BANK OF CANADA

Central banks, monetary policy and the financial system

C. D. Deshmukh Memorial Lecture

by John W. Crow
Governor of the Bank of Canada

at the

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My remarks today are those of a practitioner. What I aim to present are some observations on central banking activities ... through the eyes of a Canadian central banker.

I realize of course that some of what I say will cover territory familiar to a number of you here today. Nonetheless, I think there is merit in underlining important central banking issues and in sharing practical experience. There may be particular merit in discussing these issues when what we can do, and in fact do, might part company with common perceptions _outside_ the central bank -- for example, as I shall discuss later, perceptions as to how interest rates get determined.

Furthermore, my distinguished predecessors in this lecture series do not appear to have focussed in any detail on central banking as such. But it was of course a major part of Chintaman Deshmukh's illustrious career -- Secretary of the Central Board of the Reserve Bank of India, Deputy Governor, and then Governor.

Among the public policy activities undertaken by the Bank of Canada, by far the best known in Canada are its responsibilities for formulating and conducting monetary policy. In addition the Bank has a less well-known, but also important, role in contributing to an efficient and stable financial system.

These are the two areas that I wish to reflect on.

You probably need no convincing that they are suitable topics for a central banker. But before getting into them more specifically, let me underline that they are more than just suitable. Indeed, it is not going too far to say that they are the essence of our job.

I say this because their mainspring lies at the heart of the central bank, namely right in its balance sheet. It is the ability of the central bank to manage the size of its balance sheet that gives it the power to create and supply liquidity, the ultimate means of payment, for the national financial system. And this is its indispensable and inalienable lever for monetary policy and for its involvement in the financial system more generally.

How the lever is applied differs in each case. In the case of monetary policy, the leverage (including lending undertaken to smooth out clearing and settlement fluctuations) is used on a regular, day-to-day, basis. In the case of the financial system, the leverage is available more as a backstop. This more occasional role is captured by the fact that central banks, by virtue of their unique liquidity creation powers, are also traditionally known as lenders of last resort.

But not too well known, I trust. The less real lending of last resort we do, as opposed to regular smoothing operations, the better. To do a lot would clearly mean continual confidence problems in the financial system. So, while we are of course always ready to play backstop, we do expend much effort trying to ensure that the financial system works well -- through good design or preventive medicine in the areas where the Bank of Canada is specially able to make a contribution, particularly as regards the clearing and settlement of payments.

Another feature that to my mind links these two areas is the fact that from whatever angle they are approached, one constant is the need for a central bank to pay close attention to financial markets, the information they provide and how effectively they are working.

Monetary policy and financial markets

Monetary policy is the most market-oriented, and therefore most indirect perhaps, of all public economic policies. And in this case there is a two-way street -- monetary policy operating through financial markets and financial markets feeding back on monetary policy.

Let me start by dealing with the first, perhaps more standard, direction -- monetary policy operating through financial markets.

What is continually impressed on the practitioner is the fact that the instrument the central bank has to work with in undertaking monetary policy is a very specific kind, in a very specific dimension. As I've already noted, at bottom it is the central bank's balance sheet, its control over the volume of assets that it accumulates. Through this control of its assets it controls its liabilities -- the volume of the ultimate means of payment available in the system.

For the Bank of Canada at least, there really isn't any more than what I've just indicated. Not for many years has the Bank attempted to exert a direct influence on credit or on interest rates posted by financial institutions. Even our own statutory minimum lending rate, the Bank Rate, floats -- being linked to the rate for three-month treasury bills set at the weekly government auction. And indeed, by mid-1994 there will be no reserve requirements on bank deposits -- although financial institutions will still have to settle their claims on one another on the books of the Bank of Canada.

These comments are statements of fact, certainly not notes of regret. What we have is what it takes for monetary policy to work effectively in the Canadian context.

Now to the context.

What we have beyond our balance sheet that does help a lot are resilient, well functioning, financial markets. They are well equipped to act as the transmission belt of our monetary policy actions when we add to, or subtract from, the liquidity in the system.

Naturally enough, the Bank of Canada has had a lot to do with encouraging the development of those markets, especially the money market.

When the Bank was set up in the mid-1930s, Canadian money markets were not well developed. The Bank was concerned to do what it could to change this, but its helping hand could not be extended in earnest until after World War II.

The 1950s were for the Bank a time of intense market-building. It began to offer a line of short-term, last resort financing to investment dealers; auctions of treasury bills were changed from a fortnightly to a weekly cycle and the amounts that were auctioned increased; the Bank provided wire facilities across the country (a very wide country!) for the transfer of government securities. Daily averaging of commercial bank reserves was introduced. This latter initiative enabled banks to economize on cash reserve balances, as they could average shortfalls and surpluses over a given period; it also helped the Bank of Canada by encouraging a demand for bank reserves that was more stable, and therefore more systematically responsive to changes in the supply of central bank liquidity.

Let me add at this point for the specialists among you, that we are preserving this averaging even though reserve requirements as such are being eliminated. The rules will give financial institutions an incentive to aim for a zero balance at the Bank of Canada, averaged over roughly a month.

The basic reason why commercial bank reserve requirements are being phased out has been the growth of competition from nonbank financial institutions. While the Canadian financial market has become much less compartmentalized institutionally than just a few years ago, reserve requirements apply only to banks and not to other deposit takers. Accordingly, the removal of reserve requirements (and I should note that reserves in Canada do not pay any interest, market rate or otherwise) has been driven by considerations of efficiency and equity.

In any event, the change has no material effect on monetary policy management. In other words, we will continue to have the same effective control over the liquidity-creation process that we had before.

Given a well functioning domestic financial market, the Bank of Canada is in principle able to see quite readily the results of its broad liquidity actions fan out from one-day markets through markets at 30 days, 90 days and so on -- just as the standard textbooks say.

Now I want to turn to the other side of the street -- the influence of markets themselves on what central banks can do. This will add a note of greater realism to the discussion, because what the discussion thus far misses is the demand side. What it misses is indeed, in the broadest sense of the term, the market.

What I mean by the market in the broadest sense is the views and attitudes of savers and investors. These are the folk, individuals or institutions, that acquire the liabilities generated by the financial system. Their views matter vitally as to what is bought, how much, and at what price.

What I now want to address more directly is how this relates to monetary policy. And perhaps the best way to illustrate the importance of the attitudes of savers and investors is by focussing on how interest rates are determined.

In my experience, by far the most common perception regarding monetary policy is that it consists of the central bank's power to raise or lower interest rates. However, while this view may be partly right, it is quite wrong in crucial respects, as the Bank of Canada often explains. Certainly, the central bank can add to, or subtract from, the stock of liquidity. But what happens to interest rates in general is a rather different story. In particular, because interest rates are inherently forward looking, it depends on what happens to the views of investors and savers in the process.

The idea that interest rates respond automatically and in a particular direction -- the primary example being that they will move down when the central bank adds to liquidity -- stems from one of two views.

One is that those acquiring financial claims are simply indifferent to what the central bank is doing.

But how could they be? Since the central bank is at the heart of the liquidity supply process this is not credible. At least, the view is not credible at the all-important margin of supply and demand for financial assets, where the yields are determined.

A better founded view is that savers and investors do care about what the central bank is doing, but that they also have confidence in its actions. Then, it may be plausible to argue that the additional liquidity greases the wheels of the financial market, acting to encourage a decline in interest rates across the maturity spectrum.

Why would savers and investors have such confidence? The answer of course lies in the ability of the monetary authorities to articulate a clear and consistent framework for monetary policy, into which the particular central bank actions are shown to fit and are seen to fit. In my view, the importance of this point can hardly be overemphasized.

Establishing and maintaining such a confidence-building framework may involve a range of features. For example, one helpful element is a clear institutional structure for monetary policy decisions. Such a structure points to the value of well conceived mandates and accountability for the central bank, the statutory creator of money in the system. The Bank of Canada has published quite a lot of material analyzing and discussing the issues involved in this area.

I will not go further into mandate and accountability issues here, but I will consider further what kind of monetary policy is likely to have the favourable properties I have alluded to.

It is evident from a wide range of experience that the monetary policy most likely to help is one that is grounded in price stability -- in preserving confidence in the future value of money. Such a policy has two vital advantages. For one, it systematically contributes to the good functioning of a market economy, that is, a decentralized economy in which the institution of money and monetary exchange is a central feature. It also provides a necessary anchor for market expectations.

Let me say a brief word on Canadian experience.

The Bank of Canada's monetary policy has been clearly set on the medium-term goal of price stability. Not so long ago, inflation fears were quite strong, as was inflation, peaking at some 6 per cent in early 1991. In this climate, with the Bank aiming to expand liquidity at a pace that did not encourage inflation, interest rates rose, particularly at the short end. In more recent years, inflation has come down substantially. It has averaged less than 2 per cent for more than a year. In this situation, interest rates have come down a long way, both at the short- and at the long-term ends of the market.

The decline in interest rates has been gradual, and it has had interruptions. Still, I think it fair to say that those interruptions have originated not so much in any uncertainties about what the objectives of monetary policy have been, as in uncertainties about fiscal and political developments. The decline has been gradual because savers' and investors' expectations tend to change only gradually. And given history, their views on the chances that a better inflation performance can be sustained are likely to be particularly slow to change. This means that the Bank of Canada has to move carefully and purposefully if it is to encourage a sustained improvement in those expectations. We know that we have to bring savers and investors along with us. Obviously, this process would not have been helped by creating liquidity at a pace that would have been judged inflationary.

It used to be commonplace to refer to Canadian monetary policy as a "high interest rate policy." This is now far less easy to do. However, some infer from the fact that interest rates have been appreciably lower than for many years that monetary policy itself has changed. Not so. It's just that one of the eventual results of a policy oriented to price stability is in fact, so far as monetary policy can deliver them, low interest rates, not high ones. But, as I already indicated, generating a low interest rate climate does take time, because building trust in money takes time.

Let me now shift focus somewhat, noting that thus far I have been looking very much through a domestic lens. All the same, I have been conscious that what I have been saying about monetary policy does imply that the exchange rate floats. In other words, if the exchange rate is pegged, it is at the least somewhat contrived to talk about a monetary policy that is domestic in origin.

In any event, making the role of the floating exchange rate more explicit changes very little in the substance of what I have said. Indeed, where there is any change it is in the direction of reinforcing the thrust of the argument.

Consider the market transmission process for monetary policy.

Clearly, we have to allow for the fact that not only can interest rates shift in response to monetary policy actions but so can the exchange rate. Indeed, in its assessment of shifts in monetary conditions the Bank of Canada takes account not only of changes in interest rates but also of changes in the exchange rate. In other words, it aims to take an integrated approach regarding the monetary policy transmission process and the market impact of monetary policy actions on aggregate demand.

This jars a bit with much commentary in Canada, which sees monetary conditions (not to speak here of interpretations of the thrust of monetary policy itself!) exclusively through what happens to interest rates. The difference is most striking when, for example, interest rates move up while the exchange rate goes down, as happened in the autumn of 1992 and more recently. All I will do now is reiterate that the Bank of Canada must look at yields and prices in both the money and exchange markets in assessing the overall impact of monetary conditions on aggregate demand.

I think it can also fairly be said that the role of expectations, and the desirability of providing a strong monetary policy framework so that market expectations can evolve in a constructive way, is rendered only the more important when put in the context of the exchange market.

Looking across countries, Canada has been a bit of an exception in its exchange-rate regime. We were floating when most of the rest of the world was fixed. So whatever else might be said, our experience with floating has been relatively lengthy.

I know that much is made these days of the difficulties in managing exchange rates in light of a dramatic expansion in international capital mobility. However, our own experience does not really suggest that floating is more hazardous than before in the sense that the exchange rate is now more susceptible to being pushed around in ways that seem quite unwarranted by the "fundamentals." I think it is also relevant to note that for Canada the experience with a floating exchange rate has been one without exchange controls. The last vestiges of the wartime controls were eliminated in 1951.

In fact, the recent European experience would suggest a rather different moral, namely, that holding on to a <u>fixed</u> rate has become more difficult. The Bank of Canada has always been conscious that one advantage of a floating rate is that it does <u>not</u> provide a one-way bet for speculation. This itself should make a big difference to the momentum that speculative capital movements can gather.

<u>Central banks and the effective operation of the financial system</u>

Now I want to turn from discussing monetary policy in a market context to discussing the role of central banks in the effective operation of the financial system. While my treatment is far from comprehensive, I will make some observations on what I view as some of the main issues or question marks concerning how well financial markets work. I will also comment on the kinds of challenges these issues pose for central banks.

Let me begin by noting that there is no presumption that financial markets are always going to get the price right. Obviously, this is unlikely in markets providing quotes every minute of the day (and often night as well) as participants filter and react to the stream of disparate information arriving.

However, to note this, and to recognize the possibility of volatility and overshooting -- even of herd instinct, bubbles and misalignment -- is far from indicating that the "market" tends to get things wrong. Indeed, as a policymaker I particularly value the fact that markets provide a valid independent view, even a "quote," on the economic and financial situation. In other words, financial market developments and reactions are undeniably a valuable source of information and an invaluable check on wishful thinking.

Furthermore, and as I emphasized in regard to monetary policy, there can be no doubt that the effective functioning of financial markets in general, in particular the avoidance of erratic movements, is helped greatly if they are underpinned by clear and coherent macroeconomic policies.

One often cited example of sharp and unsustainable movements in financial markets was the explosion in Japanese stock and real estate prices in the late 1980s. However, it is worth bearing in mind that an enormous amount of liquidity had been allowed to accumulate in Japan -- a monetary policy concern. And in some ways, the surprise was not so much the sharp increase in property and stock prices, but rather the remarkable absence of significant inflation in currently produced goods and services.

But what about behaviour in the exchange market? This is a financial market that is arguably of even more acute interest to central banks, if only because it quotes a price for domestic money in relation to someone else's. I have already touched upon the exchange market in a monetary policy context, but here I'll comment on its operation as a market.

Clearly, with a floating exchange rate regime, one shouldn't really complain about the exchange rate moving. But one might still complain about it behaving badly. And equally clearly, misalignment is a serious instance of bad behaviour -- an extreme example of volatility perhaps. This is when the exchange rate seems to part company for an extended period with what are thought to be the fundamental determinants.

But these "fundamentals," especially when they are seen as purchasing power parity or a movement in the current account, may not be giving the right answer. I'd like to look at two cases.

Much has been written about the "misalignment" of the U.S. dollar in the 1980s. As many of you will recall, the U.S. dollar moved up sharply against virtually all major overseas currencies in the first half of the decade to what many thought were unsustainable levels, before falling back in the latter part of the 1980s.

The view I take is that there may well have been some misalignment, but not as much as many suppose. It should be recalled what happened to fiscal policy in the United States in the earlier part of the decade. The budget deficit widened sharply, and national savings shrank. This, at a time of booming U.S. investment, had a lot to do with the upward movement in the U.S. dollar. And indeed, one of the possible policy antidotes, running an easy money policy in order to bring down the external value of the currency, would have made the overall macroeconomic situation worse, not better. Bear in mind that this was not a time when overall demand for U.S. goods and services was by any measure soft.

In this context, let me also make reference to Europe. Concerns about the behaviour of exchange rates came to the fore recently in connection with the turbulence in the European Exchange Rate Mechanism. The underlying shock, financing Germany's unification, was very similar in nature to the U.S. fiscal shock to which I just referred. However, in the European case the problem could be seen as one where the deutschemark was, for institutional reasons, slow to shift up relative to the currencies of its partners in the ERM. The shift in the deutschemark was made necessary by the nature of the adjustment in Germany's balance of payments on current account. This adjustment from surplus into deficit had to take place because of the sharp increase in Germany's intake of foreign savings to spend at home.

Instances of these kinds suggest that we should be cautious about deriving strong general conclusions as to the existence of exchange rate stresses as independent events. For the most part, what tend to be seen as misalignments have their root cause in the kinds of fiscal and monetary policies that are followed. Put another way, what dominates in this regard is the payoff in improving our domestic policies -- clearly, in achieving a better fiscal performance in the two cases I have just mentioned. It is heartening that this has been happening.

Furthermore, when considering what kind of contribution national monetary policies can make that would systematically promote exchange rate stability, I doubt whether one can do better than having each country consistently pursue policies oriented toward domestic price stability. Such an international framework provides a solid monetary basis for relatively stable exchange rates. It also guards against the corrosive effects on open international trade of competitive depreciation -- an important source of international economic discord in the 1930s.

Let me now shift my focus from the macroeconomic plane. I want to look principally at issues relating to the effective operation of the financial system coming from the degree of risk taken by financial institutions, and at some implications for prudential regulation and supervision.

These issues of course involve many institutional and microeconomic questions, including legal ones. But the main questions for central banks are the systemic implications. These are the chances that financial difficulties will spread contagiously through the financial system, damaging that system and consequently the economy, and what can be done to lessen those chances. The Bank of Canada is not a supervisor of individual financial institutions, but such systemic concerns are still intrinsically on its plate -- supervisor or not.

I can perhaps be brief on the background, noting that such eminent practitioners as Gerald Corrigan, until recently President of the Federal Reserve Bank of New York, and Alexandre Lamfalussy, General Manager of the Bank for International Settlements (BIS), have delivered numerous addresses on the subject. Indeed, part of Mr. Corrigan's lecture here almost three years ago reviewed the issues with his usual pointedness and succinctness.

Trying to be even more succinct, I would say that while globalization and deregulation have brought major gains in terms of competitive and therefore economically efficient financial markets, there is concern that risk may also have increased as financial institutions have exploited new business opportunities.

One element commanding a lot of attention recently has been the explosive growth in the volume and variety of financial derivatives -- swaps, options and suchlike. It is clear that by tailoring risk to a user's particular business circumstances the use of derivatives can help to manage, and therefore limit, risk in business. However, legitimate and important questions remain as to how the risk gets transferred across institutions in the financial system. In particular, it is not as clear as it might be how robust derivative markets will be under stress and what are the possible systemic implications of pressures in these markets. This is because the linkages across instruments, institutions, and supervisory jurisdictions, the probabilities of market stress, and the kinds of financial exposures that could turn up in times of turmoil, so far have been difficult to gauge.

As Mr. Corrigan pointed out, all this leaves a compelling burden.

In the same vein, we can surely agree with the view expressed a few years ago by Preston Martin, when he was Deputy Chairman of the Federal Reserve Board, that deregulation (imposing fewer restrictions on the range of activities that financial institutions may undertake) does <u>not</u> mean desupervision. What kind of prudential supervision and how much prudential supervision there should be are matters that need to be addressed separately.

I noted that the Bank of Canada is not a supervisor. Perhaps, however, I should add at this juncture that we do maintain very close contact indeed with the supervisory authorities. Since we are lender of last resort, this is only common sense. In other words, while it may not be necessary for the central bank to be directly involved in supervising financial institutions, it is difficult indeed to see how it could effectively play its role as lender of last resort and, collaterally, in facilitating the final settlement of payments, if it did not have close knowledge of prudential issues and concerns in the financial system. In our case, statutory mechanisms have been set up to ensure that we can acquire that knowledge.

The particular contribution that the Bank of Canada has to offer in the area of financial system risk is its expertise with regard to payments and payments systems. As I stressed earlier we, as do all central banks, provide the ultimate means of payment in the system. So we should not duck the involvement, because we cannot duck the responsibility at the end of the line.

I also referred at the beginning of these remarks to good design, to preventive medicine. In this regard, the notable feature that has impressed itself upon us, as we deal with issues concerning payments, debt clearing and settlement, and the netting of foreign exchange transactions, is the need to understand very clearly the nature of the risks that are being assumed in the context of these systems, and by whom -- knowingly or otherwise.

This understanding doesn't necessarily come quickly, either in the private sector or among the regulators. Still, the Bank of Canada has systematically asked itself and other parties whether the risk characteristics of the various arrangements were being adequately understood and provided for. Perhaps they were understood at the level of the individual institutions, but this understanding was much less apparent when we scrutinized the risks at the system-wide level. Perhaps it was thought that difficulties at that level would be assumed by the lender of last resort. Perhaps they might, but the central bank is the last institution to wish to have systems designed to operate with that outcome in mind. That's introducing moral hazard, and potential carelessness. Accordingly, the Bank of Canada's involvement, besides seeking to ensure that the systems will work smoothly, has also focussed on making sure that they will contain risks adequately -- preferably by seeing to it that incentives that minimize risk are built into the systems.

At the same time, I am happy to report that as work has proceeded on these systems, consciousness of risk and, more broadly, an appreciation of the need to guard against what might happen when things go wrong, has advanced a great deal.

A recent welcome development in the increasing awareness of risk has been the sharper focus of financial institutions on counterparty risk. This risk has been brought to the fore by the massive expansion in the use of financial derivatives.

Another manifestation of heightened awareness of risk has been the increased importance financial institutions have been attaching to capital backing. Indeed, as someone who recalls at first hand the introduction of the capital adequacy standards for international banks under the auspices of the G-10 central bank governors and the BIS, it is gratifying to see that those minimum standards are now generally being not just met, but exceeded by the vast majority of internationally active banks. Clearly this is happening in response to the increased value that the markets themselves now put on capital adequacy, and is a constructive response, especially in the context of deregulation.

I have already referred in passing to the BIS. Let me now underline the importance of the contribution it has been making, in close cooperation with central banks and other supervisory authorities around the world, in devising and promoting prudential techniques and standards that help us to cope with the changing financial environment. The international cooperative nature of the exercise -- particularly the development of standards that command common assent -- makes the tasks of individual central banks, regulators and supervisors so much less difficult than it could be.

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My conclusions are brief.

Coming back to domestic monetary policies, let me just reiterate the value of a noninflationary monetary climate in contributing to sustained good performance in a market economy. In terms of getting exchange rates that behave reasonably well and interest rates that can be low across the whole maturity spectrum, the arguments for price stability are only reinforced. As a final point, let me add that stability in the value of money, and sustained confidence in its future value, will make domestic financial systems, and the international links among such systems, generally work better as well. This itself contributes to better economic performance and also facilitates the prudential tasks we undertake.