

C.D. Howe Institute Institut C.D. Howe

Communiqué

Embargo: For release Thursday, March 6, 1997

Future of inflation targets discussed in new C.D. Howe Institute study

The Bank of Canada should continue to target low and stable inflation in the medium term. That is the view of most contributors to a C.D. Howe Institute study released today.

The study, *Where We Go from Here: Inflation Targets in Canada's Monetary Policy Regime*, was edited by David Laidler, Professor of Economics at the University of Western Ontario and an Adjunct Scholar of the C.D. Howe Institute, and records the proceedings of a conference held at the Institute in October 1996.

Canada's current inflation control targets were put in place shortly after the election of the Chrétien government and on the announcement of the appointment of Gordon Thiessen as governor of the Bank of Canada. The inflation control program is premised on the belief that price stability is not an end in itself but the best means available to the Bank to help ensure Canada's long-run prosperity. This goal was first quantified in 1991 in the form of specific inflation reduction targets announced jointly by the Bank's governor and the minister of finance in the federal budget, and modified in late 1993. The current targets are scheduled for review sometime in 1998.

The participants in the C.D. Howe Institute conference were nearly unanimous in accepting the usefulness of a targeting regime. And the range of disagreement about the appropriate range for inflation goals in future was relatively narrow — running from a low of 0.5 to 2.5 percent to a high of 2.0 to 4.0 percent.

In his editor's introduction, Laidler argues that Canada's macroeconomic policy situation, though much improved in recent years, is still fragile. Current projections for a decline in the ratio of outstanding public debt to gross domestic product (GDP) could easily be upset by a shock such as a downturn in the US economy or a sudden political crisis over Quebec. Accordingly, medium-term monetary policy choices should not rock the boat, Laidler cautions.

In one of three major papers in the volume, Peter Howitt, a Canadian economist recently appointed to a professorship at Ohio State University, concludes that the fight against inflation, despite the transitional costs Canadians have borne, is finally beginning to yield benefits: inflation expectations have fallen, the average term of household mortgages is lengthening, business borrowing is less heavily concentrated at the short end of the market, investment as a fraction of GDP is picking up, and labor market unrest is in decline. These changes, Howitt

says, should improve the performance of the Canadian economy, although he concedes that the evidence is not yet readily apparent that this is happening.

In another paper, Wilfrid Laurier University economist Pierre Siklos examines the political accountability and autonomy of the Bank of Canada. He proposes increasing the Bank's accountability to the provinces, among other proposed changes to the *Bank of Canada Act*, and assesses the experience with inflation targets in Canada and elsewhere.

In a third major paper, John Grant, an adjunct professor of economics at the University of Toronto and former chief economist at Wood Gundy Inc., looks at the framework within which monetary policy is executed from day to day. He stresses that the private sector's response to monetary policy measures is influenced not just by the Bank of Canada's broad policy goals but also by the Bank's day-to-day operations themselves, which are, in effect, statements about its beliefs and intentions.

In the conference wrap-up essay, Michael Parkin of the University of Western Ontario stresses two issues that dominated the discussion of inflation targets at the conference. On the one hand, if inflation targeting lends credibility not just to monetary policy but to macroeconomic policy in general, then a strong case can be made for persevering with the current target range or even reducing it a little. On the other hand, if resistance on the part of workers to wage cuts, even under a credible regime of negligible inflation, turns out to be a permanent feature of the labor market, this would make a modest increase in the target range more attractive. Parkin, like a number of other participants in the conference, stresses the need for further research on this last issue.

The volume also includes comments on the main papers by several Canadian monetary policy experts, including former Bank of Canada governor John Crow and Pierre Fortin, a leading critic of Bank of Canada policy.

* * * * *

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Where We Go from Here: Inflation Targets in Canada's Monetary Policy Regime, Policy Study 29, edited by David Laidler (C.D. Howe Institute, Toronto, March 1997). 300 pp.; \$19.95 (prepaid, plus postage & handling and GST — please contact the Institute for details). ISBN 0-88806-405-5.

Copies are available from: Renouf Publishing Company Limited, 5369 Canotek Road, Ottawa, Ontario K1J 9J3 (stores: $71^1/2$ Sparks Street, Ottawa, Ontario, phone 613-238-8985; 12 Adelaide Street West, Toronto, Ontario, phone 416-363-3171); or directly from the C.D. Howe Institute, 125 Adelaide Street East, Toronto, Ontario M5C 1L7. For trade book orders, please contact: McGraw-Hill Ryerson Limited, 300 Water Street, Whitby, Ontario L1N 9B6.



C.D. Howe Institute Institut C.D. Howe

Communiqué

Embargo : à diffuser le jeudi 6 mars 1997

Une nouvelle étude de l'Institut C.D. Howe débat de l'avenir des cibles de réduction de l'inflation

À moyen terme, la Banque du Canada devrait continuer à cibler une inflation faible et stable : telle est l'opinion de la plupart des collaborateurs à une étude de politique de l'Institut C.D. Howe publiée aujourd'hui.

L'étude, intitulée Where We Go from Here: Inflation Targets in Canada's Monetary Policy Regime (Que faire maintenant : les cibles de l'inflation dans le cadre de la politique monétaire canadienne), est dirigée par David Laidler, professeur d'économique à l'University of Western Ontario et attaché de recherche à l'Institut C.D. Howe; cette étude donne le compte rendu d'une conférence organisée en octobre dernier par l'Institut.

Les cibles actuelles de maîtrise de l'inflation ont été mises en pratique peu après l'élection du gouvernement Chrétien, lors de la nomination de Gordon Thiessen comme gouverneur de la Banque du Canada. Le programme de maîtrise de l'inflation est fondé sur la conviction que la stabilité des prix n'est pas une fin en soi, mais le meilleur moyen dont dispose la Banque pour veiller à la prospérité à long terme des Canadiens. Cet objectif a tout d'abord été quantifié en 1991 sous la forme de cibles précises de réduction de l'inflation, annoncées conjointement par le gouverneur de la Banque et le ministre des Finances dans le cadre du budget fédéral, puis il a été modifié fin 1993. Les cibles actuelles seront passées en revue en 1998.

Les participants à la conférence de l'Institut C.D. Howe ont approuvé presque à l'unanimité l'utilité de ce programme. Quant aux suggestions de la fourchette idéale de ces cibles pour l'avenir, elles ne différaient que sensiblement — avec une limite inférieure de 0,5 à 2,5 % et une limite supérieure de 2 à 4 %.

Dans son introduction de cette étude qu'il a dirigée, M. Laidler soutient que, malgré une amélioration récente, la politique macroéconomique du Canada se trouve dans une situation encore précaire. Les prévisions actuelles d'une baisse du ratio de la dette fédérale nette au produit intérieur brut (PIB) pourraient facilement être bouleversées par une conjoncture comme un repli économique aux États-Unis ou une soudaine crise politique au sujet du Québec. Il importe donc que les choix de politique monétaire à moyen terme ne créent pas de remous, avertit M. Laidler.

Dans l'un des trois principaux documents de l'ouvrage, Peter Howitt, un économiste canadien récemment nommé à un poste de professeur à la Ohio State University, arrive à la conclusion que la lutte contre l'inflation, malgré les coûts transitoires qu'ont subi les Canadiens,

porte finalement ses fruits : les attentes inflationnistes sont moindres, la durée moyenne des hypothèques résidentielles s'allonge, les emprunts commerciaux se concentrent moins sur le court terme, les investissements en tant que pourcentage du PIB augmentent, et il y a moins d'agitation sur le marché du travail. Tous ces changements, indique M. Howitt, devraient améliorer le rendement de l'économie canadienne, bien qu'il admette qu'il n'existe pas encore de preuves apparentes à cet effet.

Dans le cadre d'un autre document, l'économiste de l'Université Wilfrid Laurier, Pierre Siklos se penche sur l'autonomie et la responsabilisation politiques de la Banque du Canada. Parmi divers changements qu'il propose d'apporter à la *Loi sur les banques*, il suggère une responsabilisation accrue de la Banque auprès des provinces, et il traite des leçons tirées de l'utilisation des cibles de maîtrise de l'inflation, au Canada comme ailleurs.

Dans le troisième document, John Grant, professeur auxiliaire d'économique à l'Université de Toronto et ancien économiste en chef chez Wood Gundy Inc., examine le cadre dans lequel évolue la politique monétaire au jour le jour. Il souligne que la réaction du secteur privé aux mesures de politique monétaire ne dépend pas seulement des objectifs généraux de politique de la Banque du Canada, mais également de son fonctionnement au jour le jour, car celui-ci sert en fait d'indication de ses opinions et de ses intentions.

Dans l'exposé qui concluait la conférence, Michael Parkin de l'University of Western Ontario souligne deux enjeux qui, dans cette conférence, ont dominé les discussions des cibles en matière d'inflation. D'une part, si les cibles de maîtrise de l'inflation donnent de la crédibilité non seulement à la politique monétaire mais également à l'ensemble de la politique macroéconomique, on dispose d'arguments solides pour poursuivre la fourchette cible actuelle, ou même de la réduire quelque peu. Par ailleurs, si l'opposition des travailleurs aux diminutions de salaires, même dans un contexte d'inflation insignifiante, devient une caractéristique permanente du marché du travail, on gagnerait alors à hausser de peu cette fourchette cible. Pareillement à plusieurs autres participants de cette conférence, M. Parkin souligne le besoin d'effectuer des recherches plus poussées sur cette dernière question.

L'ouvrage comporte également des commentaires sur les principaux documents, émis par plusieurs spécialistes en politique monétaire canadienne, dont l'ancien gouverneur de la Banque du Canada, John Crow et Pierre Fortin, un détracteur important de la politique de la Banque du Canada.

* * * * *

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telephone : 416 865-1904; telecopieur : 416 865-1866 adresse électronique : cdhowe@cdhowe.org Internet : http://www.cdhowe.org/fr/index.html Where We Go From Here: Inflation Targets in Canada's Monetary Policy Regime, Étude de politique nº 29 de l'Institut C.D. Howe, sous la direction de David Laidler, Toronto, Institut C.D. Howe, mars 1997, 300 p., 19,95 \$ (les commandes sont payables d'avance, et doivent comprendre les frais d'envoi, ainsi que la TPS — prière de communiquer avec l'Institut à cet effet). ISBN 0-88806-405-5.

On peut se procurer des exemplaires de cette publication auprès des : Éditions Renouf Itée, 5369, chemin Canotek, Ottawa ON K1J 9J3 (librairies : $71^1/_2$, rue Sparks, Ottawa ON, tél. 613 238-8985 et 12, rue Adelaide ouest, Toronto ON, tél. 416 363-3171), ou encore en s'adressant directement à l'Institut C. D. Howe, 125, rue Adelaide est, Toronto ON M5C 1L7. Pour les commandes commerciales, veuillez communiquer avec McGraw-Hill Ryerson Limited, 300, rue Water, Whitby ON L1N 9B6.

Where We Go from Here

Inflation Targets in Canada's Monetary Policy Regime

John Grant, Peter Howitt, Pierre L. Siklos

with comments by
John W. Crow, Pierre Fortin, David Johnson,
Jerzy Konieczny, Stephen S. Poloz,
Daniel Racette, William B.P. Robson,
Thomas K. Rymes, and William Scarth

Michael Parkin, rapporteur

edited by David Laidler

Policy Study 29

C.D. Howe Institute

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For college book orders, please contact: Prentice-Hall Canada Inc., 1870 Birchmount Road, Scarborough, Ontario M1P 2J7; phone (416) 293-3621

Institute publications are also available in microform from: Micromedia Limited, 20 Victoria Street, Toronto, Ontario M5C 2N8

This book is printed on recycled, acid-free paper.

Canadian Cataloguing in Publication Data

Main entry under title:

Where we go from here

(Policy Study, ISSN 0832-7912; 29) Proceedings of a conference entitled Monetary policy and the future of inflation control in Canada, held in Toronto, Ont., Oct. 19, 1996. Includes bibliographical references. ISBN 0-88806-405-5

1. Inflation (Finance) – Canada – Congresses. 2. Monetary policy – Canada – Congresses. 3. Bank of Canada – Congresses. I. Laidler, David, 1938– . II. C.D. Howe Institute. III. Series: Policy study (C.D. Howe Institute); 29.

HG655.W43 1997 332.4'971 C97-930051-7

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Foreword

Monetary policy has been out of the headlines recently. Low inflation, a stable and even modestly rising exchange rate, not to mention low interest rates, have combined to create an environment conducive to renewed and sustained real expansion. Rather, it is the pace of deficit reduction that has attracted attention. As everyone acknowledges, however, this has been much helped by low interest rates and rising real incomes.

Its very success has pushed monetary policy into the background. That is perhaps as it should be, but monetary policy does not operate on automatic pilot — it cannot be relied on to deliver a satisfactory outcome year in and year out. Canada's current monetary policy framework, the "inflation control program" put in place shortly after the election of the Chrétien government and the appointment of Gordon Thiessen as governor of the Bank of Canada, runs only until 1998. By then, decisions must be taken about whether it should be extended, amended, or even abandoned.

It was with this in mind that the C.D. Howe Institute invited a group of experts, drawn from the academic and business communities and from the Bank of Canada itself to consider the issues that must be addressed over the next year before decisions about the future of inflation targets are taken. The conference, chaired by David Laidler, Professor of Economics at the University of Western Ontario and an Adjunct Scholar at the Institute, was held on October 19, 1996. Dr. Laidler then edited the papers presented at the conference, along with discussants' comments and the rapporteur's remarks, and provided an introduction for this volume.

The papers presented here focus on the future, rather than on the past, of monetary policy in Canada, and range well beyond the topic of inflation targets *per se*. They discuss the benefits and costs of low inflation, as well as broad questions concerning the governance vi Foreword

of the Bank of Canada, and the evolving technical framework in terms of which, day by day, the Bank designs and executes its policies. The contributors are not of anything like one mind on many issues — the conference saw much lively debate about, for example, the possible existence of downward wage stickiness in the Canadian labor market and its implications for inflation, the appropriate degree of political independence to be granted to the Bank, and the role that ought to be given to the monetary aggregates in the future design of monetary policy.

Nevertheless, it is important to note the degree of consensus that emerged at the conference about some key issues. Virtually all participants accepted the usefulness of a targeting regime, for example. And the extent of disagreement about an appropriate range for inflation goals in future, though the matter was forcefully argued on all sides, was remarkably narrow — running from a low of 0.5 to 2.5 percent to a high of 2.0 to 4.0 percent.. To have forecast the emergence of so narrow a range of disagreement about such an issues at the beginning of this decade would have seemed otherworldly. Small wonder that debates about monetary policy now have trouble making the headlines. But for all that, the issues raised in the following pages are both interesting and important for the future of macroeconomic policy in Canada. They will be much discussed in the coming year and thereafter as well.

The conference in whose deliberations this volume originated could not have happened without the organizational skills of Monique Cormier and Karen Walker of the Institute's staff. The volume was copy edited by Lenore d'Anjou, Riça Night, and Barry A. Norris, and prepared for publication by Wendy Longsworth. The analysis and opinions presented in the study are the responsibility of the authors, and do not necessarily reflect the views of the members or Board of Directors of the C.D. Howe Institute.

Thomas E. Kierans
President and
Chief Executive Officer

The Contributors

John W. Crow was born in London, England, and graduated from Oxford University with a degree in Philosophy, Politics and Economics. From 1961 to 1973, he worked as an economist at the International Monetary Fund, latterly as chief of the North American Division. After joining the Bank of Canada in 1973 as deputy chief of the Research Department, he occupied progressively more senior positions before becoming governor from 1987 to 1994. In 1993, he was elected chairperson of the central bank governors of the Group-of-Ten countries, a position he relinquished when his term as governor ended. He is now a director or advisor of a number of Canadian and international corporations, Fellow-in-Residence at the C.D. Howe Institute, Adjunct Professor of Economics at the University of Toronto, and Chair of the Investment Committee of the Canada Council.

Pierre Fortin is Professor of Economics at the Université du Québec à Montréal and a Research Associate of the Canadian Institute for Advanced Research. He is past president of the Canadian Economics Association and a Fellow of the Royal Society of Canada. Over the past 20 years, he has authored more than 100 scholarly publications in Canada and abroad, mostly in the areas of wage-price determination, unemployment, and fiscal and monetary policies. In addition to his university duties, he has been active as an advisor to government, business, and community organizations, and in 1995–96 he co-chaired the committee mandated by the Quebec government to review income security programs in that province.

John Grant is currently Adjunct Professor of Economics at the University of Toronto, where he teaches in the Faculty of Man-

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Peter Howitt is Professor of Economics at Ohio State University in Columbus. He received his PhD from Northwestern University and then taught at the University of Western Ontario in London, Ontario, from 1972 until 1994. He is an Associate of the Economic Growth and Policy Program at the Canadian Institute for Advanced Research, a Fellow of the Econometric Society and of the Royal Society of Canada, Associate Editor of Econometrica and the Journal of Economic Growth, and a member of the Board of Editors of the Journal of Economic Literature. His research interests include monetary economics and the theory of endogenous growth. He has written extensively on Canadian monetary policy and inflation.

David Johnson teaches economics at Wilfrid Laurier University in Waterloo, Ontario. Educated at the University of Toronto, the University of Western Ontario, and Harvard University, he also worked for two years at the Bank of Canada. He has an active interest in monetary policy and central banking as well as in international finance. Most recently, he has published the Canadian edition of *Economics*, a principles textbook co-authored with John Taylor of Stanford University.

Jerzy Konieczny was educated at the University of Warsaw and the University of Western Ontario, where he received his PhD in 1987. He currently teaches economics at Wilfrid Laurier University in Waterloo, Ontario. His research interests include the costs of inflation and the optimal inflation rate, costly price adjustment models, endogenous altruism, and fertility.

David Laidler has been Professor of Economics at the University of Western Ontario in London, Ontario, since 1975, and an Adjunct Scholar of the C.D. Howe Institute since 1989. A specialist in monetary economics and the history of economic thought, he is a Fellow of the Royal Society of Canada and past president of the Canadian Economics Association. His most recent book, *The Great Canadian Disinflation*, written in collaboration with William B.P. Robson, was published by the C.D. Howe Institute in 1993.

Michael Parkin taught economics at the University of Manchester before taking up a Professorship of Economics at the University of Western Ontario in 1975. His path-breaking research on the economics of inflation, central bank independence, and the conduct of monetary policy have earned him an international reputation. He is currently President-elect of the Canadian Economics Association.

Stephen S. Poloz is Managing Editor of The International Bank Credit Analyst, a monthly international investment journal published since 1961 by the Montreal-based Bank Credit Analyst Research Group. He holds a BA in Economics from Queen's University and an MA and PhD in Economics from the University of Western Ontario. From 1981 to 1995, he pursued a career with the Bank of Canada, and from 1992 to 1995 was head of the Bank's Research Department. Mr. Poloz has served on the editorial board of the Canadian Journal of Economics (1988–91) and on the executive council of the Canadian Economics Association (1992–95). He has also spent time as a visiting scholar at the Economic Planning Agency in Tokyo (1984) and with the Research Department of the International Monetary Fund in Washington, DC (1992).

Daniel Racette is Chairman of the Institut d'économie appliquée and Professor of Economics at the École des Hautes Études Commerciales, a business school affiliated with the Université de Montréal. His main research interests are in macroeconomics, monetary theory, and international finance. He is the author of numerous scholarly articles, and has acted as a consultant for the Economic Council of Canada, the Bank of Canada, and the Quebec government. He and colleague Jacques Raynauld were jointly awarded the Pierre Laurin Prize by the École des Hautes Études Commerciales for their scientific publications in 1992–93.

William B.P. Robson is a Senior Policy Analyst at the C.D. Howe Institute and Canadian Liaison Officer for the British-North American Committee. He specializes in Canadian monetary and fiscal policy and has written and edited numerous Institute publications on government budgets and their economic effects and on the Bank of Canada and inflation. He is a familiar commentator on economic issues in the media.

Thomas K. Rymes is Distinguished Research Professor of Economics at Carleton University in Ottawa. He received his PhD from McGill University in 1968 and was a research statistician at Statistics Canada before joining Carleton. His studies include capital, monetary and banking theory, history of economic thought, and productivity measurement. His most recent publication (with Colin Rogers of the University of Adelaide) is "Keynes's Monetary Theory of Value and Modern Banking," in G. Harcourt and P. Riach, eds., The Second Edition of the General Theory (Routledge, forthcoming).

William Scarth is Professor of Economics at McMaster University, Hamilton, Ontario, where he began teaching after receiving MA and PhD degrees at the universities of Essex and Toronto. He has held a number of visiting positions at other universities in Canada, Australia, and the United Kingdom. He has published many articles in academic journals, often writing on topics such as the stabilization policy problems faced by small, open econo-

mies and the challenges posed by government debt. He is also the author of several textbooks, including *Macroeconomics: An Introduction to Advanced Methods* (2nd ed., 1996). Professor Scarth is an Adjunct Scholar of the C.D. Howe Institute and a frequent contributor to Institute publications.

Pierre L. Siklos is Professor of Economics at Wilfrid Laurier University in Waterloo, Ontario. He is the author of articles published in professional journals such as the Journal of Econometrics, the Journal of Money, Credit and Banking, and Economic Inquiry, as well as several books, including Money, Banking and Financial Institutions (McGraw-Hill), Varieties of Monetary Reforms (Kluwer), and Great Inflations of the 20th Century (Elgar). He has been a visiting scholar at Oxford University, the University of California at San Diego, and the International Monetary Fund, as well as a consultant to several central banks.

Monetary Policy and Inflation Control in Canada:

Editor's Introduction

David Laidler

This volume records the proceedings of a conference held at the C.D. Howe Institute on October 19, 1996, under the title "Monetary Policy and the Future of Inflation Control in Canada." The conference saw wide-ranging discussion of the current state of knowledge on issues central to the ongoing debate about Canadian monetary policy, a debate that is about to enter a new phase.

Background to the Conference

Nineteen ninety-eight will see the tenth anniversary of John Crow's Hanson Memorial Lecture (Crow 1988), which heralded what eventually became known as Canada's inflation control program. More important, that year will also see a review of the quantitative inflation targets that are the program's central feature.

The monetary policy regime now in place evolved piecemeal after 1988.¹ In the Hanson Lecture, Crow had declared that *price stability* was not an end in itself but the best means available to the Bank of Canada to help ensure the country's overall long-run prosperity. Only in 1991 was this goal quantified and the path to be taken

I am grateful to Ken Boessenkool, Angela Ferrante, and Bill Robson for comments on an earlier draft.

¹ These developments are described to the end of 1993 in Laidler and Robson (1993).

toward it specified, in the form of *inflation reduction targets* announced jointly by the minister of finance and the Bank on the occasion of that year's budget. In turn, the phrase *inflation control program* came into use in 1993, when a slightly modified version of the 1991 targets was reaffirmed, again by way of a joint announcement from the minister of finance and the Bank, shortly after the election of the present government and the appointment of Gordon Thiessen as governor of the Bank.

These developments were more than an ongoing exercise in labeling. Any attempt to significantly reduce Canada's inflation rate, which was running at about 5 percent and rising at the end of the 1980s, was bound to lead to a transitional slowdown in real economic activity, and by the end of 1990 the economy was clearly heading into recession. Opposition to the Bank of Canada's policies was by then both widespread and vocal. Questions about how responsibility for monetary policy ought to be divided between the elected government and the Bank's governor — questions that had lain dormant since the 1960s — arose with a vengeance, for a while becoming entangled in the wide-ranging constitutional debate.

Canada's attempt to reduce inflation by monetary means was set in motion without any simultaneous effort to tighten fiscal policy. Furthermore, although many other major countries were also reducing their inflation rates at the turn of the decade, there were no systematic efforts at international policy coordination. Indeed, floating exchange rate mechanisms seemed to give each individual country room to choose its own inflation goals and the pace of achieving them. Private capital markets were, nevertheless, already highly integrated internationally, so the anti-inflation policy had important short-run repercussions for the real exchange rate.² Indeed, for a

² Specifically, the exchange rate significantly overshot its long-run sustainable level, putting severe pressure on exporters and on domestic-market competitors with imported goods and services (including retailers located close to the US border). In recent literature, Dornbusch (1976) is the *locus classicus* of analysis of exchange rate overshooting and the role of international capital mobility in bringing it about, but the mechanisms involved were well understood by some economists even before World War 1 (see, for example, Hawtrey [1913]).

while, the Canadian media treated the phrase *anti-inflation policy* as synonymous with "high interest rate, high exchange rate policy."

The particular combination of circumstances at the beginning of the 1990s had no close precedents, and no one could be sure before the event how it would condition the day-by-day outcomes of monetary actions taken with purely domestic goals in mind. That is one reason why, over the past seven or eight years, the tactics of monetary policy have been examined and discussed as much as the broad anti-inflation strategy and the institutional framework within which both were designed. All aspects of Canada's monetary policy regime have thus been and continue to be subjected to debate, which is likely to grow more intense as 1998 approaches and decisions about the inflation targets have to be made.

The Conference and Its Organization

The conference whose proceedings make up this volume sought to contribute to that discussion both by surveying its overall subject matter and by exposing to constructive criticism a variety of points of view on specific issues. Its focus was on the future rather than on the past, on what ought or ought not to be done in 1998 and thereafter rather than on what ought or ought not to have been done since 1988. Recent experience was discussed, of course, but as a source of lessons for what might be done next, not for the sake of displaying the wisdom that comes with hindsight.

The conference was organized in four sessions, three of which centered around particular papers dealing, respectively, with the costs and benefits of negligible inflation (Peter Howitt), the political accountability and autonomy of the Bank of Canada (Pierre Siklos), and the Bank's tactical operating framework (John Grant). Though such a division was as natural as it was convenient, one striking result to emerge from the discussions was that these topics are, in fact, interconnected parts of a complex whole. Any decision taken about one component in 1998 or thereafter must involve careful attention to its consequences for the others. The nature of this interconnectedness emerges with particular clarity in the final essay of

this book, written by Michael Parkin, the conference rapporteur, who both reviews the day's proceedings and draws some provocative conclusions of his own about the issues that arise from them.

I now turn to a brief and necessarily selective account of what the following pages contain. Since the purpose of this volume, like that of the conference from which it stems, is to air alternative viewpoints rather than to hammer out a consensus, and since disagreements among the contributors on some issues are clearly on display below, I shall, from time to time, take the liberty of drawing some conclusions of my own, clearly labeled as such, about the questions to be settled between now and 1998.

Costs and Benefits of Negligible Inflation

The principal contribution to the first session is the work of Peter Howitt, whose 1990 study, "Zero Inflation as a Long-Term Target for Monetary Policy," has already become something of a classic. That paper, written at a time when moderate inflation was still deeply embedded in the Canadian economy, weighed the likely costs of *reducing* inflation against the benefits that might be expected to emerge once it *had been reduced*. It concluded that this cost-benefit calculus was strongly in favor of moving to a much lower inflation rate than was then in place, though perhaps not all the way to zero.

That the transitional costs Howitt foresaw in 1990 were indeed encountered is quite uncontroversial, and in keeping with this conference's intentions, his new paper is concerned with two questions: first, whether the benefits to which he looked forward in 1990 are now beginning to emerge; and second, whether any new factor has appeared that needs to be taken into account as the stance of future policy is set.

The Emerging Benefits

On the first of these questions, Howitt's investigations give grounds for guarded optimism. Both the level and the volatility of the inflation rate have come down since 1990, and a number of the expected consequences have begun to follow. The level and, much more important, the dispersion of inflation expectations have fallen, as have nominal (though not real) interest rates right across the term structure. The average term of household mortgages is lengthening; business borrowing is less heavily concentrated at the short end of the market than it was; investment seems to be picking up as a fraction of gross domestic product (GDP); and the degree of labor market conflict (as measured by strike activity) is in decline. All in all, the amount of "noise" that inflation induces in the price system has clearly been reduced, the decisionmaking environment is a little less uncertain, and the horizons of decisonmakers are lengthening.

All of these changes ought by now to be improving the economy's real performance in terms of its capacity both to provide economic well-being from a given level of resource use and to generate a more rapid rate of economic growth. Perhaps the changes in question are doing just that, but if so, the evidence is not yet apparent, as Howitt concedes. He does, however, draw attention to the great deal of work that has been done on the connections between inflation and economic growth since he last wrote on the topic and to emerging and widespread agreement among economists that the right way to examine these issues is by way of cross-sectional studies of long runs of data for groups of economies.⁴

At the low rates of inflation relevant to the Canadian case, such studies do not yield clear-cut, *statistically* significant results, but they do point to the possibility of growth rate gains, which, though

³ Many people believe that, because low inflation generates low nominal interest rates, it harms those who rely on interest receipts as a major source of income. Yet this circumstance would occur only if low inflation also systematically generated low real interest rates, and it does not seem to do so. Thus, the belief is erroneous. It stems from a failure on the part of those who hold it to take proper account of the influence of inflation on the real value of the principal sum that yields the interest income in the first place. That such a belief is nevertheless widely held is a prime example of the confusion that inflation creates for those making financial plans.

⁴ A particularly thorough example of a study along these lines is Barro (1996).

numerically small, may be of considerable long-term *economic* significance. Moreover, and of particular relevance when the question is what do when starting from a situation of very low inflation, these same results strongly contradict the proposition that higher inflation in any way helps economic growth.

Gains to the growth rate from cutting inflation arise over and above any once-and-for-all increase in the level of income that low inflation makes it possible to extract from given resources. Howitt notes, citing Feldstein (1996), that some, though not all, of this latter increase comes from the way in which low inflation reduces distortions caused by its interaction with the structure of the tax system, particularly as that system impinges on companies. The importance of these distortions (as costs of inflation *per se*) thus depends very much on the feasibility of offsetting them by the alternative means of cutting the level of corporate tax rates. But once again, the argument here points to effects of higher inflation that are clearly adverse.

The Chance of Permanently Higher Unemployment

A new and potentially important element was recently added to the debate about low inflation. Unemployment has been a major concern in Canada in recent years, and Howitt draws attention to new work carried out by Fortin (1996) in Canada and Akerlof, Dickens, and

⁵ It is important to be clear that two separate effects are at work here: one on the level of income that the economy can extract from a given quantity of productive resources, and another on the rate of growth of that income level. In a widely noticed critique of Howitt's (1990) paper on the benefits of low inflation, Linda McQuaig (1995) fails to make this distinction, and therefore erroneously concludes that the whole of his case rests on the results of one study (Jarrett and Selody 1983) of the effects of inflation on economic growth. In fact, Howitt (1990) concludes that the case for much lower inflation could be made on the basis of level effects alone and even in the total absence of growth effects. Thus, McQuaig's critique is largely beside the point. See McQuaig (1995, 128–133, particularly p. 131), where her confusion between estimates of the effects of inflation on the marginal productivity of capital (a level effect) and on the rate of productivity growth (the growth rate effect analyzed by Jarrett and Selody) becomes crucial to, and hence undermines, her argument.

Perry (1996) in the United States. It has given a new twist to the old idea that, in reducing the frequency with which possibly difficult-to-make nominal wage cuts become necessary as the structure of relative prices evolves over time, a little inflation may beneficially lubricate the workings of the labor market.

The new twist here is quantification of this qualitative argument. Taking Akerlof, Dickens, and Perry's (1996) quantification at face value, Howitt concludes (albeit tentatively) that, at the current Canadian inflation rate of about 1.5 percent, the gains from lubricating the labor market with a little inflation are not worth the potential losses from even the modest reduction in economic growth that doing so might cause. These potential losses in economic growth are, of course, somewhat speculative, but so are the gains from lubricating the labor market, as Howitt also notes.

Much of Akerlof, Dickens, and Perry's and Fortin's evidence for downward nominal wage stickiness, on which this whole debate hinges, was generated when significant and persistent inflation was either in place or a still recent memory. Their results thus likely overstate the pervasiveness of the phenomenon in an economy where negligible inflation is already well established and expected to persist. No one disagrees with the proposition that the *rate of change* of nominal wages may be downwardly sticky relative to the expected rate of price inflation, but the argument of Fortin and of Akerlof, Dickens, and Perry requires that, over and above this effect, the *level* of money wages tends to an absolute downward stickiness that is independent of inflation expectations. The effects of these two phenomena are inevitably difficult to disentangle from one another in an inflationary economy.⁶

⁶ The hypothesis of Fortin (1996) and Akerlof, Dickens, and Perry (1996) appears to predict that the closer the expected inflation rate is to zero, the smaller the effect on actual inflation relative to its expected value of an output gap of a given magnitude. Thus, the short-run Phillips curve should become increasingly nonlinear as the long-run inflation rate falls. In this context, it is interesting to note that Loretta Nott (1996) finds some evidence that the short-run Phillips curve in Canada is nonlinear, but that this nonlinearity was no more pronounced in the early 1990s than in the early 1980s, even though the average inflation rate had fallen markedly between the two periods. See, in particular, her figure 2, p. 15.

An Important Area of Disagreement

Howitt concludes that, taking one thing with another, the evidence points to the desirability of having the Bank of Canada persist in pursuing an inflation rate of its current level, about 1.5 percent, as measured by the consumer price index (CPI). Not surprisingly, Pierre Fortin would prefer a higher inflation target — namely, 2.0 to 4.0 percent, with an average value of 3.0 percent. He is more skeptical than Howitt about the growth rate gains to be had from lower inflation and, more important, he argues that, at an inflation rate of about 3 percent, the labor market would cope effectively with downward money-wage rigidity. Fortin warns, however, that the advantages here would be exhausted by increasing inflation from 1.5 percent to 3.0 percent; he therefore opposes any relaxation of inflation targets beyond the 2.0 to 4.0 percent range.

John Crow, on the other hand, questions the evidence supporting downward money-wage rigidity. (His skepticism found a good deal of support among conference participants, as Parkin's account of the subsequent discussion makes clear.) Crow also expresses doubts about how credible and hence durable would be a commitment to inflation targets whose range lies above what has been achieved in the recent past.

All in all, Crow would clearly prefer Canada to get on with the program he initiated in 1988. Defining price stability as "a state of confidently held expectations about the absence of inflation" (p. 73) — a striking phrase to which Parkin draws attention — he urges that its achievement remain the goal of monetary policy and suggests that a reasonable operational target for the immediate future is measured CPI inflation in the 0.5 to 2.5 percent range.

The discussion just summarized ended in disagreement about what inflation targets should be set in future. Yet it is important to keep a sense of proportion here. At a C.D. Howe Institute conference dealing with the same topic in 1990, many participants expressed doubts about the capacity of the Bank of Canada to sustain an inflation rate lower than that ruling in the United States and hence

about the wisdom of its setting *any* inflation targets of its own. Six years later, this conference took for granted the technical feasibility of such a policy and accepted with no argument that the high exchange rates and high nominal interest rates mentioned earlier were features of the transition to low inflation, not permanent fixtures in a low-inflation regime. The practical policy question participants were now debating — whether the midpoint of the target range for inflation should be 1.5 percent or 3 percent — would have seemed, if not quite other-worldly, then at least trivial to the point of irrelevance in 1990.

For all that, this dispute is not trivial, because underlying it is disagreement about nominal wage stickiness's long-term consequences for the unemployment rate and how to design monetary policy so as to mitigate them. This matter, particularly as it impinges on the Canadian economy, surely merits close investigation before a new inflation (or price stability) target is set.

Still, a measure of how far Canadian inflation control has come over the past few years is the fact that the conference participants could formulate their disagreement rather precisely in terms of alternative target ranges for the time path of the CPI and agree on the factors that must be further investigated to resolve their differences.

Accountability and Autonomy of the Bank

The targets embodied in the current inflation control program were agreed between (and simultaneously announced by) the minister of finance and the governor of the Bank of Canada, but it is understood that the Bank makes the day-by-day choice of measures needed to implement the program. These arrangements clearly reflect a particular view about how responsibility for the conduct of monetary policy should be divided between elected representatives answerable to Parliament and the electorate on the one hand and appointed

⁷ The proceedings of that conference are published in York (1991).

officials of the Bank on the other. Yet the *Bank of Canada Act*, the legislation under which that Crown corporation operates, is completely silent about such an arrangement. Pierre Siklos's broadranging paper deals with an array of issues that surrounds this fact.

Siklos discusses what is currently known about the relationship between inflation outcomes and that collection of institutional characteristics often summarized in the phrase *central bank independence* and about the specific relevance of that knowledge to the Canadian case. He also deals with some international evidence on the performance of inflation-targeting regimes and the lessons it might yield for the future of their Canadian version. In addition, he discusses the governance of the Bank and makes some specific proposals for amending the *Bank of Canada Act*.

Central Bank Independence

Many people believe that a rather clear-cut, causative relationship runs from central bank independence to low inflation. Siklos warns, however, that the evidence supporting this belief has not stood up well to the intense scrutiny of researchers in recent years. The fact is that the outcomes of many earlier studies were largely predetermined by the presence of Germany and Switzerland (and perhaps Austria) among the countries analyzed. These countries have central banks that are, by common consent, well insulated from political pressures, and they also have records of low inflation. But it takes more than two or three observations to establish the existence of a reliable empirical regularity, and things are often more ambiguous elsewhere, not least in Canada.

Did the Bank of Canada become more independent in the mid-1960s with the introduction of the directive power and Louis Rasminsky's doctrine of dual responsibility? Or did it become less independent? Or did its status remain the same? Given the large increase in inflation that took place in the 1970s, the answer matters. And what change in the Bank's degree of independence, if any, explains the fall in inflation in the 1980s and again in the 1990s? On

Siklos's reading of the evidence, the Canadian case, which seems to reveal no relationship at all between a measure of central bank independence and inflation performance, is far from unique.

What does *independence* mean anyway? Does it refer to the choice of policy goals or to the means of achieving them? If the latter sense is primary, who sets the goals of policy if not the central bank, and what incentives can the bank be given to pursue goals not of its own setting? As Siklos reports, the literature nowadays often takes it as given that liberal democratic principles require elected politicians to have the ultimate say over the goals of monetary policy, as well as the means of calling to account central bank officials who fail to achieve those goals. It almost as often takes for granted that central bankers who are to be held responsible for carrying out certain tasks should be given enough room to be able to accomplish them in the first place. Thus, *accountability* and *autonomy* have become the key concepts around which discussions of central banking are organized.

The Bank of Canada's Mandate

As William Robson's comment on Siklos's paper makes clear, the form that discussions of central banking takes always reflects the current state of knowledge (I hesitate to use, but cannot quite resist, the phrase *conventional wisdom* here) about what monetary policy can and should accomplish. And this vision does change over time.

In the Canadian context, Siklos and Robson agree, just such a change in conventional wisdom has undermined the usefulness of the preamble to the *Bank of Canada Act* as a mandate for the institution's activities. That preamble assigns the Bank two main tasks: stabilizing the external value of the currency and, to the extent that it can do so, ironing out business cycle fluctuations. In the early 1930s, the ultimate restoration of the gold standard seemed very much in the cards, so it made sense for the goals of monetary policy to give pride of place to the external value of the currency. And the potential for time lags to render countercyclical monetary policy ineffective or even destabilizing had not been recognized at the time.

Siklos and Robson are, therefore, of the view that the Bank's current mandate is ripe for revision. They also believe that the medium-term behavior of the domestic price level is the only thing that monetary policy can reliably and systematically influence. Hence, taking due account of evidence such as Howitt's paper surveys, they conclude that the revision in question should place primary emphasis on the behavior of the price level.

I can only record my agreement with them on this matter and also with their view that an act of Parliament is not the right vehicle for giving specific quantitative content to price level goals. Unlike Robson, however, I would not exclude a general endorsement of price stability from the mandate.

Institutionalizing Target Setting

A more difficult issue is the extent to which a revised *Bank of Canada Act* should institutionalize formal inflation targets. Siklos would go further in this direction than Robson, who wishes the elected government to take and retain clear responsibility for setting quantitative inflation targets and who would make no effort to specify their nature within the act itself.

At this point, it is worth recalling that, as Siklos notes, a number of countries, including the United States, Germany, and Japan, have recently done an effective job of controlling inflation without formal targets.

In my own view, the most salient characteristic common to countries that have adopted formal targets in recent years is an earlier history of poor inflation performance. The suggestion is that a key role of targets has been to aid in the creation of credibility for a new policy regime. If I am correct, then as the credibility of negligible inflation becomes established in Canada, the significance of any precise and publicly announced quantification will diminish. Such a consideration argues against including even the concept of numerical targeting in the *Bank of Canada Act*.

The passage of time and the growth of policy credibility may, however, change rather than diminish the significance of Canadian inflation targets. These targets are now becoming public statements about the limits of inflation rates that the authorities will tolerate, limits whose observance in practice enhances private agents' confidence in the competence and trustworthiness of the central bank. But the targets might evolve into devices intended, on the New Zealand model, to clarify the performance that the elected government, on behalf of the general public, requires of the central bank. With change in such a direction, the case for embodying the idea of targeting in the *Bank of Canada Act* would become stronger.

If the targets do evolve from credibility-creating devices into instruments of accountability (which will nevertheless remain useful sources of information for the general public), then the central value of any target range will increase in importance relative to its bounds, as the latter become statements about margins of error that *must usually be accepted* in practice, rather than about boundaries whose violation *will not be tolerated*.

Recent New Zealand experience, discussed by both Siklos and Parkin, demonstrates that it is one thing to threaten dire consequences if a central bank allows inflation to move beyond the bounds of its target range and another, politically much more difficult, thing to actually do something about it after the event. Vacillations on these matters can only undermine public confidence in the monetary policy regime — a caution that implies the undesirability of laying more stress on the bounds of inflation targets than they are able to bear. As Parkin suggests, if central bank accountability is to involve sanctions, it seems preferable that their severity increase gradually as performance deteriorates, rather than for them to bite hard and suddenly once some threshold is passed.⁸

⁸ Moreover, as the importance of the central value of the target range increases relative to that of the bounds, then the case is strengthened for narrowing them somewhat — or for adopting what are, as Siklos makes clear, the roughly equivalent policies of shortening the time period over which the target inflation rate is measured or reducing the extent to which the specific price index used by policy differs from the everyday and widely understood CPI.

More Questions

Siklos's paper raises fundamental questions of political principle about the links between democratic processes in general and the conduct of monetary policy in particular. It proposes changes to the governance of the Bank of Canada to increase that institution's direct accountability to the provinces by changing the way its directors are appointed and increasing their powers over the design and implementation of monetary policy.

Thomas Rymes further broadens the discussion of these issues by recalling that an important strand in the modern academic literature questions the very necessity of having a central bank at all. His own preferred position, on the other hand, would honor democratic principles by reducing the central bank's status to that of a department of state, overseen by a minister answerable to Parliament and staffed by civil servants duty bound to execute the minister's wishes not only about the ends of policy but also about the means adopted to achieve them.

This introductory essay offers insufficient space to argue the pros and cons of any of these proposals. Suffice it to note that, important though these questions are and unlikely as they are to disappear from discussions of the Bank's role in Canadian economic life in the foreseeable future, there is no need to settle them between now and 1998. Indeed, if one takes seriously, as one should, Siklos's warning that his (and presumably any other) proposed revisions to the *Bank of Canada Act* are not to be undertaken piecemeal but rather should be seen as an interlinked package, attempting immediate settlement would be impractical. That is, at least, my personal view of this matter.

The Operating Framework of Monetary Policy

The conference's third session dealt with the framework within which monetary policy is executed from day to day. At first thought, the issues involved here seem merely technical, having little direct bearing on the broad policy principles that were the subject of discussion in the two preceding sessions (beyond the obvious point that setting goals is senseless in the absence of a framework capable of achieving them). The central message of John Grant's paper, however, is that the implicit dichotomy between principle and practice is a false one here.

Expectations and Rhetoric

Grant stresses that private sector expectations, particularly but not solely in financial markets, significantly affect the way in which the economy responds to specific day-by-day policy measures. He also emphasizes that those expectations, in their turn, are influenced by what he calls the *rhetoric* of economic policy. This way of looking at things has a number of implications.

Most people recognize that the existence of broad policy goals, such as price stability or negligible inflation, and of targets giving them quantitative content are components of that rhetoric, inasmuch as they convey information about the Bank of Canada's ultimate intentions and hence provide the context in which the private sector interprets the Bank's day-by-day operations in financial markets. In Grant's view, however, rhetoric goes much further. He argues that the Bank's operations themselves should be seen as statements about its beliefs and intentions. Thus, he says, knowledge of the technical framework linking the Bank's activities to its own perception of how the economy is evolving and of what needs to be done to achieve its stated long-term goals plays an important, but hitherto little-noted role in the policy process. That knowledge serves as a kind of code book, enabling private sector agents to interpret the statements implicit in the Bank's day-to-day actions.

A technical policy framework that is to function efficiently as a code book must satisfy certain criteria, according to Grant. First, it must be forward looking as far as the goals of policy are concerned. Second, it must involve a clearly specified and reliable set of links between the ultimate goals of policy to be achieved in the future and

the instruments of policy that are amenable to direct manipulation in the present. Third and crucially, it must be transparent: the linkages in question, not to mention the Bank's beliefs about their nature, must be widely understood. In the current Canadian case, Grant argues, this need for transparency is all the greater because the policy instrument under the Bank's direct control, the size of its own balance sheet, is such a small part of the overall financial system.

Though one discussant, Daniel Racette, questioned the amount of emphasis that Grant places on the role of day-to-day rhetoric in ensuring the success of policy, no one dissented from Grant's broad conception of how to think about the operating framework for monetary policy in general or from his overall assessment of the effectiveness of the framework currently in place in Canada. In particular, as Parkin records, participants gave the Bank of Canada high marks for having in place an explicit and well-specified operating framework whose forward-looking nature is firmly anchored in precisely quantified inflation targets.

The Monetary Conditions Index

When it came to the matters of a reliable set of links between policy instruments and goals and the transparency of the framework, the verdicts, though still favorable overall, were a little more mixed. Various participants expressed qualms about the interrelated issues of the role (or lack thereof) accorded to the monetary aggregates in the Bank of Canada's operating framework and the part played by its monetary conditions index (MCI). There was also discussion about whether the Bank could do more than it does at present to inform the public about its own assessment of the current state and likely evolution of the economic conditions that provide the context for its own policy actions.

The Bank's current operating framework links the behavior of the inflation rate to the size of the output gap (the discrepancy between current output and an estimate of its long-run maximum sustainable level). Given a target for inflation, the Bank works back from the size of the gap needed to achieve it to an estimate of the monetary conditions that will, given all the other factors impinging on aggregate demand, generate that gap. Monetary conditions, in turn, are measured by an index that is a weighted average of the exchange rate and a short-term interest rate, the latter variable in particular being open to decisive influence (though by no means precise control) on the part of the Bank.⁹

A Role for the Monetary Aggregates

Though the Bank of Canada clearly pays attention to the evolution of the monetary aggregates as sources of information about economic conditions in general, they play no formal role in the framework just described. This absence is curious from two points of view.

First, as Poloz in particular stresses, almost everyone agrees that the Bank's MCI is a short-term device that is hard to read at the best of times. The factors that link its behavior to that of aggregate demand are numerous and malleable. Yet certain monetary aggregates (notably M1) have proved useful leading indicators of the behavior of real output and, with a longer lag, of inflation. This fact alone, as Grant himself points out, makes them candidates for a more formal role in the framework, not perhaps superseding the MCI, but helping to bridge the awkward space that currently lies between the behavior of interest rates and the exchange rate and that of the output gap. ¹⁰ Such a change might also help to overcome the overemphasis

⁹ Duguay and Poloz (1994) and Freedman (1995) give useful overviews of this framework as seen by the Bank of Canada.

¹⁰ My own view is that the Bank of Canada should announce informal targets for money growth rates that seem to be consistent with its inflation goals and then try to adhere to them. The behavior of money growth relative to its preferred path would then become an important source of information on the actual evolution of monetary conditions, information separate and distinct from that yielded by the MCI, which will always require careful consideration. Deviations of money growth from target would often be the occasion for remedial action. See Boessenkool, Laidler, and Robson (1996) for more detailed discussion.

on exchange rate behavior that, in Poloz's view, has marred the conduct of policy from time to time.

A second reason to give the monetary aggregates a role starts with a point that Racette, in particular, stresses. The long-run relationship between money growth and inflation is both a well-established fact of economic life and a well-accepted prediction of economic theory. Thus, it seems only natural for a policy regime whose goals are set in terms of the inflation rate to put the behavior of one or more monetary aggregates at the center of its operating framework — to "put the money back in monetary policy," as Racette phrases it (p. 243).

Indeed, Racette would go so far as to remove the MCI from any formal role in the policymaking process. He, like Poloz, believes that the Bank of Canada has in the recent past designed its policies with too much influence from the behavior of the exchange rate, displaying a reluctance to see it fall that has been inappropriate in the light of policy's focus on a purely domestic inflation rate goal. And he fears that the risk of such errors recurring will persist as long as the monetary conditions index has a formal status in the Bank's operating framework.

Room for Improvement

In my view, these concerns about the role of the monetary aggregates and the exchange rate in the policymaking framework are signs that, despite the Bank's serious and persistent recent efforts to render its decisionmaking process transparent, room for further progress exists.

Only in economics textbooks can one find a world in which every private sector agent believes in exactly the same model of the monetary policy transmission mechanism as does the central bank and always shares its judgment about how economic conditions in general are evolving. Disagreements will probably always exist about these matters. This fact implies that, when private sector agents are constructing their own interpretation of the situation, including those aspects of it conditioned by current and likely future

Bank behavior, they need to know how the Bank is interpreting that same situation.

Disagreements about details among Grant and his discussants should not, however, be allowed to mask their broad consensus that the Bank could do a little more than it currently does to inform the public about what information it uses and how in making its forecasts and calibrating its policies. Asking for publication of forecasts of outcomes conditional on current policy is, of course, pointless; it is hard to see how a monetary authority charged with achieving a particular goal for inflation could ever forecast anything other than its own success. But any or all of lagged publication of the records of past deliberations (Grant), publication of current forecasts conditional on no policy change (Poloz), or immediate publication of the details of current policy actions (Racette) would render the rhetoric of monetary policy a little easier to interpret than it now is and hence make policy itself that much more effective.

Implications for 1998 and Beyond

Economic policy involves a great deal more than its monetary component, but, as Grant points out, in Canada at present that component has moved much further than any other toward being consciously formulated in a framework that links the day-to-day manipulation of policy instruments to clearly specified medium-term goals — a framework that, therefore, gives maximum scope for the rhetoric of policymakers to influence the expectations and behavior of the private sector. The frameworks of fiscal and environmental policy, he suggests, would benefit from being reformulated along similar lines.

Grant's comments on fiscal policy are particularly pertinent in the light of Siklos's reminder that, ultimately, if Canada does not get its fiscal house in order, no monetary policy regime aimed at even stable, let alone negligible, inflation will retain its credibility. Rising public debt brings with it increasing pressures for monetary expansion and inevitably calls into question the capacity of the central bank to resist them. To be sure, Canada's fiscal situation has improved significantly in the past two or three years. The fact remains, how-

ever, that, with the provinces included in the picture, the ratio of public debt outstanding to annual GDP currently lies somewhere between 103 and 105 percent. On current projections, it is unlikely even to begin to fall before fiscal year 1997/98. It would not take much of a shock — a downturn in the United States or a sudden political crisis over Quebec, say — to upset those projections.

In short, the overall macroeconomic policy situation, though much improved in the past few years, remains extremely fragile. In my view, this fact places important constraints on the choices about monetary policy that must be made in 1998. To put the point bluntly, those choices must not rock the boat. So it is both important and reassuring to note the widespread agreement among the conference participants¹¹ that medium-term inflation targets represent a useful underpinning for monetary policy and ought to be persevered with.

Inflation Targets

The participants reached less agreement, as I have already noted, about what the precise range of inflation targets should be. As Michael Parkin's rapporteur's remarks make clear, two issues dominated discussion of this issue. On the one hand, the more concerned one is with the role of inflation targets in lending credibility not just to monetary policy but also to macroeconomic policy in general, the stronger seems the case for persevering with the current target range or even modestly reducing it. On the other hand, the more credence one gives to the possibility of substantial and persistent resistance to nominal wage cuts, even under a credible regime of negligible inflation, the more attractive seems a modest increase in that target range.

David Johnson argues that, in the light of the modesty of the likely gains from further inflation reduction and of the studies of wage stickiness by Fortin (1996) and Akerlof, Dickens, and Perry (1996), the burden of proof here lies with the advocates of such

¹¹ Not unanimity, though. William Scarth, for example, would rather have a regime of nominal GDP growth targets.

reductions. But Jerzy Konieczny provides a brief but penetrating warning against assuming that inflation is necessarily the theoretically prescribed response to the problems created by nominal wage stickiness when prices are stable. As he points out, this conclusion is not quite as obviously true as it seems at first sight.

Despite the disagreement on many points and despite the need for more theoretical and empirical work to settle matters, it is important to keep a sense of proportion about the policy differences on display here. The spread of options for inflation targets debated in this book is very narrow: 1.5 percent versus 3.0 percent as the center of a two percentage point range. And everyone at the conference accepted the importance of credibility effects. It is no accident, for example, that Fortin, a strong advocate of slightly easing monetary policy, is also a particularly forceful supporter of fiscal restraint. 12

As for my personal position on this matter, I find myself on the side of those who oppose any relaxation and indeed favor an eventual modest lowering of the inflation targets. I stress the adjective *eventual*, however, for I see no need to move quickly, so long as the movement is modestly downward in the end. I would, for example, be quite satisfied with a set of targets that, in 1998, envisaged no reduction in inflation from its current range before the beginning of the next century. Monetary policy became extremely expansionary at the end of 1996, with year-over-year M1 growth exceeding 17 percent at the end of December. It is quite likely that inflation will be above 3 percent in early 1998. If it is, there will be much to be said for bringing it under control slowly. But brought under control it will have to be; a breach of the targets should not be an excuse for raising them.

I share the doubts of Parkin and others about the evidence presented in Akerlof, Dickens, and Perry's and in Fortin's studies about the prevalence of wage stickiness, not least in Canada, but these doubts are not decisive to my thinking on this issue. My main

¹² In evidence given to the House of Commons Standing Committee on Finance on October 10, 1996, Fortin advocated a package that included relaxation of the inflation control targets to the 2 to 4 percent range, but he simultaneously voiced support for tight fiscal policy.

reason for opposing any relaxation of the inflation targets is that I take the current fragility of the macroeconomic environment, particularly its fiscal component, seriously and fear that even a modest upward revision of the targets would damage it. Furthermore, I agree with Parkin that the stance of monetary policy probably affects politicians' willingness to tackle fiscal problems; therefore, I have little confidence in the capacity of political processes to deliver the tightening of fiscal policy that would be required to sustain the credibility of Canada's overall macropolicy regime were its monetary component eased. With reference to this last point, the increasing frequency with which significant tax cuts are nowadays being implemented (as in Ontario) or promised (as in the federal political arena) is, in my view, extremely disquieting and adds considerable weight to the case against any easing on the monetary side. ¹³

Other Possible Reforms

If the inflation targets are renewed in 1998 at some range close to where they are now, does anything else need to be done at the same time? The conference participants had, as already reported, considerable discussion about ways in which the Bank of Canada's operating framework might be further improved and about possible reforms to the *Bank of Canada Act*.

On the first of these matters, I have only two brief points. First, fine tuning the Bank's operating framework has been an ongoing

¹³ It is true that Ontario's fiscal policy regime combines expenditure cuts with tax cuts and that the Reform Party's recently announced program would defer tax cuts pending the elimination of the federal deficit. Even so, in my view, it is current debt levels, rather than deficits per se, that pose the real threat to the viability of Canada's macroeconomic regime. So I argue for postponing tax cuts until the debt-to-GDP ratio has been significantly reduced — to 60 percent, say. I also worry that, whatever politicians' intentions may be at this moment, they may end up doing a better job of convincing voters (and perhaps themselves) that tax cuts are feasible than of persuading them that expenditure cuts are necessary. The macroeconomic consequences of creating such a climate of opinion would be extremely unattractive.

process in recent years and is likely to continue.¹⁴ Second, John Grant's conception of that operating framework as creating an environment for constant dialogue between the authorities and the markets is likely to prove extremely useful as a means of organizing discussions of the future evolution of that framework.

As to the *Bank of Canada Act*, if monetary policy is to be aimed primarily at inflation targets, there is certainly much to be said for rewriting at least the preamble to reflect this goal. There is also much food for thought in Parkin's discussion of recasting inflation targets in terms of a formal contract between the Bank and the government specifying a central value for inflation and penalties whose severity grows at an increasing rate as deviations from that target occur, and the implementation of such an arrangement would probably require amendment to the act well beyond its preamble.

That being said, my personal view is that a word of caution is in order here. Not so long ago, the Manley Committee carried out a thorough review of the Bank of Canada's governance and decided to recommend no changes to Parliament (Canada 1992). Although, along with a number of other participants in this conference, notably Siklos and Robson, I am inclined to regret that committee's hesitancy, the following facts remain. Inflation targeting has been in place for six years. The Bank recently created a Governing Council, which now shares responsibility for monetary policy with the governor. Coming changes in the role of the Bank's regional offices are designed to provide more regional input into the policymaking process. And all of this has been done without amendment to the Bank of Canada Act. It is hard to resist the conclusion that, although an overhaul of the act is well worth discussing, there is no urgency about undertaking it and, in any event, no prospect of completing it by the end of 1998, even if it were started today.

¹⁴ In this regard it is interesting to note that the November 1996 issue of the Bank's Monetary Policy Report introduces a new version of the monetary conditions index cast in real terms — that is, its exchange rate component is adjusted for foreign price level behavior and its interest rate component for domestic inflation. The same report also contains a brief boxed statement, headed "Canada's Inflation Control Strategy," that gives a prominent place to the behavior of the monetary aggregates.

Conclusion for 1998

What is specifically required in 1998 is that the current inflation targets be reviewed and reset. That review will be a critical milestone in the evolution of Canada's monetary policy regime, and it will undoubtedly generate debate about the regime in general, as indeed it should. The more that debate is centered on the specific role of inflation targets within that regime, the more helpful it is it likely to be.

Beyond 1998

One can begin to see that issues other than those on which this conference mainly concentrated may be up for serious discussion in a few years' time. Rymes, for example, invited the conference participants to consider the monetary system not merely as a framework within which traditional monetary policy is implemented but rather as an industry providing financial services. The extent to which that industry should be regulated or left to the market is already a matter of contention in Canada; Rymes draws attention to the fact that this debate has implications for discussions of traditional monetary policy questions.

Moreover, the financial services industry is rapidly becoming internationalized. Thus, although questions about the appropriateness of maintaining separate national currencies linked through floating exchange rates are currently (and in my view appropriately) far down the agenda for policy debate in North America, it is hard to believe they will remain so. And when those questions do come to the fore, it will be impossible to debate them without also discussing the desirability, even the very feasibility, of maintaining monetary policy as the prerogative of national governments to be implemented through national central banks.

There will, in short, be plenty to discuss after 1998.

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In this index, the word "Bank," without further identification, refers to the Bank of Canada

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