶⁾ provide a thorough review of the pros and cons of price-level targeting.

At the other extreme, however, perhaps nothing more has happened than that agents, experiencing a 2 percent inflation environment, have eventually adapted their behaviour to it without making any conscious effort to understand matters further. If this is so, then expectations remain "backward looking," and any future effort to implement a new regime — even if it is pre-announced — will risk creating inconsistency between the goals of policy and private sector expectations about its outcome. This inconsistency, in turn, will disrupt the economy's smooth working until those expectations once more catch up with experience.

Nowadays, forward-looking behaviour does seem to characterize financial markets, which would probably take a carefully pre-announced change in the rules of the monetary policy game in their stride. The likely reaction in labour and goods markets however, at least as important to the costs of any such change, is more difficult to predict. These markets have certainly shown more flexibility in Canada since the early 1990s, with symptoms of the kind of extrapolative behaviour associated with backward-looking expectations diminishing in importance. There now seems to be less stickiness in money wages and prices than there was, and less inertia in their time paths, while the degree of "pass through" into the domestic prices of imported goods as their foreign prices and the exchange rate vary has also been markedly reduced. More generally, the Canadian labour market has displayed remarkable resilience in the face of very large shocks emanating from fluctuations in world commodity prices that were not completely buffered by offsetting exchange rate swings.

Even so, though wage and price flexibility have markedly increased, both are probably still less than complete. As well, the labour market's resilience has delivered changes in wage *relativities* among sectors and regions against an overall stable upward trend in money wages, so we still cannot be sure about its capacity to absorb the generalized downward pressure on that trend that a move to lower inflation would imply. Furthermore, there has been a lengthening of the periods of wage settlements and a reduction in the frequency of Cost of Living Allowance (COLA) clauses (Laidler and Robson 2004). These settlements surely reflect greater confidence in the stability of the current inflation rate, and by their very nature constitute a new obstacle to changing that rate, particularly at short notice.

Distributive Issues

If the trade-off between the efficiency benefits to be expected from setting a pricestability goal for monetary policy and the costs of making the transition to it is considered in isolation, the evidence, as it now stands, seems to favour sticking with the status quo. The distributional effects of inflation perhaps point in a

⁹ For example, the lack of interest in monetary policy noted at the outset of this *Commentary* does not extend to the media that serve this sector, where the attention paid the latest economic indicators, and their likely implications for the Bank of Canada's next interest rate decision, is not only essentially continuous but also displays a widespread understanding that the decision in question will be aimed at keeping inflation on track.

¹⁰ Among relevant studies of the evidence discussed here are Amirault, Kwan and Wilkinson (2006), and Bouakez and Rebei (2005).

different direction, however, and along with international considerations, might also be the source of political pressures for change.

Inflation and the Purchasing Power of Savings

Inflation's corrosive effect on nominal savings, and on fixed-money incomes is notorious. Even the current target rate of 2 percent will reduce the purchasing power of a dollar to less than 80 cents in a decade. But the weight that we might attach to this effect depends on, among other things, just how many people are vulnerable to it, and who they are. ¹¹ Here it is crucial to note how much demographics have changed since the early 1990s. The baby boom generation is aging, so the number of older people whose wealth and incomes are likely to be adversely affected by inflation is growing rapidly.

Their pensions, of course, can be indexed, and some are and will be, not least the government-provided elements of the system (C/QPP and OAS — GIS). However, except in the public sector, indexation is not a common feature of the supplementary occupational pension plans and annuitized RRSPs, on which many rely to top up these basic benefits. Moreover, as private-sector plans continue to shift away from the defined-benefit and towards the defined-contribution model — a trend that started in the 1990s — the extent of such indexation is likely to decline further.

Some Effects of Taxation

There is little comfort to be found in the well-known tendency of nominal interest rates to include a premium that helps to offset the effects of inflation on savings. This premium is always a rough and ready source of compensation, and sometimes incomplete. But crucially, it interacts in unfortunate ways with a Canadian tax code that treats the whole of the nominal return on any asset (even on an index-linked government bond) as taxable income. This interaction is particularly troublesome when real interest rates themselves are low, as they are at present.

The arithmetic here can be sobering, even for savers with rather modest incomes. For example, at the currently targeted 2 percent inflation rate, anyone in a 25 percent marginal tax bracket who wants a mere 2 percent after-tax real rate of return would have to hold an asset yielding a before-tax nominal return of just over 5.3 per cent — far above anything currently available on safe instruments in Canada. At 1 percent inflation, a 4 percent yield would suffice. Or, to put the same point another way, if an investor gets a before-tax nominal rate of return of 3.6 percent on a GIC, the after-tax real return is 0.7 per cent when the inflation rate is at 2 per cent, and 1.7 per cent when it is 1 per cent. Should inflation stray to its current 3 percent upper boundary for a whole tax year, real after-tax returns over that interval would be negative on these same assumptions.

¹¹ The reader is reminded that there are gainers as well as losers from the redistributive effects of inflation, including governments (and hence taxpayers in general), shareholders in financial institutions and borrowers in general, including younger home-owners with mortgages.

Now it is not clear how long the low levels of real interest rates currently prevailing are likely to persist, but the longer they do the more widely will Canadian savers recognize the effects of even 2 percent inflation on after-tax real returns. The disheartening effect will be deepened by the baleful influence of inflation on the purchasing power of the supplementary pension incomes of a growing fraction of the population. These distributional consequences, arguably undesirable, are thus likely to become more widespread in the next few years, and a constituency with little tolerance for even low inflation might well develop as a result. In order to assess the gains to be expected from moving to a price-stability goal, and the extent of the political support it might command, it would be worth knowing just how many people are likely to be affected by these developments, and to what extent.

International Factors

Any country that sets a purely domestic goal for its monetary policy must allow its exchange rate to float more or less freely, and there is no technical economic reason why the international inflationary environment should impinge on Canada's domestic monetary policy choices. Nowadays the 2 percent inflation rate that seemed so ambitious in 1991 is unremarkable among the world's economies: no fewer than 27 of the 42 countries listed in the *Economist's* "league tables" of economic performance had consumer price inflation rates of 3 percent or less last year. As well, any effects of a move to a price-stability target on the day-to-day behaviour of the Canadian dollar's exchange rate would surely be swamped by the influence of other factors. These features of the international environment are therefore neutral when it comes to a choice between price stability and the status quo.

Overseas Experience

Some recent overseas experience can nevertheless be read as suggesting that inflation targets can be set too low for comfort. New Zealand, for example, began with a target inflation range of 0 to 2 percent but has now completed the process of revising it upwards to 1 to 3 percent. Britain has also slightly raised its target, though stealthily. Recently, too, Sweden has been advised by outside experts (Giavazzi and Mishkin 2006) to relax its policy a little to reduce the frequency with which it has undershot its inflation target in recent years. To the extent that it might be desirable for targeters to converge upon a common goal in the interests of international financial stability — and Andrew Rose (2006) has recently suggested that inflation targeting has now become so widespread that we should think of it as a newly emerging international monetary system — perhaps Canada

¹² Unlike Canada, New Zealand policymakers attach no particular significance to the mid-point of the range. Britain has relaxed its targets by dropping the price index initially targeted — the UK retail price index — substituting for it the so-called "harmonized consumer price index" used in the euro zone, while *lowering* its actual inflation target from 2.5 to 2 percent, which is probably less than would have been needed to compensate for the greater tendency of the latter to *overstate* inflation.

already has things about right. And significantly in this respect also, no country currently targets the time path of its price level.

The Future of US Policy

The international considerations that are likely to impinge most on Canada's monetary policy choices arise from its close economic ties to the US, which is now having a rather low-key debate about whether or not to follow the international crowd and adopt formal inflation targets of its own. As we saw in the late 1990s, Canadians have a low political tolerance for a currency that systematically declines against the US dollar. So were the US to move onto a lower inflation path than Canada and hence make a long-term Canadian dollar depreciation a possibility, this would work against local political support for the status quo and make a move to price stability (or at least to a lower inflation target) more attractive.

Such a contingency perhaps seems remote at present. The US is still some way from adopting formal inflation targets, and domestic considerations there would surely loom large in the design of any scheme likely to be proposed for serious consideration, let alone adopted. Since there does not seem to be much interest in reducing the long-run inflation rate among the US electorate at present, such a regime would likely be built around a target inflation rate at the top end of the Federal Reserve system's current "comfort zone," which, if anything, seems to involve a higher rate than that currently targeted in Canada. However, the likely effects of introducing a formal target on the status of the US dollar as an international reserve currency — a consideration with no parallel in the Canadian policy environment — could not be quite ignored, so decisions already made elsewhere in the world would have to count for something. Perhaps significantly in this context, the US dollar's main competitor as a reserve currency, the Euro, is already subject to a monetary policy goal of inflation "below, but close to 2 percent."

So, if, in the light of current domestic political considerations, an inflation-targeting US would be unlikely to opt for an inflation rate much less than it has recently been informally pursuing, it would surely not be likely to opt for anything much higher than 2 percent either, because of international considerations. Furthermore, the same demographic forces discussed above in the Canadian context are also at work in the US, so domestic political preferences there might also change in due course. In the longer run, then, the adoption of more ambitious inflation targets in the US than those currently in place in Canada cannot be quite discounted, and there might be something to be said for staying ahead of such developments if that would make it easier to maintain public

¹³ The Federal Reserve seems to pay particular attention to the rate of change of the "core personal consumption expenditure deflator." However, this particular inflation measure has recently run close to a percentage point below the rate of change of the US consumer price index, the equivalent index to that targeted by the Bank of Canada. A recent study by Daniel Thornton (2007) suggests that the Fed. has an implicit objective for the long-run inflation rate that would keep it within a range of 1 to 3.3 percent, with a mid-point of 2.25 percent.

support for the local regime in the longer run. This consideration needs further analysis, with a view to being factored into Canada's 2011 decision.

Concluding Comment

"Further work is required" is an old academic cliché, and it certainly applies in this case. Though it is hard to argue for shifting to a price-stability goal on the traditional grounds that this would promote economic efficiency, at least given currently available evidence on these matters, we have seen that distributional and international factors might, in the next few years, not only tend to favour such a change, but also generate political support for making it. It would, therefore, be wise to invest some effort in looking at these more carefully and assessing the likelihood of such an outcome.

It would also be worth re-examining what Canadians think we already know about the above-mentioned efficiency considerations, and also to try, well in advance of any decision, to understand better what the costs of change might be, and of how these might be reduced. We need to investigate why elements of backward-looking expectations, and of the extrapolative behaviour that goes with them, seem to persist. Further we should consider whether any problems these might create can be mitigated by increasing the public's understanding of how monetary policy works, by enhancing the credibility of any promises that are made about its future, and by making such promises well in advance of any change.

But whether the eventual decision is to shift to a price-stability goal or to remain with the 2 percent inflation status quo, a systematic and public airing of the issues at stake in the design of the post-2011 monetary policy framework well in advance of that decision will be thoroughly worthwhile. It will ensure that the configuration of this central element of Canada's monetary order will have been self-consciously chosen on its merits, rather than improvised by default yet again. This will indeed be better late than never for a regime that in 2011 will already be 20 years old.

References

- Akerlof, George, William Dickens and George Perry. 1996. "The Macroeconomics of Low Inflation." Brookings Papers on Economic Activity. 1:1-19.
- Amirault, David, Carolyn Kwan and Gordon Wilkinson. 2006. "Survey of Price Setting Behaviour of Canadian Corporations." Bank of Canada Working Paper 2006-35. Ottawa.
- Bank of Canada. 2006. Renewal of the Inflation-Control Target: Background Information. (November) Ottawa.
- Bouakez, Hafedh, and Nooman Rebei. 2005. "Has Exchange Rate Pass-through Really Declined in Canada?" Bank of Canada Working Paper 2005-29. Ottawa.
- Crow, John. 1988. "The Work of Canadian Monetary Policy." (The Eric J. Hanson memorial lecture). Bank of Canada Review (Spring).
- ——. 2002. Making Money. Toronto: John Wiley.
- Freedman, Charles. 1994. "Formal Targets for Inflation Reduction: the Canadian Experience." In J. O. DeBeaufort Winholds, S. Eijffinger and L. W. Hoodiun, eds. *A Framework for Monetary Stability*. Dordrecht and Boston: Kluwer Academic Publishers.
- Giavazzi, Francesco, and Frederic Mishkin. 2006. *An Evaluation of Swedish Monetary Policy Between* 1995 and 2005. Stockholm: Riksdagstryckereit.
- Howitt, Peter. 1990. "Zero Inflation as a Long-term Target for Monetary Policy." In Richard Lipsey, ed. Zero Inflation: the Goal of Price Stability. Toronto: C. D. Howe Institute.
- Laidler, David, ed. 1987. Where We Go From Here. Toronto: C. D. Howe Institute.
- ——, and William Robson. 1993. *The Great Canadian Disinflation: the Economics and Politics of Monetary Policy in Canada, 1988-93.* Toronto: C. D. Howe Institute.
- ——. 2004. Two Percent Target: Canadian Monetary Policy Since 1991. Toronto: C. D. Howe Institute.
- Lipsey, Richard, ed. 1990. Zero Inflation: the Goal of Price Stability. Toronto: C. D. Howe Institute.
- Robson, William. 2007, (forthcoming). The Canadian Monetary Order: Past, Present and Prospects. C.D. Howe Institute Commentary. Toronto: C. D. Howe Institute.
- Rose, Andrew. 2006. "A Stable International Monetary System Emerges: Inflation Targeting is Bretton Woods, Reversed." NBER Working Paper 12711.
- Selgin, George. 1997. Less than Zero: The Case for a Falling Price Level in a Growing Economy. Hobart Paper No. 132, London: IEA.
- Svensson, Lars. 1999. "Price-level Targeting vs. Inflation Targeting: a Free Lunch." *Journal of Money, Credit and Banking*. 31:277-295
- Thornton, Daniel. 2007. "The Lower and Upper Bounds of the Federal Open Market Committee's Long-Run Inflation Objective." Federal Reserve Bank of St. Louis Review 89 (May/June) 183-193.
- York, Robert, ed. 1990. Taking Aim: the Debate on Zero Inflation. Toronto: C. D. Howe Institute.

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