

# Bank of Canada

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Annual report of the Governor  
to the Minister of Finance  
and statement of accounts for the year

1988

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1988

Bank of Canada  
234 Wellington Street  
Ottawa, Ontario  
K1A 0G9

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Bank of Canada · Banque du Canada Ottawa K1A 0G9

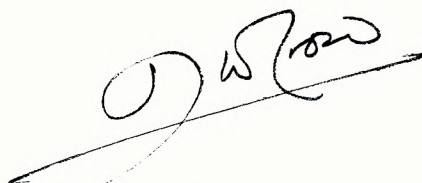
February 28, 1989

The Hon. Michael H. Wilson, P.C.  
Minister of Finance  
O t t a w a

Dear Mr. Wilson,

In accordance with the provisions of  
the Bank of Canada Act, I am submitting my report  
for the year 1988 and a statement of the Bank's  
accounts for this period, signed and certified in  
the manner prescribed in the by-laws of the Bank.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'D. Row', written over a horizontal line that extends to the right.

Governor



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# **BANK OF CANADA**

## **REPORT OF THE GOVERNOR – 1988**

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## GENERAL OBSERVATIONS

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The fundamental task for monetary policy, as for all public economic policies, is to promote a strong economy – that is, an economy that is dynamic and productive, and that provides an expanding supply of jobs for its workforce. The particular, and essential, contribution that monetary policy can make to strong economic performance is to maintain and enhance confidence in our money, the vehicle through which we invest, save and transact our daily business. In the circumstances of 1988, this responsibility meant above all demonstrating strong and consistent resistance through Bank of Canada actions to the spending pressures that throughout the year threatened to provoke a self-reinforcing upsurge in inflation.

### **The Canadian economy and monetary policy**

In 1988, the sustained pressures of demand on our economy further intensified strains on supply that were already becoming apparent in 1987. Those pressures, analyzed in detail in the next section of this Report, showed up in the figures on profits, wages, and prices, as production in a considerable number of industries was expanded to the limits of capacity and labour market conditions tightened further. More broadly, total dollar spending in the economy increased by about 8 per cent during 1988, after an increase of almost 11 per cent the year before. This pace is far above even the most optimistic measures of the economy's capacity to add to the supply of goods and services in volume terms.

Initially, an inflationary expansion of demand shows up in a faster rise in money incomes and is often taken as a sign of increased prosperity. But the adverse consequences, price inflation, do eventually arrive. And the danger of a cost-price spiral becomes greater the longer the demand pressures persist. This is why it is vital

for anti-inflationary monetary policy actions, if they are to be effective, to be taken in a timely way.

There have been suggestions that the Bank of Canada should have taken a relaxed view of this situation – that it should have been prepared to take more risks with inflation. However, both analysis and experience demonstrate unequivocally the need for a monetary policy that consistently justifies confidence among Canadians that the money they use will indeed hold its value.

The real problem with inflation is the damage that it does to the ability of our economy, indeed any economy, to function effectively. Because of the uncertainty that inevitably develops in inflationary conditions, it is more difficult to make well-founded economic plans and decisions whatever the field of endeavour. Inflation thus distorts decisions about savings, investment, prices and wages. As a result, the economy will not perform as well under inflationary conditions as it will under conditions of price stability. Nor will it perform as fairly. Those unable to protect their incomes or savings against rising prices lose out. Indeed, the experience we had with inflation during the 1970s and early 1980s in the end left no one with what they wanted. Consistent pursuit of overall stability in the level of prices is therefore an important ingredient in enhancing the performance of the Canadian economy. It is the crucial contribution that monetary policy can make.

In these circumstances, and because of these considerations, the task faced in the past year by monetary policy has been to curb the pressures of demand on the economy, and avoid the excesses that would damage the sustained economic expansion that Canada has enjoyed since 1983. The continual challenge for policy has been to gauge the intensity of those pressures and to decide how forcefully to respond to them.

It is in this regard that some comment is in order on the possible response of monetary policy to regional economic differences.

Let me begin by noting that one element that was welcome in the performance of the Canadian economy in 1988, from whatever angle it is viewed, was evidence of further progress in narrowing regional disparities in economic activity. Unfortunately, important differences still remain across the country. The Prairie provinces in particular suffered from the effects of drought on the agricultural sector and from continuing weakness in energy prices. But elsewhere in Canada many industries continued to benefit from the recovery over the past two years in the world prices of a wide range of raw materials. With this broadening in the industrial and regional base of the expansion, almost all parts of the country experienced strong employment gains and some decline in unemployment.

Still, criticism that monetary policy has addressed problems of overheating that are only localized has been very persistent. Such criticism needs to be addressed.

One fundamental point that cannot be emphasized too often is that we have an efficient and unified financial system in Canada because there are no barriers to the movement of funds across the country. That is a good thing. Savers benefit from the opportunity to place their funds in diverse, competitive markets, and investors can spread risk efficiently. Borrowers benefit from access to a much larger pool of funds at more competitive rates than would otherwise be available. Having unified and efficient money and capital markets in Canada means that interest rates will to all intents and purposes be the same in all parts of the country. And of course the exchange rate will in any event be the same for all Canadians. Consequently, there is no useful sense in which we can have a monetary policy that is differentiated by regions.

Given that the impact of monetary policy is bound to be national in scope, decisions regarding monetary policy are also taken from a national perspective. In other words, the Bank of Canada gears its actions to the circumstances and needs of the country as a whole.

As I noted earlier, spending pressures at

the national level at which monetary policy operates have been very substantial indeed. The same is true, as is shown below, in regard to the pace of national monetary and credit expansion. It would not have been responsible for the Bank of Canada to ignore the existence of these national pressures on the grounds that they were not the same in each part of the country.

Finally, it can be noted that although monetary policy cannot, by its very nature, be directed at resolving cyclical or structural economic differences among regions or provinces, other kinds of economic policies undertaken by all levels of government, and including their overall fiscal policies, have long played a role in this regard.

### **Monetary policy and financial markets**

In charting monetary policy, the Bank pays careful attention to the rates of expansion of money and credit. As already observed, these also provided striking evidence of the persistent strength of spending demands and of inflationary pressures throughout 1988. While information on these and other financial indicators is provided later in this Report, it may be useful to provide a summary here. Credit to households expanded by about 17 per cent, while business credit went up by about 10 per cent. The M2 and M2+ monetary aggregates, which have displayed a relatively close relationship with movements in total dollar spending and in prices in the economy, also grew strongly – at a pace in excess of 10 per cent. Such rates of expansion are not consistent with progress towards price stability. A slower rhythm of monetary expansion, certainly under 10 per cent, needs to be achieved.

The firm stance of monetary policy in the face of vigorous spending pressures and rapid monetary expansion contributed to a pronounced rise in short-term interest rates through 1988 and into early 1989. The increases, amounting to about 3 percentage points in total, took place at intervals, as evidence accumulated of continued strong momentum in spending and inflation. At times the Bank initiated upward movements in the very shortest-term interest rates through its money-market operations. Those movements then spread to a wider spectrum of market and

administered rates. At other times, especially when interest rates abroad were rising, the pressure for higher interest rates came from changing expectations of borrowers and lenders. The Bank did not resist the upward movement on those occasions when it was evident that resistance would have been untimely in light of the pressures on money, demand and inflation in Canada.

Starting in 1987 and continuing in 1988, the Canadian dollar rose markedly against its U.S. counterpart. In terms of a weighted average of the currencies of our principal trading partners, the upward movement in 1987 was quite modest, but in 1988 the Canadian dollar appreciated by about 10 per cent. In large part this appreciation stemmed from the strong recovery in the prices of many of the raw materials which Canada produces, compared to the low values that had prevailed in the 1982-86 period. These price increases reflected the vigour in worldwide aggregate demand over the last two years. As well, the attitude of investors in Canada and abroad towards the Canadian dollar took on a more favourable cast. This was related in part to the recovery in commodity prices, but other factors were also important. Prominent among these were the perception that Canadian monetary policy would continue to resist inflation pressures, and the view that the economic benefits for Canada from the free trade agreement with the United States would be substantial.

Although exchange rate movements are difficult to explain with any precision, the main swings in the Canadian dollar do appear to be broadly explainable in terms of these considerations. And, as is suggested by this account, monetary policy actions are but one of the elements relevant in shaping the movement of the Canadian dollar.

In this context it is worth emphasizing that neither the exchange rate nor interest rates should be viewed as fundamental objectives of monetary policy, although monetary policy actions are among the forces that affect prices in money and foreign exchange markets. Indeed, the impact of monetary policy is very much transmitted through these markets, and the Bank of Canada is well aware of how important interest rates and the exchange rate are for all kinds

of economic activities. Nonetheless, the fact remains that interest rates and the exchange rate are better viewed as policy channels than as policy goals. The goals are price stability and sustained healthy economic performance; these in turn require a moderate rate of monetary expansion and moderate growth in total spending in the economy.

It is too soon to see fully the contribution of the actions taken by the Bank of Canada during 1988 towards the achievement of these goals. But there can be no doubt that without those actions – that is, with a monetary policy that tolerated faster rates of money, credit and demand expansion than in fact occurred – the pressures on our costs and prices would be still more pronounced than they currently are.

In early 1989, as this Report is being written, the pressures pushing our costs and prices upward have evidently not been dissipated. Nevertheless, there are grounds for believing that those pressures have been contained in some important respects. In this regard, it is noteworthy that shorter-term and longer-term interest rates have moved rather differently in the past year. Details of these movements are provided in another section of this Report, but what can be pointed out here is that despite the substantial increase in short-term rates, longer-term rates have been relatively stable. I believe that this stability reflects a good climate of expectations. It reflects confidence among savers and investors that inflation will in fact be curbed and economic expansion preserved.

### **International economic conditions and foreign and domestic imbalances**

The broad pattern of developments over the past year in aggregate demand, inflation and the stance of monetary policy just described has not been uniquely a Canadian experience. Important similarities have been evident in the United States and overseas.

At the end of 1987, widespread doubt prevailed whether the long-lived expansion of the major industrial economies could continue. Those concerns focussed on the effect on demand of the stock market crash and on whether major overseas countries could cope with the

substantial decline in the external value of the U.S. dollar. It was thought that the stock market decline would reduce consumer spending worldwide. The change in currency values was expected to result in a slowing in the Japanese and German economies, because of their dependence on the export sector. Neither of these things happened, and through the year, in one set of forecasts after another, projections had to be adjusted upward. Output expansion around the world turned out to be much stronger than anticipated and, indeed, the five principal overseas industrial economies posted their most rapid rise in economic activity in more than a decade.

The widespread and therefore mutually reinforcing surge of demand has heightened inflationary pressures worldwide. In response, the stance of monetary policy has been tightened progressively in most major industrial countries, and short-term interest rates have risen internationally.

For the United States, the continued vigour of domestic demand has also raised concerns over the extent to which room is being made in the economy for an adequate reduction of the large U.S. trade deficit. Progress has been made in adjusting the U.S. external position, but not nearly enough. Furthermore, it has become increasingly apparent that U.S. fiscal policy has a key role to play in securing progress. One way in which action to reduce the U.S. budgetary deficit would be helpful is by slowing the advance of domestic spending in the relatively near term, thereby making further room for exports. More broadly, and also with an eye on the longer-term health of the U.S. and world economies, such fiscal action can make a contribution to economic growth by increasing the availability of savings to finance business investment in the United States and elsewhere. For these kinds of reasons a great deal of attention around the world has been, and will continue to be, focussed on how the U.S. budgetary situation might evolve.

Large budget deficits also exert upward pressure on real interest rates and have adverse implications for the cost of new debt financing and the servicing of existing debts. While a number of debt-related problems in both the public and private sectors have arisen around the

world in recent years, the most complex and deep-rooted of them all is the problem of foreign indebtedness among a range of developing countries. In part, progress in resolving the problem depends on maintaining adequate economic expansion in the industrial world and an adequate flow of financing to debtor countries. However, at least as important in securing progress is a better economic performance by the debtor countries themselves. As is noted in a later section of this Report, some headway was made in a number of respects in the past year. It is disappointing that progress has not been faster, but the fact of the matter is that there are unlikely to be quick or comprehensive solutions. Progress requires steady, painstaking and co-operative work from all parties.

Turning back to Canada, I note that much less attention has been focussed on the fiscal deficit and the accumulation of public debt here despite the fact that our ratios of deficit and debt to national income are high by international standards. Given the relatively small impact that our fiscal performance can have on the development of the world economy this lack of attention is understandable from an international perspective. However, the risks of damage to our economic well-being through deficits that lead to an unsustainably rapid pace of debt accumulation are no different or less serious for Canada than elsewhere. More recently, the facts and risks of our fiscal situation have been getting more extensive commentary. This attention is welcome, because sound fiscal performance is a cornerstone of sound economic performance.

Let me also comment in this regard on the area of overlap, or "mix," between broad fiscal policy on the one hand, and monetary policy on the other.

What is the nature of that overlap? Both kinds of policies are, broadly speaking, demand policies. In other words, they are policies that operate mainly by affecting the pace of total spending in the economy. However, the channels through which each policy affects spending are quite different. In the case of monetary policy, the impact, though powerful, is relatively indirect. As I noted earlier, monetary policy effects are channelled through money and foreign exchange markets. The resulting changes in inter-

est rates and the exchange rate in turn affect spending decisions. For fiscal policy, the effects on demand come largely through changes in taxes or government outlays of various kinds. They tend, therefore, to be more direct in nature.

In the light of this, it can quite readily be seen that in a broad and very general sense, scope exists for some counterbalancing between the impacts of fiscal and monetary policy on total demand in the economy. Thus, actions undertaken to reduce fiscal deficits help to restrain demand, which in turn tends to ease pressures on monetary policy and on monetary conditions. The chances of a better policy balance overall are thereby improved.

\* \* \* \* \*

Monetary policy in Canada needs to be a bulwark against inflation and to work towards price stability. What this implies for monetary conditions in the near term will depend on the strength and persistence of inflationary demand pressures. I am hopeful that the resistance to those pressures that was demonstrated in the past year will begin to pay off in 1989. Be that as it may, Canadians can, and indeed should, count on monetary policy to continue to work towards ensuring a solid, that is non-inflationary, foundation for Canadian economic expansion. To do otherwise, to repeat a cycle of inflation boom and bust, would undermine rather than strengthen the chances of sustained economic progress.



## ECONOMIC AND FINANCIAL DEVELOPMENTS

### Demand, economic activity and inflation

Spending in the Canadian economy expanded strongly during 1988. Total dollar outlays rose by about 8 per cent and the level of activity continued to press against capacity limits, intensifying underlying inflationary pressures.

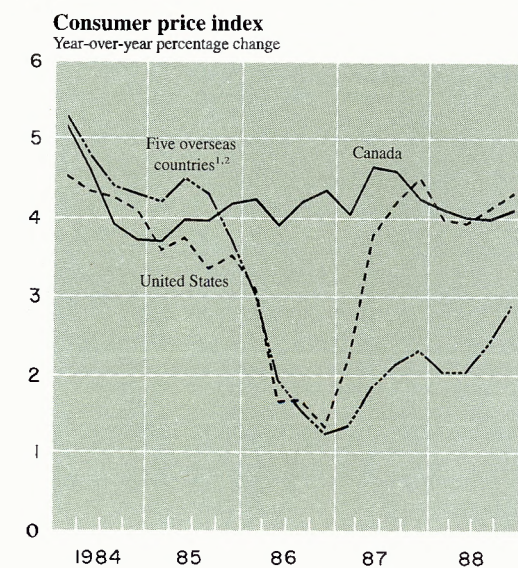
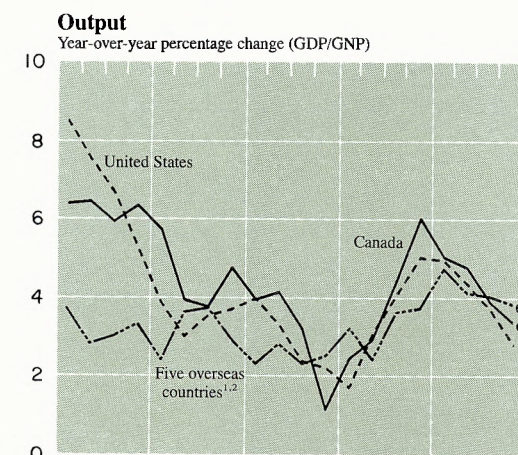
Reflecting primarily the income gains associated with the sharp rise in the prices of many of the commodities that Canada produces for the world market, the distribution of economic activity across the country was more even in 1988 than in the previous year. However, the Prairie region suffered from the effects of drought as well as from low and volatile world crude oil prices.

#### Demand and economic activity

Both domestic and external factors propelled the expansion of activity. Stimulated by buoyant world demand and supported by high household and business confidence, the volume of activity increased by about 3¼ per cent between the fourth quarter of 1987 and the fourth quarter of 1988. This was a slower increase than in 1987, but the rising level of activity, particularly in the non-farm sector of the economy, added further strain to product and labour markets. Indeed, in the non-farm sector, activity is estimated to have increased by some 3¾ per cent during the year.

One of the major boosts to economic activity in 1988 came from the increase in spending on plant and equipment. Against a background of high rates of capacity use, strong profits and the continuing need by corporations to modernize to remain competitive, the volume of capital outlays rose sharply across a broad range of sectors and regions. The buoyancy of investment spending was reflected as well in the high operating rates of producers of capital equipment and of the construction industry.

#### International comparisons



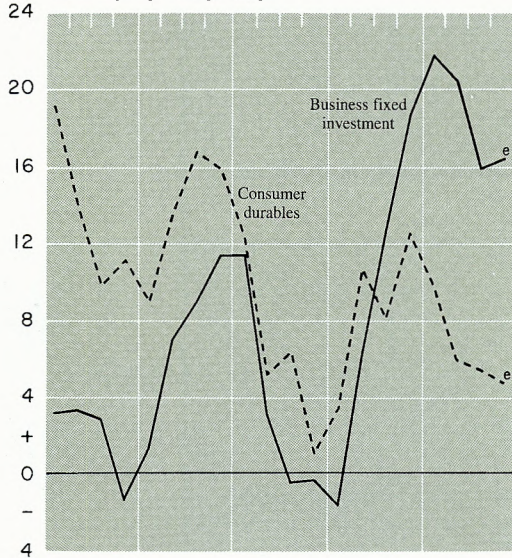
1. Japan, Germany, France, United Kingdom, Italy

2. 1982 GDP/GNP weights

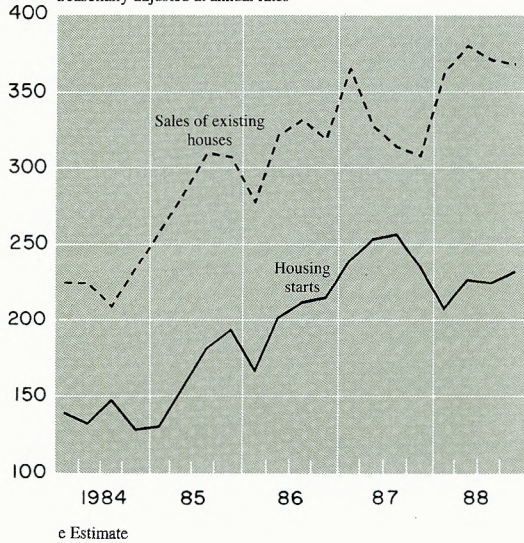
e Estimate

**Selected indicators of household and business demand**

**Growth in volume of expenditures on business investment and consumer durables**  
Year-over-year percentage change



**Housing market**  
Thousands of units  
Seasonally adjusted at annual rates



Non-farm businesses also increased the rate of inventory investment, but because of the sustained vigour of final sales the ratio of stocks to sales dropped to a record low in the second half of the year.

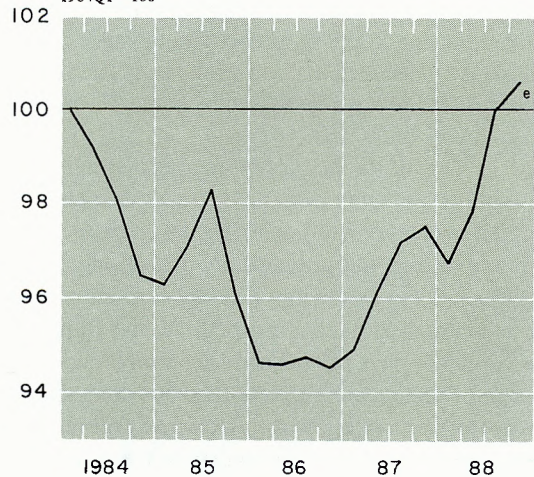
Underpinned by employment and income gains, and reinforced by a relatively low per-

sonal savings rate, spending and credit demand by the household sector continued to advance strongly in 1988. Among the major categories of consumer expenditures, purchases of durable goods again grew rapidly, although at a much reduced rate given the large additions to the stock of durables made in 1987. Activity in the housing market also remained very buoyant, spurring strong demand for mortgage credit. Construction starts on new units, although down from an eleven-year high reached in 1987, totalled 223,000, and sales of existing dwellings rose to record volumes.

Another important feature of Canada's economic performance in 1988 was the sharp increase, for the second consecutive year, in the country's terms of trade – the ratio of prices received for Canadian exports relative to import prices. The rise in the terms of trade reflected most importantly the marked increase that has occurred in prices of basic commodities other than energy. World demand for such commodities, particularly industrial materials, has been extremely buoyant, with Canadian dollar prices for most base metals and wood pulp, for example, rising to record highs in 1988. These developments stimulated output and generated considerable income gains in those parts of Canada,

**Canadian international terms of trade**

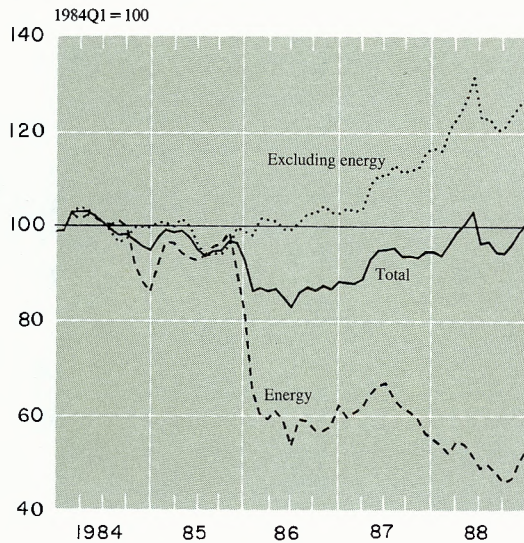
Ratio of export prices to import prices<sup>1</sup>  
1984Q1 = 100



1. Based on seasonally adjusted data  
e Estimate



**Bank of Canada commodity price indexes in terms of Canadian dollars**



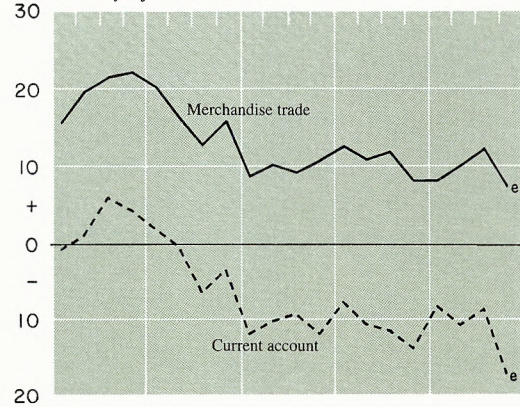
particularly in the east and the west, that depend heavily on these resource-based industries.

As noted earlier, developments in the Prairie region were less favourable. The petroleum and gas industry continued to face a situation of volatile but basically weak world prices. Profitability in the energy sector declined in 1988, and market conditions remain uncertain despite the recent rebound in crude oil prices. However, deregulation in the North American natural gas industry has spurred export sales and contributed to increases in employment and investment in the energy sector. The adverse effects of the drought on output and employment in the agricultural sector were most pronounced in the Prairies as well, even though government stabilization payments, higher crop prices and grain sales out of inventories provided important offsets in helping to maintain farm income levels.

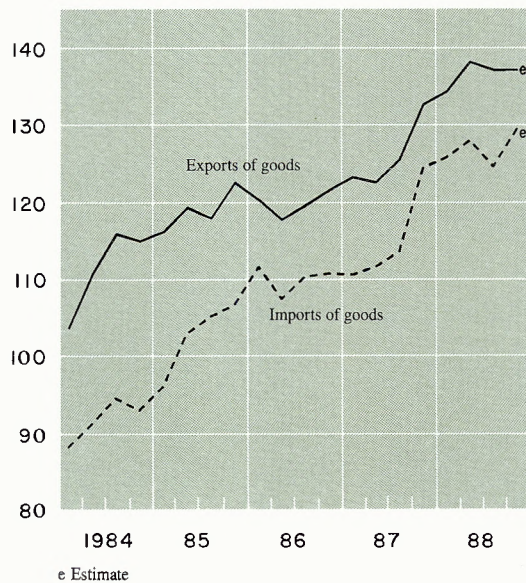
As a result of the strong demand for Canadian products abroad, export volumes rose to high levels. For some goods, export sales were constrained by capacity limits. Export growth, however, was outpaced by the rise in imports, and as a consequence the trade surplus in volume terms declined. Import volumes rose strongly, largely in response to the expansion of

**Current account of the balance of payments**

**Selected balances**  
Billions of dollars  
Seasonally adjusted at annual rates



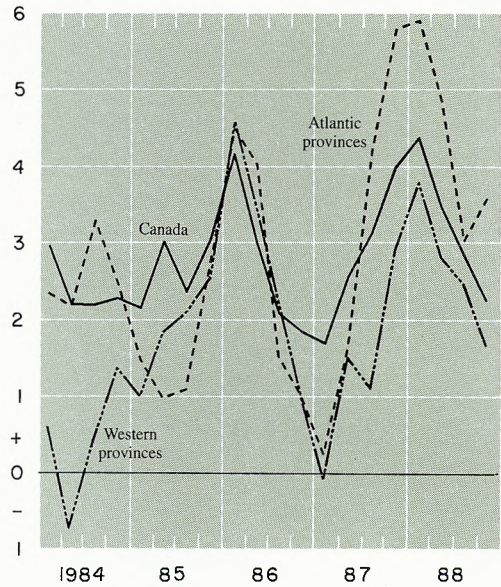
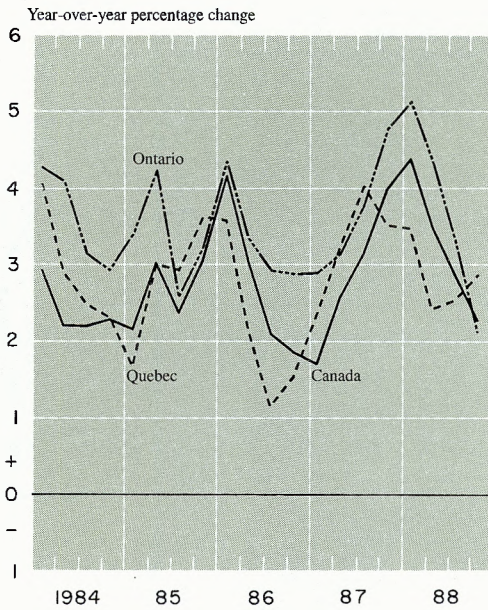
**Merchandise trade**  
Billions of dollars  
Seasonally adjusted at annual rates



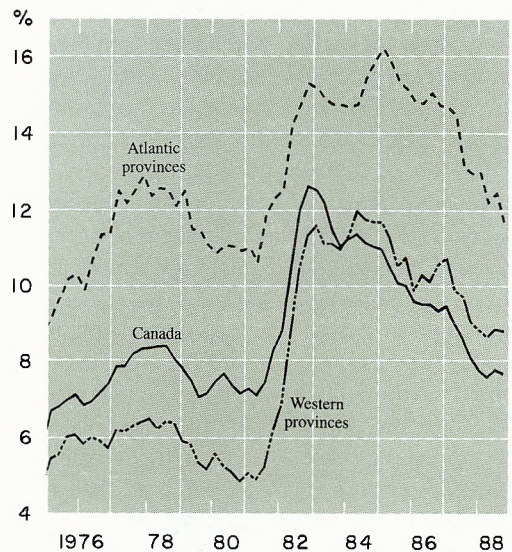
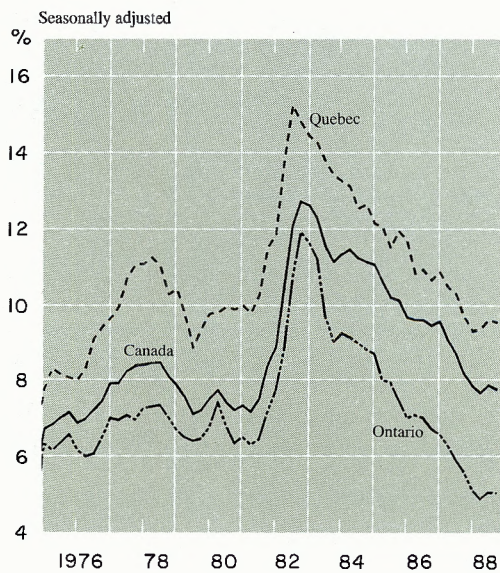
domestic demand, but also in response to lower prices resulting from the appreciation of the Canadian dollar. Given the robustness of business fixed investment, capital equipment imports increased particularly sharply.

The deterioration in the trade balance in volume terms did not carry over one-for-one to the current account deficit because of two important factors working in the opposite direction: the

### Growth in employment



### Unemployment rate



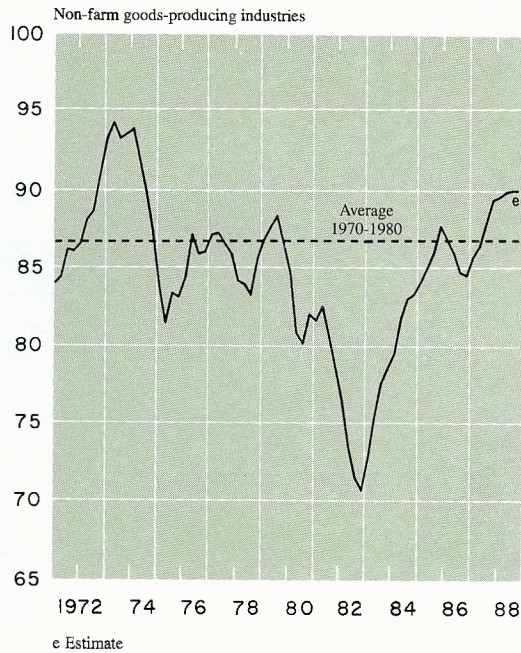
rise in export prices relative to import prices and a substantial increase in the funds brought to Canada by immigrants, particularly from Asia. Overall, the current account deficit increased slightly to approximately \$11 billion, or 1¾ per cent of gross domestic product (GDP).

With total production in the Canadian

economy expanding to meet rising demand, rates of capacity use in a considerable number of industries tightened further, to well above historical averages. For the non-farm, goods-producing sector, plants operated on average at their highest rate since the first half of the 1970s.

Pressures in labour markets also intensi-

**Rate of capacity utilization**



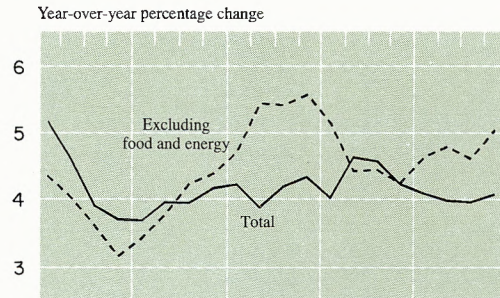
fied progressively in 1988. With the demand for labour remaining strong, employment growth outstripped additions to the labour supply. By year-end, the national unemployment rate had dropped to 7.6 per cent (on a seasonally adjusted basis). While labour market conditions in Ontario remained tighter than elsewhere in Canada, most provinces experienced a drop in the rate of unemployment.

**Inflation**

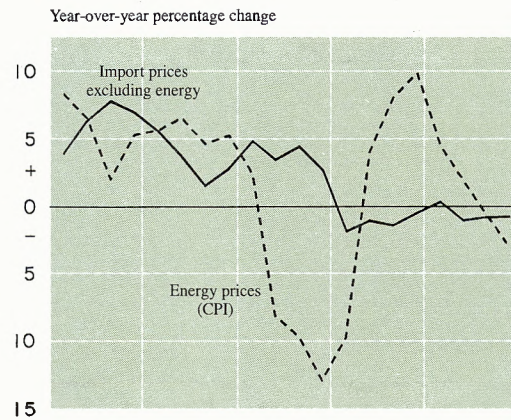
Inflation pressures in Canada intensified in 1988. As noted earlier, prices of commodities and resource-based manufactures rose sharply in response to strong world demand. In the case of food commodities, reduced supply because of the drought in North America also raised prices. There were, at the same time, factors working to provide some offset to these upward pressures. The appreciation of our currency had a downward impact on the Canadian dollar prices of traded goods, and the dip in world energy prices provided another source of inflation relief.

The net result was that at the end of 1988 the consumer price index (CPI) was 4 per cent higher than a year earlier, approximately the

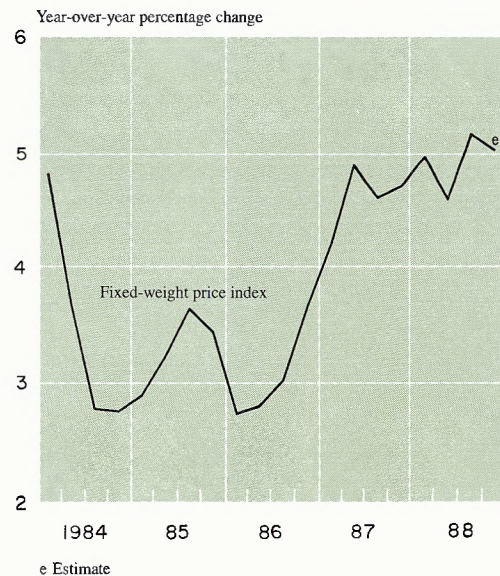
**Consumer price index**



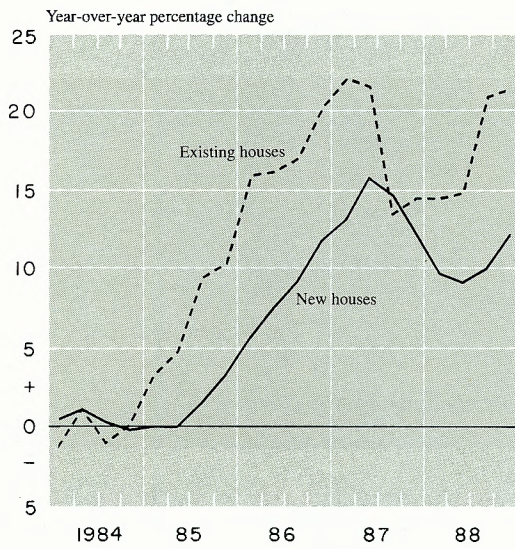
**Import and energy prices**



**Price index for gross domestic product**

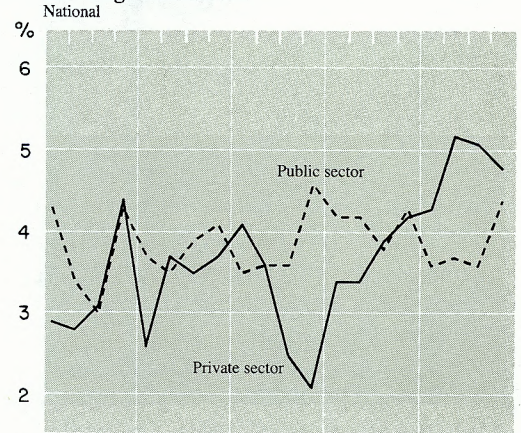


### Housing prices

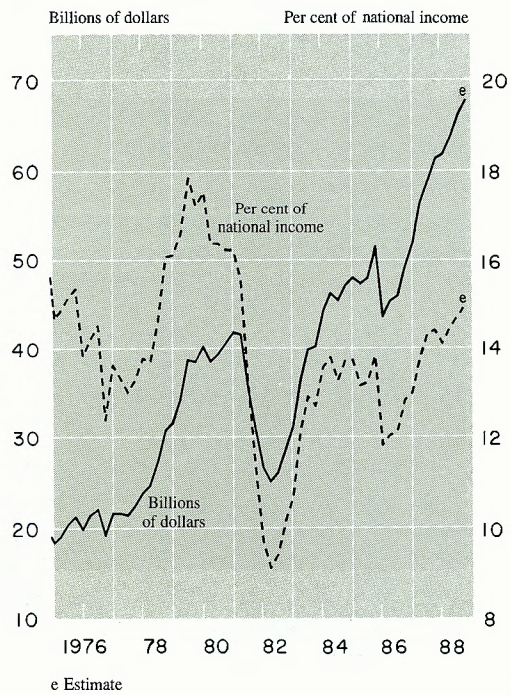


### Indicators of producer costs

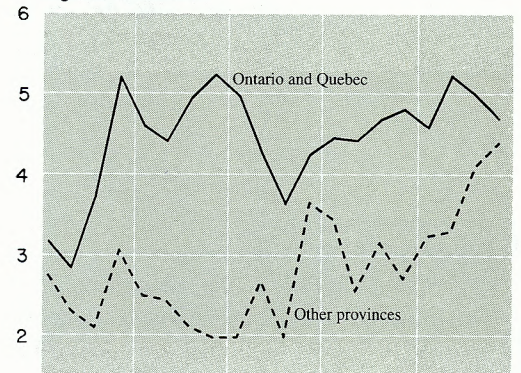
#### Effective annual wage increase in base rates for new wage settlements



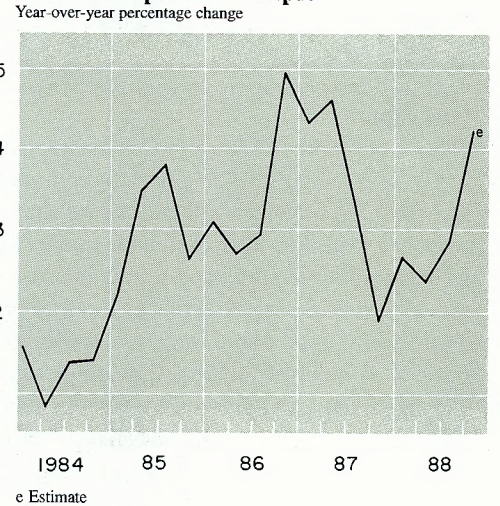
### Corporate profits



#### Regional, all settlements



#### Labour costs per unit of output



same annual rate of increase as experienced during the previous four years. However, the rate of increase of the CPI excluding the relatively volatile food and energy components accelerated to 5 per cent by the end of 1988 from 4¼ per cent a year earlier, and to nearly 5½ per cent in early 1989. If the Canadian dollar had not risen in value, the increase of the CPI over the year would have been more pronounced.

The strength of inflationary pressures was also apparent in the movement of the fixed-weight price index for gross domestic product, one of the broadest measures of prices of goods and services produced in Canada. This index increased by about 5 per cent between the fourth quarter of 1987 and the fourth quarter of 1988, reflecting both the price increases in international markets and the widespread pressures evident domestically. Prices of new and existing houses again rose rapidly in 1988 but, in contrast to the year before, the pattern of increase became more widespread across the country rather than being concentrated in central Canada. With a buoyant capital spending program, the rate of increase of non-residential construction costs ac-

celerated. In consumer markets, prices of automobiles rose more rapidly than during 1987, as did prices of a host of services.

Given strong demand conditions in product markets overall, there was a marked rise in corporate profits, which also increased as a percentage of GDP. The level of profitability was particularly high in those industries producing resources other than energy, reflecting the rise in world commodity prices.

With rising aggregate demand, generally high profitability and tightening labour markets, wage demands were boosted. Wage increases for base rates negotiated in major private sector agreements averaged 4.9 per cent compared with 3.8 per cent in 1987. While private sector settlements remained the highest in Ontario at 5.5 per cent, outside central Canada average increases rose to 4.9 per cent from 2.3 per cent in 1987. It is notable that late in the year wage increases in most provincial and municipal contracts moved up towards those in the private sector. Overall, labour income per worker rose by approximately 5 per cent, and given modest productivity gains the rate of growth of unit labour costs picked up.



## Monetary and financial developments

Reflecting the strength of total spending, aggregates for broad money and credit continued to grow rapidly in 1988, and short-term interest rates rose steadily. At the same time, long-term interest rates remained fairly stable, suggesting a relatively favourable climate of expectations regarding the future course of inflation.

### Monetary aggregates

With the rapid increase in total dollar spending in the economy, M2 and M2+, the aggregates to which the Bank pays particular attention, grew by more than 10 per cent in 1988.

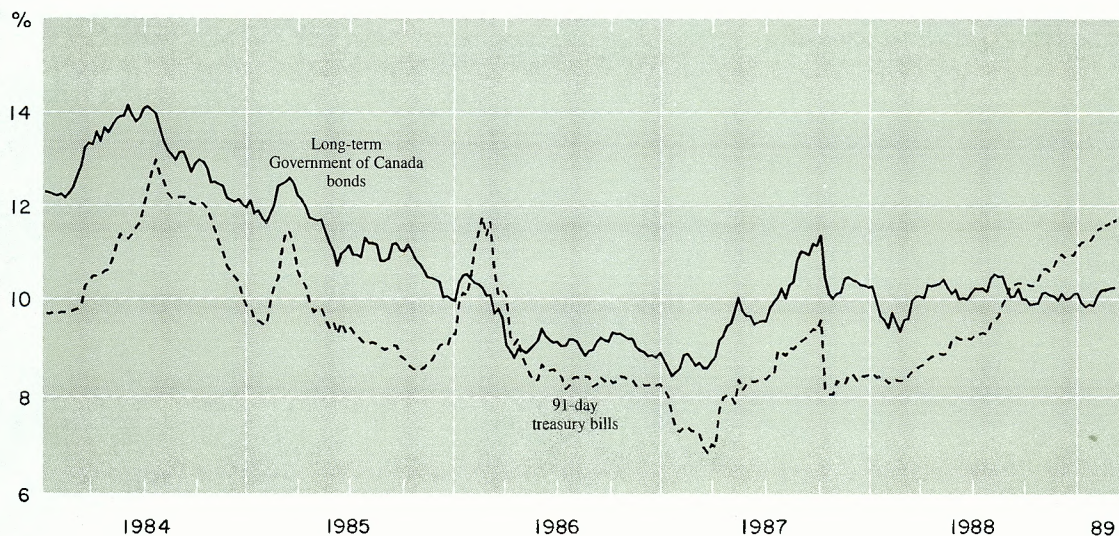
As in previous years, the Canada Savings Bond (CSB) campaign led to a temporary break in the growth path of these aggregates. In 1988, net CSB sales were lower than normal, and this resulted in a sharp rise in M2 and M2+ in November, on a seasonally adjusted basis; in November 1987, on the other hand, exceptionally strong CSB sales had led to sizable declines

in these aggregates. However, it should be noted that for the period December 1987 to October 1988, when the campaign was not a factor, the annual rate of expansion of M2 and M2+ was 10.3 per cent and 12.1 per cent, respectively. The relatively more rapid growth of M2+ reflected the continuing increase in the near banks' share of the market for deposits.

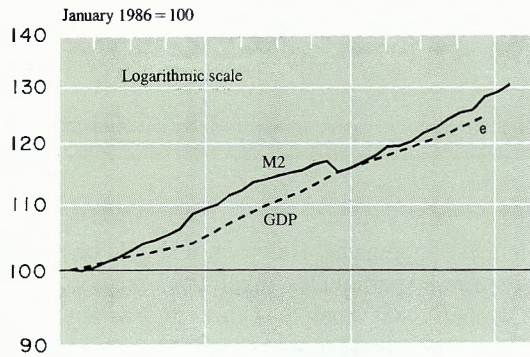
Since M1 consists largely of non-interest-bearing components, it was strongly affected by the rise in short-term interest rates. Thus, its growth was well below that of total spending. The impact of higher short-term interest rates on the pace of expansion of the broader aggregates was less pronounced. Yields on most of the deposits included in M2, M2+ and M3 adjust quite quickly to changing market rates, and therefore changes in interest rates have a mostly indirect influence on these broader aggregates through their impact on aggregate demand and prices.

The path of M3 is largely determined by

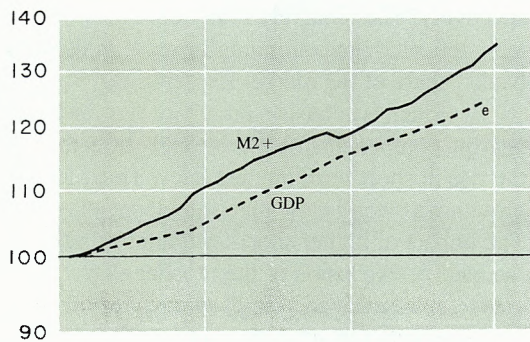
### Canadian interest rates



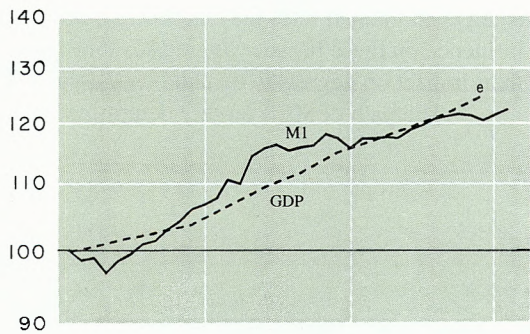
Monetary aggregates and gross domestic product (GDP)



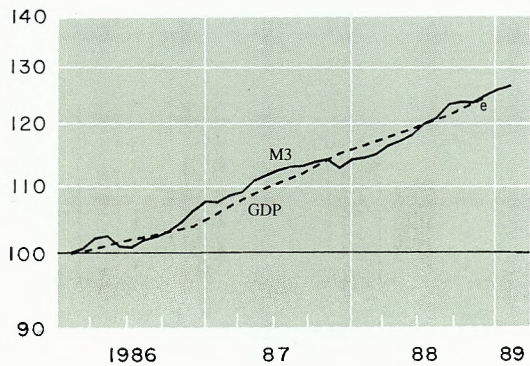
M2:  
M1 plus personal savings deposits and non-personal notice deposits



M2 + :  
M2 plus deposits at trust and mortgage loan companies, and deposits and shares at credit unions and caisses populaires



M1:  
Currency and demand deposits less private sector float



M3:  
M2 plus non-personal fixed-term deposits plus foreign currency deposits of residents booked in Canada

e Estimate



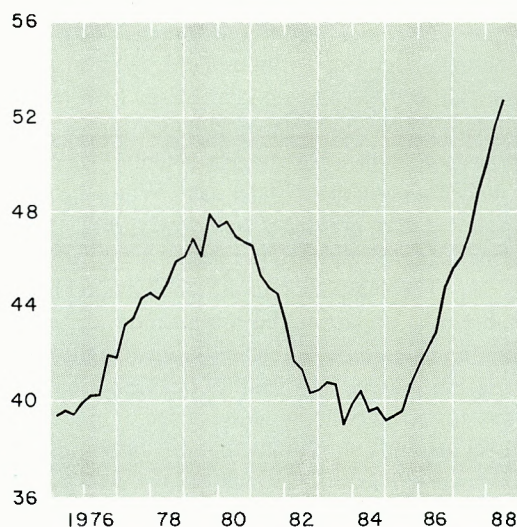
changes in the demand for bank loans. The strong demand for such loans in 1988 led banks to rely more heavily on wholesale deposits, which are included in M3 but not in M2. The acceleration in the growth of M3 was only one measure of the general expansion of liquidity in Canada that followed the stock market crash. Bankers' acceptances and commercial paper, both of which are quite similar to wholesale bank deposits, also grew at a very rapid pace.

### Credit aggregates

The behaviour of credit aggregates indicated a rapid increase in household and in business indebtedness, as well as a continued slowing in the growth of public sector debt. The growth in private sector debt was a further indication that the stock market crisis had little lasting effect on the attitudes and spending plans of Canadians.

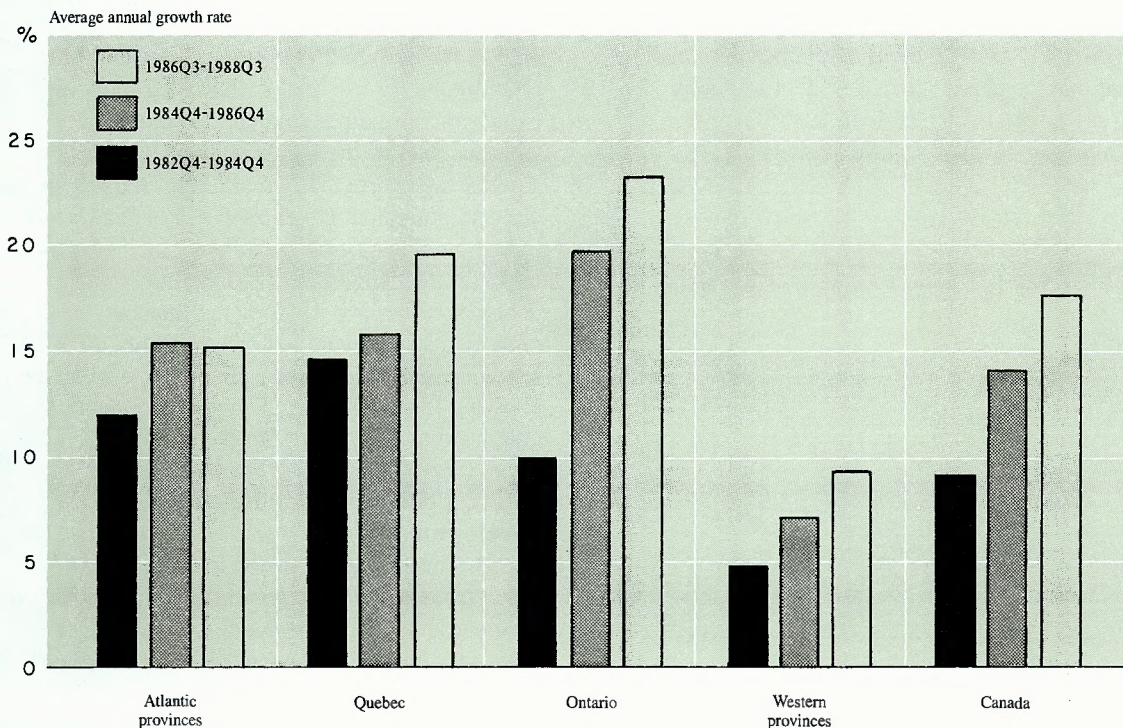
Household credit expanded particularly rapidly in 1988, reflecting vigorous consumer

### Household credit as a percentage of personal disposable income<sup>1</sup>



1. Total credit extended by chartered banks, trust and mortgage loan companies, sales finance companies, and life insurance companies

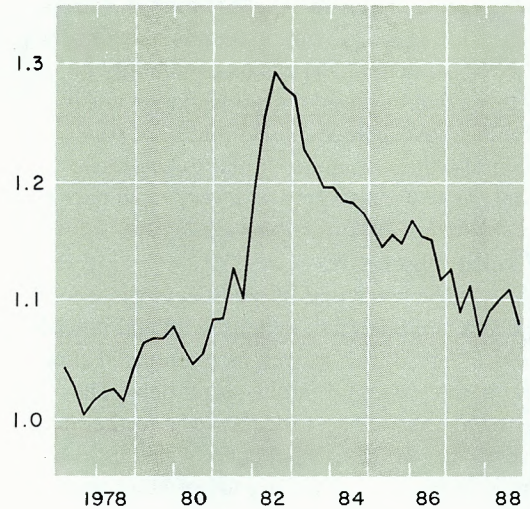
### Household credit by region



spending and strong demand for housing. The pace of expansion steadied at about 17 per cent, with a marked acceleration over the past six years. This rapid pace of growth reflected the continued optimism of households regarding their capacity to take on increases in their level of debt relative to income. The increase in household debt was strongest in Ontario and Quebec – more than 20 per cent. While the rise in the western provinces was slower, it was nonetheless close to 10 per cent.

The sharp slide in the stock market had a substantial impact on the composition, though not the magnitude, of business financing from external sources. Demand for business credit was sustained by the vigorous pace of investment and the considerable number of corporate takeovers. Thus, the growth of total business credit (including stock issues) remained around the 10 per cent rate reached in 1987. Businesses continued to rely heavily on bond financing. However, after having drawn substantially on the stock market as a source of funds earlier, in more favourable circumstances, they virtually abandoned it in 1988, turning instead to short-term sources of credit, including bank loans, bankers' acceptances and commercial paper. Nonetheless, strong growth in retained earnings meant that the overall corporate debt-to-equity ratio stayed relatively stable in 1988. Over the past six years businesses have managed to re-

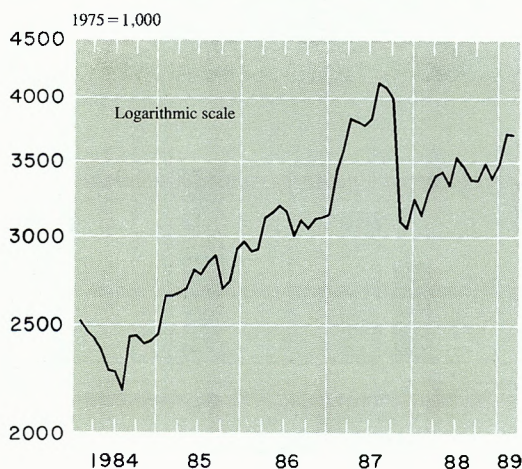
**Corporate debt-to-equity ratio  
(excluding intercorporate loans)**



duce their debt-to-equity ratios considerably from the level reached at the trough of the 1982 recession.

In addition to fuelling the demand for credit in the private sector, continued economic expansion has helped to increase tax revenues and thus to slow the rise in public debt. This slowing was particularly marked for the provincial and municipal governments, where a further reduction in debt-to-GDP ratios was achieved. As in 1987, the expansion of federal government debt was inflated in 1988 by the financing requirements associated with a large build up of foreign exchange reserves. However, even after allowing for this factor, federal government debt continued to grow more rapidly than GDP.

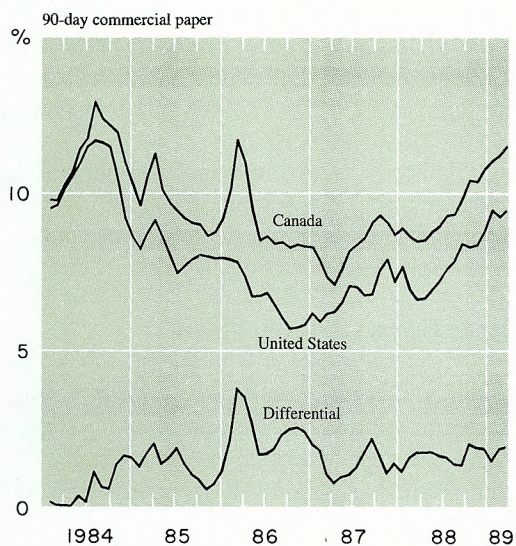
**Toronto Stock Exchange Composite (300) Index**



**Interest rate and exchange rate developments**

The strong expansion in money and credit through the year was accompanied by a steady rise in short-term interest rates. The yield on 90-day commercial paper rose from 8.75 per cent in early January to 11.10 per cent by the end of December, exceeding the level it had reached just before the stock market crash. The

**Canada-U.S. short-term interest rates**

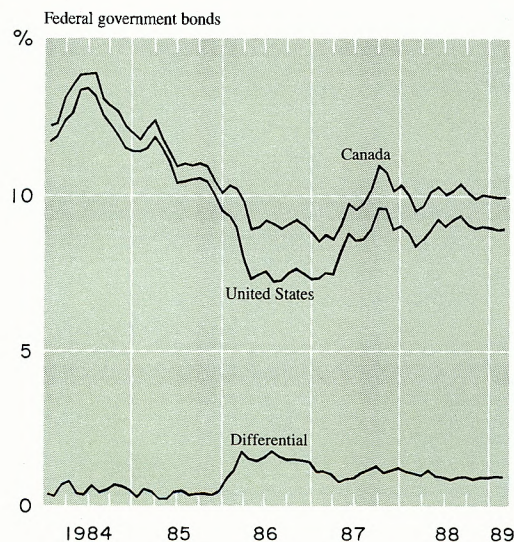


During 1988 the Canadian dollar appreciated by about 10 per cent against a weighted average of the major currencies. It gained almost 8 per cent in the first half of the year, reflecting most notably higher commodity prices as well as the positive view in exchange markets of the anti-inflationary stance of Canadian monetary policy and of the consequences for Canada of the free trade agreement with the United States. In the second half of the year, the dollar fluctuated markedly as a result of swings in market sentiment regarding the prospects for passage of the agreement.

Long-term interest rates picked up slightly in early spring as expectations of an economic slowdown, which had precipitated the decline in these rates after the stock market crash, were erased by evidence of the continued

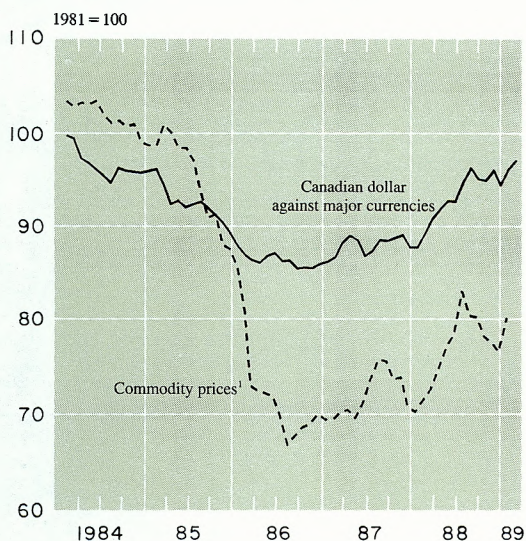
gradual tightening of monetary conditions in Canada occurred against a background of rising interest rates in the United States, with the result that interest rate differentials between the two countries remained fairly stable, though relatively high, throughout the year.

**Canada-U.S. long-term interest rates**



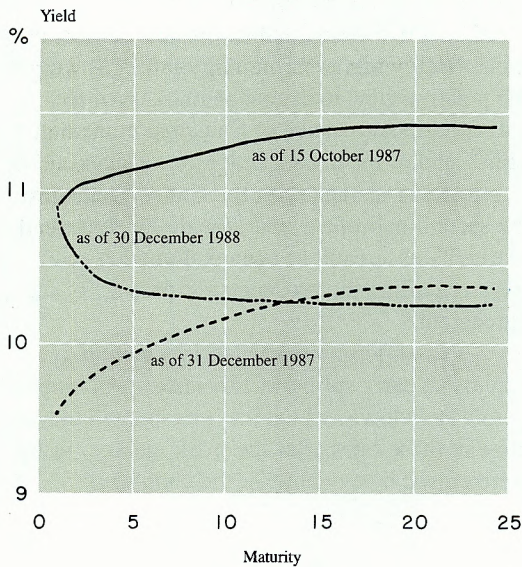
strength of demand. Thereafter, despite rising short-term rates, long-term rates remained fairly stable at levels well below those prevailing just before the crash, bringing about an inversion of the yield curve. This behaviour of long-term rates suggests that financial markets are confident that rising short-term rates will help curb inflation.

**Exchange rate and commodity prices**



1. In terms of a weighted average of G-7 currencies

**Theoretical yield curve for Government of Canada bonds**



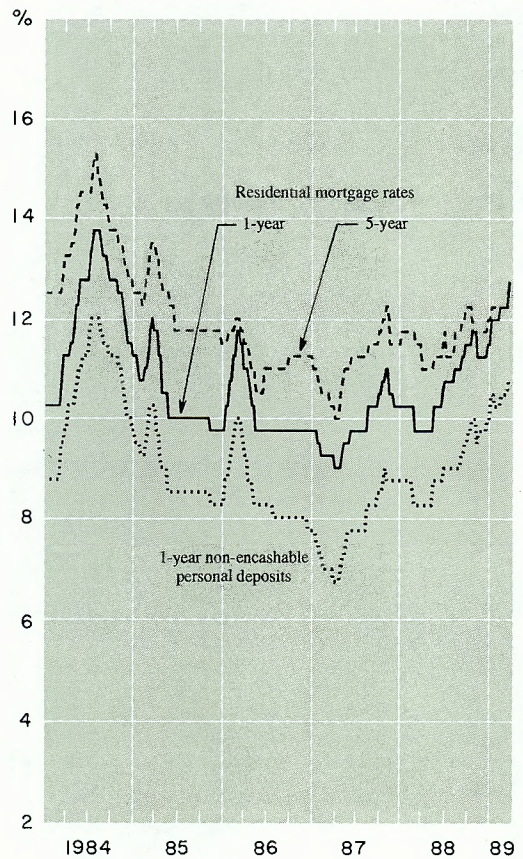
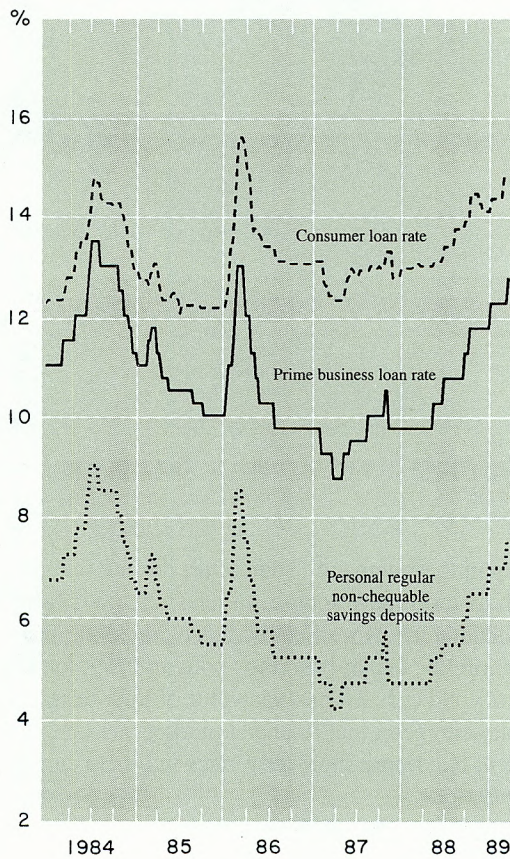
Administered interest rates closely followed market rates of similar maturity. Thus, prime lending rates of banks rose 2½ percentage points during 1988 in response to higher short-term market rates, while 5-year mortgage rates rose by only half a percentage point.

Short-term rates continued to climb in the early weeks of 1989, setting off further increases in administered rates, most notably a rise in the prime rate of half of a percentage point.

**Other financial developments**

Canada, together with the other G-10 countries, is putting into effect the recommendations of the Basle Committee on Banking Regulations and Supervisory Practices aimed at strengthening and harmonizing capital standards for international banks. The Committee developed a framework that establishes a minimum level of capital to be achieved by 1992. This

**Selected chartered bank interest rates**



level is set at 8 per cent of a weighted total of bank assets, including both balance sheet and off-balance-sheet items. The framework provides for transitional steps so as to ensure a smooth adjustment to the new standards. It also allows for a measure of national discretion with respect to some of the asset weightings and the definition of capital. Following discussions with Canadian banks, the Office of the Superintendent of Financial Institutions indicated that the definition of capital to be used in Canada would exclude the general provisions for losses on sov-

ereign loans as well as unrealized capital gains on banks' holdings of securities and bank premises.

The process of financial market restructuring in Canada continued in 1988, following the relaxation of rules governing the ownership of investment dealers. All six major Canadian banks have now established or acquired securities firms. This development took place against the backdrop of a continuing international trend towards allowing banks to become more involved in the securities industry.



## International developments

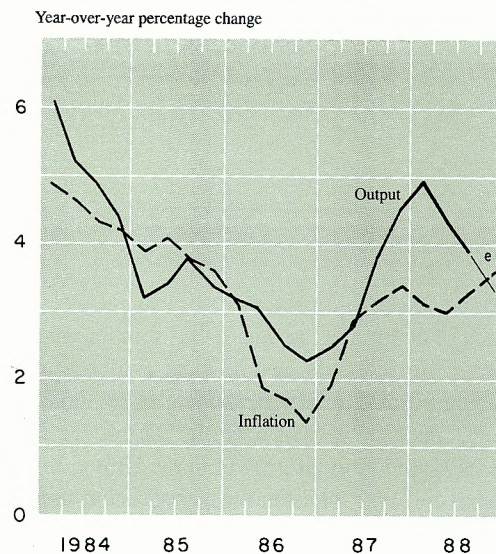
Economic expansion in the major industrial countries was unexpectedly strong in 1988, and signs of emerging inflationary pressures in many countries led to a general tightening of monetary conditions. Progress was made in reducing the payments imbalances between Germany, Japan and the United States during the first part of the year, but the pace of adjustment began to slow and showed some signs of reversing as the year progressed.

For the developing countries, favourable external developments such as the strong growth of spending in industrial countries and a general strengthening of commodity prices were offset by rising international interest rates and, in some cases, by weaker world oil prices. While there was a broad improvement in ratios of debt to GNP and debt to exports of goods and services, many debtor countries had problems servicing their debts and continued to face a difficult financing environment in 1988. In particular, banks became increasingly reluctant to raise their exposure through new lending. However, this situation was mitigated by the further development of alternative financing options and increased acceptance of various forms of voluntary debt reduction.

### Industrial countries

The pace of economic activity in the seven major industrial countries accelerated throughout 1987 and into the first quarter of 1988, despite a major correction in equity prices in October 1987. In light of this unexpectedly rapid expansion, concern shifted towards the potential for a resurgence of inflation and away from any possible adverse consequences arising from the stock market crash. Evidence of capacity constraints began to emerge, and consumer price inflation drifted upward in a number of countries, despite weak oil prices. Adding to

### Major industrial countries<sup>1</sup>: Output and consumer prices<sup>2</sup>



1. United States, Japan, Germany, France, United Kingdom, Italy, Canada

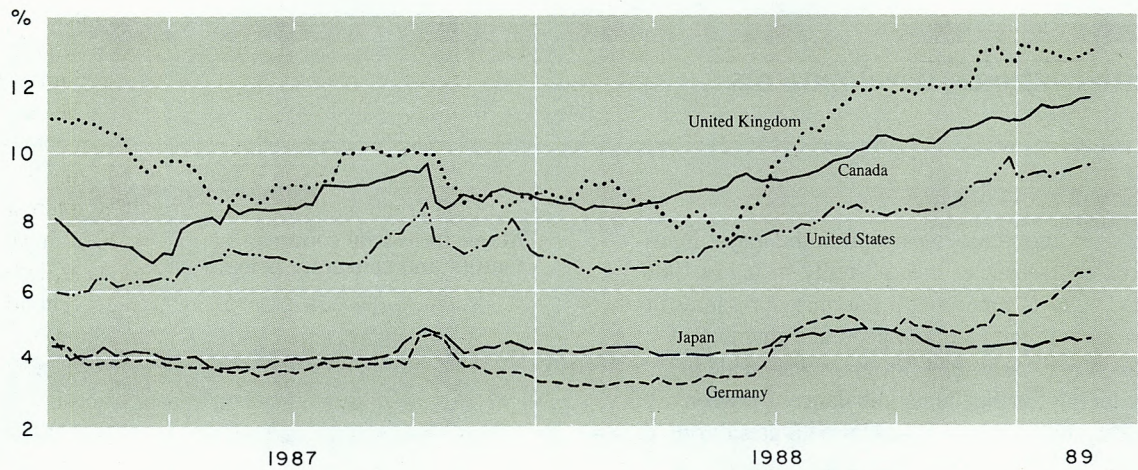
2. 1982 GDP/GNP weights

e Estimate

these pressures were rapid increases in world prices of many non-oil commodities, particularly during the first half of the year.

To counteract these developing inflationary pressures monetary policy was tightened during 1988 in most of the major industrial countries, resulting in rising short-term interest rates. However, long-term interest rates remained relatively steady, reflecting market expectations that these policy actions would forestall a resurgence of inflation in the medium term. The tightening of policy was greatest in the United Kingdom, Canada and the United States, where inflationary pressures were most evident. While the growth of aggregate expenditure moderated in the second half of the year, the

**Short-term interest rates of selected major industrial countries**

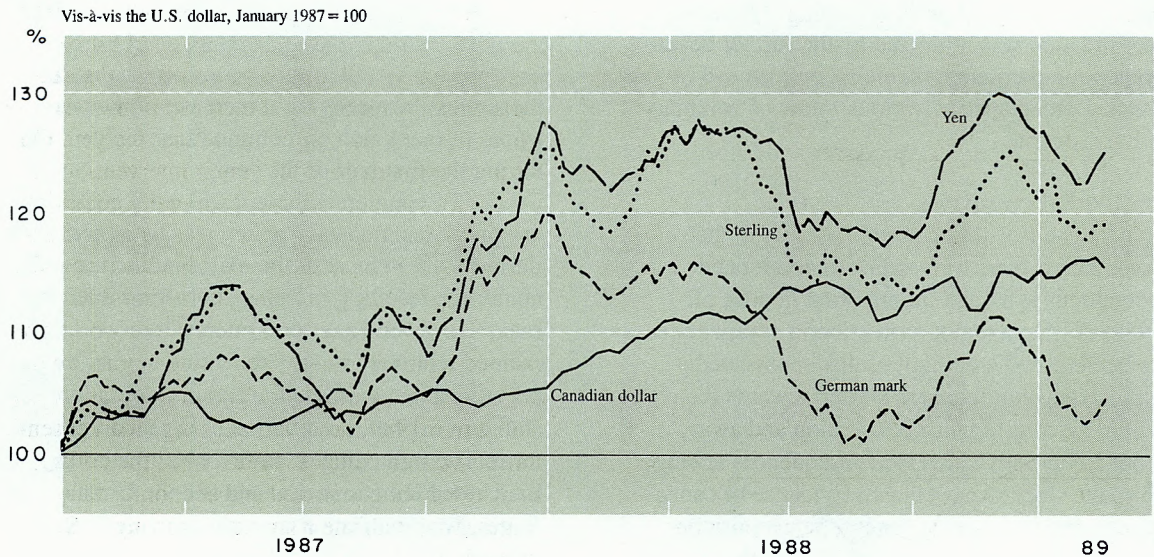


pace of economic expansion has remained high by recent standards, and no clear evidence of an easing of inflationary pressures has yet emerged.

For the year as a whole, the pattern of spending and output growth in the United States, Japan and West Germany was consistent with re-

ductions in the large bilateral imbalances that had developed in the external payments of these countries. The resulting improvements, which were most evident in Japan and the United States, reflected earlier declines in the exchange value of the U.S. dollar as well as fiscal policy

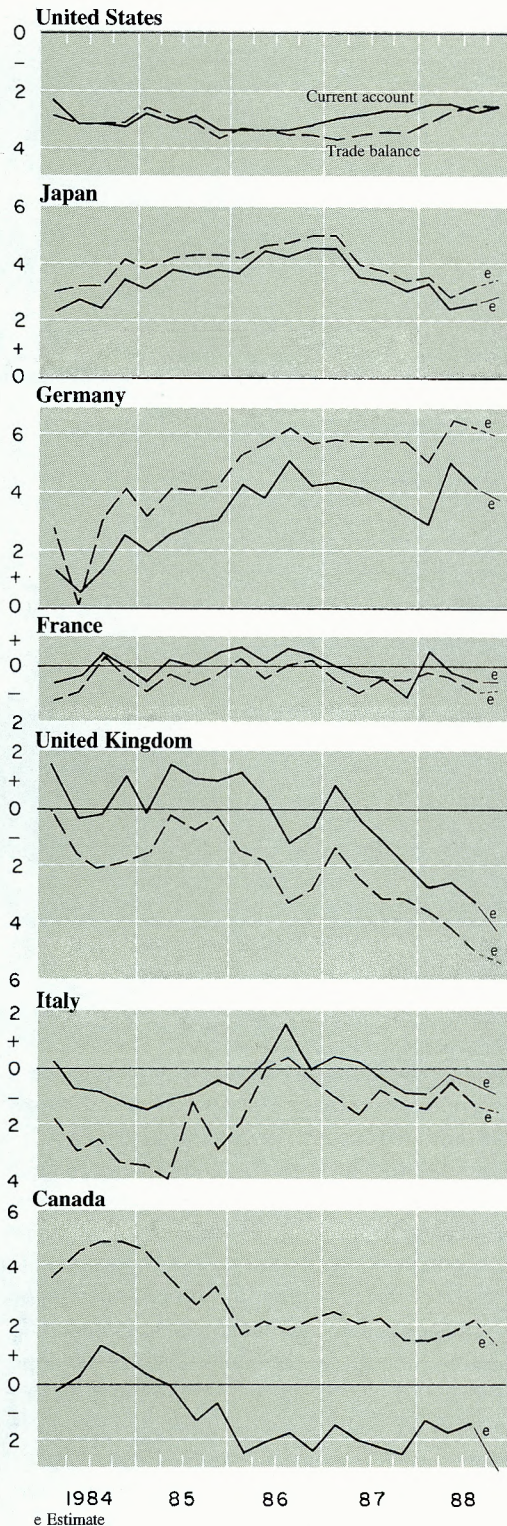
**Selected exchange rates**





## External balances of the seven major industrial countries

As a percentage of GNP or GDP



adjustments undertaken in the context of the G-7 policy co-ordination process and in response to financial market developments after October 1987. In the United States the merchandise trade balance, as a percentage of GNP, improved noticeably during the first half of the year. The current account balance, which includes payments for services and interest income, showed much less improvement owing to the growth in interest payments to service U.S. foreign debt. The Japanese trade surplus declined early in the year, but much of this progress was reversed in the second half, as exports to other Asian countries and Europe continued to expand. Germany's trade surplus rose sharply in the second quarter of 1988, owing in large part to strong growth in exports of capital goods to other European countries, but resumed its downward trend relative to GNP in the second half of the year. These developments were accompanied by some deterioration in the external balances of other industrial countries, particularly the United Kingdom.

Signs of progress in reducing the U.S. trade deficit supported the U.S. dollar during the year, halting the steady depreciation that had been observed since early 1985. The dollar was also supported by expectations of higher U.S. interest rates, based on evidence that the U.S. economy was growing more quickly than previously anticipated. While the Japanese yen showed little net change against the U.S. dollar during 1988, it appreciated significantly against the German mark and other continental European currencies. Sterling also appreciated steadily against the mark over the course of the year, while depreciating somewhat against the yen. On a number of occasions concerted intervention in the foreign exchange market by the G-7 countries helped to foster a more orderly exchange rate environment than had been typical in recent years.

Uncertainty over the future course of U.S. fiscal and monetary policy and of world oil prices resulted in renewed downward pressure on the U.S. dollar towards the end of the year. Going into 1989, however, exchange market sentiment was, on balance, in favour of the dollar, as world oil prices firmed and economic data continued to indicate a strongly growing U.S. economy.

## Developing countries

Economic performance in the developing countries was mixed in 1988. The growth of aggregate output was slightly higher, but the average rate of inflation rose to a new peak, largely as a result of a further acceleration of price increases in a number of countries with traditionally high inflation rates. In aggregate, the current accounts of developing countries swung into modest deficit in 1988 from near balance in the previous year, as the drop in oil prices weakened the position of oil exporters.

A variety of factors help to explain the apparent inability of the developing countries as a group to benefit more from the strong pace of economic activity in the industrial countries and the strengthening of demand and prices for industrial raw materials. For certain countries, favourable spillover effects were offset by the weakness in world oil markets, lower prices for some tropical commodities and the rise in international interest rates, which added to debt-servicing burdens. The effects of these adverse external factors were compounded in some countries by a failure to deal with serious domestic problems, particularly accelerating rates of inflation.

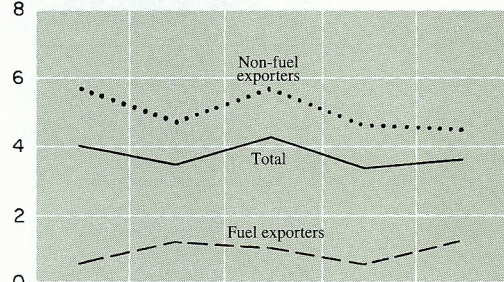
Many of the heavily indebted developing countries continued to face difficulties in meeting debt-service payments. The International Monetary Fund (IMF) and the World Bank remained actively involved in the efforts of debtor countries to deal with their problems, providing support both through policy advice and financial assistance. During the past year the authorized capital of the World Bank was increased by four-fifths, to U.S.\$171.4 billion. This will enable the Bank to increase its lending to developing countries. An existing IMF lending facility was also modified so that countries undertaking Fund-supported adjustment programs could qualify for additional financing in the event of adverse external developments. As a result of an agreement among official creditors following an initiative at the Toronto Summit in June, the poorest debtor countries, primarily those in sub-Saharan Africa, became eligible for special concessional terms in future debt rescheduling undertaken under the aegis of the Paris Club.

Agreements were also reached between banks and debtor countries on debt restructuring

## Developing countries

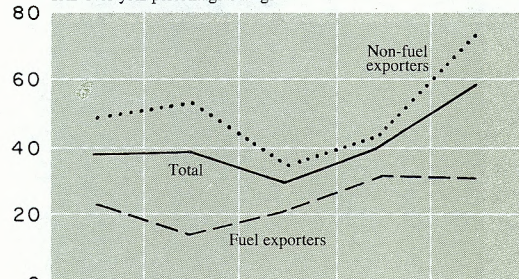
### Output

Year-over-year percentage change



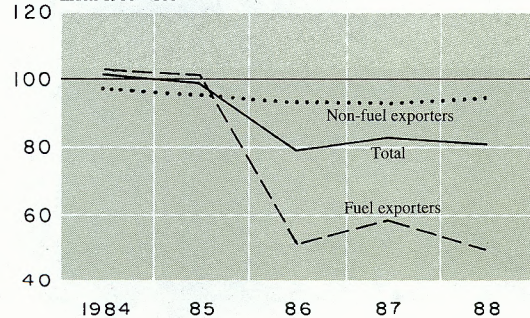
### Inflation

Year-over-year percentage change



### Terms of trade

Index 1980 = 100

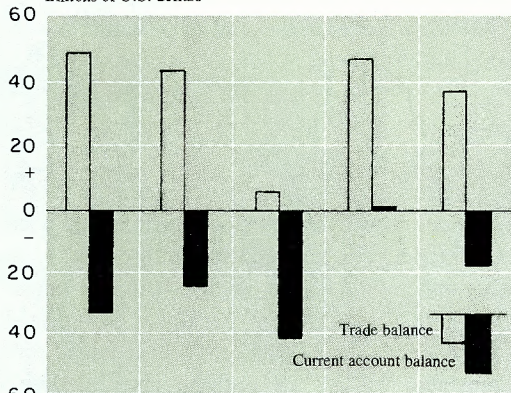


and the provision of new money, with Brazil the most notable example. The agreement with Brazil allowed it to become current on interest payments and provided for the rescheduling of much of the debt owed to banks. Nevertheless, there has been evidence of a growing reluctance on the part of banks to lend to the less-developed debtor countries. The resulting difficulties in negotiating financing agreements, compounded in some cases by a failure of the debtor country to adopt policies that can be supported by the IMF and the World Bank, and a growing diversity of interests among banks, has increasingly led debtor countries to use arrears in interest payments on loans as a substitute for new external financing.

**Developing countries**

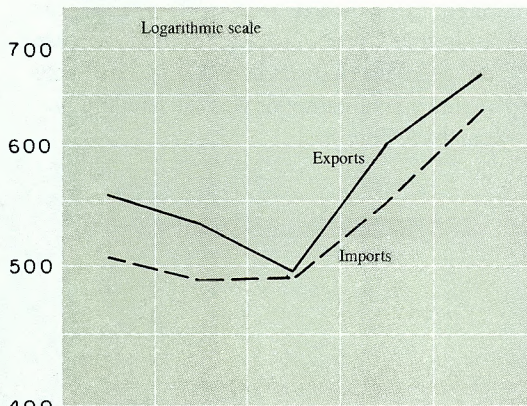
**Trade and current account balances**

Billions of U.S. dollars



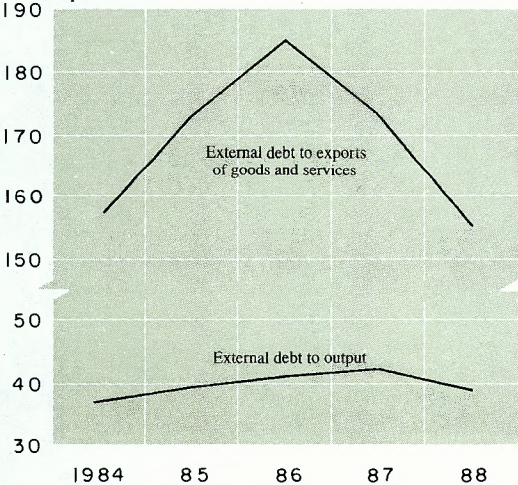
**Merchandise trade**

Billions of U.S. dollars



**External debt ratios<sup>2</sup>**

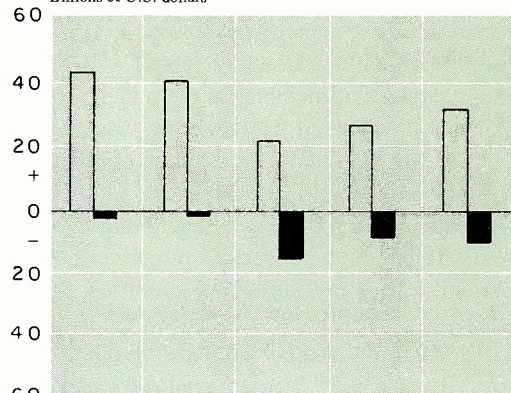
In per cent



**Fifteen heavily indebted countries<sup>1</sup>**

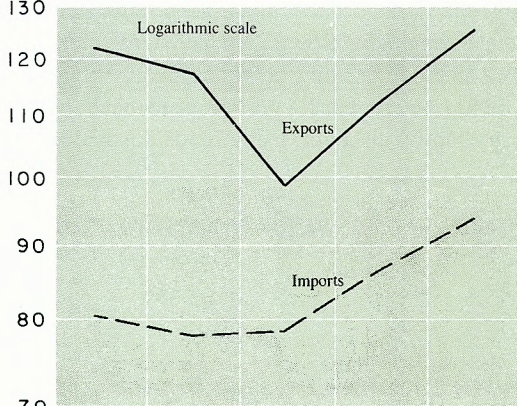
**Trade and current account balances**

Billions of U.S. dollars



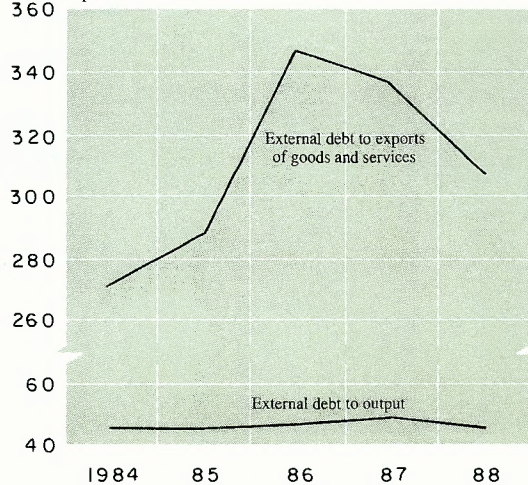
**Merchandise trade**

Billions of U.S. dollars



**External debt ratios**

In per cent



1. Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, Yugoslavia

2. Ratios apply to capital-importing developing countries only

In this environment there has been increased emphasis on widening the range of financing options offered to banks as an incentive to participate in financing packages, and on ways of reducing outstanding debt. The Brazilian agreement was notable for the range of options that it contained, including provision for debt/equity swaps and special "exit" bonds that allowed banks to eliminate or reduce future commitments in new money or rescheduling arrangements. Debt/equity conversion programs have been introduced in a number of countries, frequently as part of a financing package.

Debt has also been reduced in other ways. In early 1988 Mexico conducted an auction of collateralized bonds in exchange for bank debt and in the process moderately reduced its outstanding debt. Bolivia reached agreement with its creditor banks on an arrangement under which it bought back a portion of its bank debt at a substantial discount, using funds donated by

creditor governments. Chile, with the agreement of its creditor banks, has taken advantage of unexpectedly strong earnings from copper exports to buy back a modest amount of debt at a discount.

In 1988 the Bank of Canada, with the concurrence of the Minister of Finance, participated with other industrial countries in three short-term bridge-financing arrangements for debtor countries. In each case the financing was related to an economic adjustment program being undertaken by the country with assistance from the IMF and/or the World Bank. Canada's share in a loan of U.S.\$250 million arranged for Yugoslavia was U.S.\$10 million. The Canadian share in a U.S.\$500 million loan for Brazil was U.S.\$25 million, and in a U.S.\$500 million loan for Argentina it was U.S.\$22.5 million. At year-end the loans to Yugoslavia and Brazil had been repaid and a small amount was outstanding on the loan to Argentina.

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## BANK OF CANADA OPERATIONS

### Bank of Canada advances and securities market operations

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The Bank of Canada makes available overnight advances to members of the Canadian Payments Association (CPA) when such temporary loans are needed to enable them to meet their reserve requirements or to replenish their settlement balances at the Bank of Canada. Advances of this type amounted to \$342 million at the end of 1988 and were repaid on the first business day of the new year. A summary of advances made to CPA members in 1988 is shown in Appendix table 4.

Longer-term advances to the Canadian Commercial Bank and to the Northland Bank continued to decline in 1988. The continuing liquidation of assets of these two insolvent banks allowed such advances to be reduced to \$143 million by the end of 1988 from a level of \$362 million at the beginning of the year.

The Bank of Canada also extends credit in the form of Purchase and Resale Agreements (PRA) to investment dealers that are money market jobbers. PRA may be initiated by jobbers to finance a portion of their money market inventories when other sources of financing are unavailable or unduly expensive. However, PRA may also be initiated by the Bank of Canada to offset inappropriate upward pressure on overnight financing rates. This form, commonly known as "Special" PRA, has become dominant over the past two years. In fact, about 70 per cent of the total credit extended to jobbers in 1988 was through Special PRA.

The Bank's use of Sale and Repurchase Agreements (SRA), introduced in 1986, also continued to develop in 1988. SRA are initiated by the Bank to counter inappropriate downward pressure on overnight financing rates. SRA transactions were undertaken on ten occasions in 1988, most notably in June, when a total of

\$2.4 billion was arranged. Both Special PRA and SRA transactions give the Bank a more direct and immediate influence over very short-term interest rates than can be achieved through cash reserve management or open market operations in treasury bills. Appendix table 4 shows PRA and SRA transactions during 1988.

The Bank of Canada's holdings of Government of Canada securities rose marginally in 1988, registering an increase of \$241 million. The Bank adjusts its portfolio of these securities either through market transactions, transactions with clients or by varying its participation in new issues of marketable bonds and weekly treasury bill tenders. During 1988, the Bank's participation at the weekly tender of treasury bills was related in large part to client orders, mainly from central banks and other international institutions; total client purchases of treasury bills more than doubled to about \$8.3 billion. Net sales of treasury bills by the Bank in the open market amounted to \$2.5 billion compared with \$1.7 billion in the previous year. Intervention in the open market was most evident in June and December, as the Bank moderated downward pressure on short-term interest rates by selling treasury bills. In addition, during 1988, at times of upward pressure on interest rates, the Bank undertook so-called "switching operations" totaling \$1.3 billion in which it mainly bought treasury bills of about 3 months to maturity in exchange for shorter maturities.

The Bank acquired \$143 million of Government of Canada marketable bonds over the course of the year through modest net purchases of new issues. The changes to the Bank's portfolio of Government of Canada securities in 1988 are shown in Appendix table 3.



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## Management of government debt and cash balances

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The Bank, as fiscal agent for the Government of Canada, provides advice on debt management policy as well as administrative support for debt operations. In 1988, the government's domestic debt increased by \$31.3 billion, \$6.8 billion more than the net amount borrowed in 1987. This increase in borrowings mainly reflected the need to finance the net purchase of about \$10½ billion of foreign exchange in 1988 as compared with a net purchase of about \$5 billion in 1987.

Treasury bills, usually issued for terms of 3 months, 6 months and one year, accounted for two-thirds of the increase in outstanding debt in 1988. Marketable bonds, ranging in term from 2 years to 21 years, comprised the remainder, with the amount of outstanding Canada Savings Bonds marginally lower over the year. As a result, treasury bills increased as a percentage of total domestic government debt outstanding, rising from about 32.3 per cent to 36.5 per cent. Marketable bonds fell to 43.2 per cent of the total, down about 1 percentage point. Savings bonds continued to decline, as they have in most recent years (the exception being 1987, a year of record sales), falling to 20.3 per cent of total debt from 23.3 per cent in 1987. During 1988 the average term of the government's marketable domestic debt, including treasury bills and marketable bonds but excluding savings bonds, declined from 4 years, 11 months to 4 years, 5 months.

The ability to vary the size of the weekly auctions was an important element of the government's 1988 treasury bill program. For example, auctions of \$5 billion, a record amount, were held on several occasions. In contrast, offerings as low as \$3 billion were auctioned during November in the immediate aftermath of the annual savings bond campaign. During the year, weekly changes to the outstanding treasury bill stock ranged from a net decrease of \$900 million to a net increase of \$1.7 billion. The government

also made greater use of shorter-term treasury bills, ranging in term from 8 days to 46 days, in order to bridge temporary low points in its cash balances and to operate with a lower overall level of cash balances. A total of about \$14 billion of these treasury bills was issued in 1988, compared with \$5 billion in 1987.

In keeping with its efforts to manage its cash balances more effectively, the government stepped up its use of competitive auctions for term deposits. Under these arrangements, which have been in place since 1986, the government auctions a portion of its cash balances for various terms through competitive bidding. Eligible bidders are directly clearing members of the Canadian Payments Association. The Bank of Canada, as fiscal agent, forecasts near-term daily cash balances, advises the government on the size, term and frequency of auctions, and carries out the auction operations. During 1988, the frequency of auctions doubled to typically four or five times weekly. These auctions ranged in size from \$200 million to \$2.5 billion and in term from 1 day to 13 days.

The 1988 marketable bond program comprised 25 new issues that offered a balanced supply of short-, medium- and long-term bonds. Issue details are provided in Appendix table 5. The average term of the new issues was approximately 8 years, unchanged from the previous year. The share of new issues sold by auction, as opposed to the traditional method of placing offerings through a syndicate of investment dealers and banks, increased to 54 per cent in 1988 from about 50 per cent during the previous year.

The 1988 issue of Canada Savings Bonds, which offered a first-year rate of 9½ per cent, generated gross sales of about \$15 billion. The sales broadly offset redemptions of the outstanding stock during the year, including a record maturity of \$6.2 billion of savings bonds in November 1988. The previous record maturity was just over \$3.5 billion in 1985. A significant

innovation of the 1988 campaign was a change in the sales period from the first week in November to the latter part of October, with the last day of sales being 1 November. This new timetable provided the government with a better match between the proceeds from new sales and the outflows that take place in early November because of annual interest payments and the redemption of savings bonds that have matured.

In February 1989, in response to the general rise in short-term interest rates, the Minister of Finance announced an increase of one percentage point in the Canada Savings Bond rate, covering the period March through June.

The table below shows changes in Government of Canada domestic securities outstanding during 1987 and 1988.

**Changes in Canadian dollar  
Government of Canada securities  
outstanding during 1987 and 1988**

**Billions of dollars (par value)**

	<b>1987</b>	<b>1988</b>
Treasury bills.....	4.5	21.0
Marketable bonds.....	11.2	11.0
Canada Savings Bonds....	<u>8.8</u>	<u>-0.7</u>
Total .....	24.5	31.3
<b>Held by:</b>		
<b>Bank of Canada</b>		
Treasury bills.....	1.9	0.1
Marketable bonds.....	<u>0.1</u>	<u>0.1</u>
Total .....	2.0	0.2
<b>Chartered banks</b>		
Treasury bills.....	-3.7	2.2
Marketable bonds.....	<u>1.1</u>	<u>0.9</u>
Total .....	-2.6	3.1
<b>Government accounts</b>		
Treasury bills.....	-	0.2
Marketable bonds.....	<u>0.3</u>	<u>0.1</u>
Total .....	0.3	0.3
<b>General public</b>		
Treasury bills.....	6.3	18.5
Marketable bonds.....	9.7	9.9
Canada Savings Bonds....	<u>8.8</u>	<u>-0.7</u>
Total .....	24.8	27.7

In February, the Government of Canada initiated a domestic interest rate swap program to help reduce its debt-service charges. Under the swap agreements, the government will receive interest payments at a fixed rate, from the swap counterparties, that will be applied towards the interest cost on outstanding fixed-rate Government of Canada bonds. In exchange, the government will make floating-rate payments on equivalent principal amounts to the counterparties, based on three-month bankers' acceptance rates. By the end of the year, \$950 million in swaps had been negotiated. These swaps, all with Canadian financial institutions, ranged in term from 2 years, 8 months to 10 years, 2 months. If the average spread between three-month bankers' acceptances and three-month treasury bills continues to be about 15 basis points, as has recently been the case, the government's effective floating-rate cost on these swaps would translate into about 73 basis points below the three-month treasury bill rate.

Foreign exchange reserves doubled in 1988 as the Canadian dollar continued to appreciate. The higher level of reserves provided the Government of Canada with the flexibility to retire about U.S.\$1.5 billion of its foreign debt. Two issues, U.S.\$100 million in June and U.S.\$500 million in October, were paid off upon maturity and a yen 120 billion syndicated loan was called for early redemption in July. Details of these transactions are given in Appendix table 5. No new issues payable in foreign currencies were undertaken in 1988.

As a further means of employing exchange reserves, the government repurchased in the market about U.S.\$236 million of its unmaturing foreign debt in 1988. The program, which was initiated towards the latter part of the year, involved three Government of Canada U.S. dollar issues, maturing in July 1995, April 1998 and October 1998, that were originally placed in the U.S. market.

The level of outstanding Canada Bills, which are short-term U.S. dollar notes issued by the Government of Canada in the U.S. money market, was generally maintained in a range of U.S.\$725 million to U.S.\$1,050 million, ending 1988 at U.S.\$1,044 million. The program, introduced in the fall of 1986, provides access to a relatively low-cost source of U.S. dollars. As of



Official requirements for U.S. dollars have declined, the program has been maintained at a minimal level consistent with the objective of preserving this channel of access to the U.S. money market.

The Government of Canada's U.S. dollar standby credit facilities, which provide short-term credit of up to U.S.\$3 billion from Canadian banks and up to U.S.\$4 billion from other international banks, were not used in 1988.



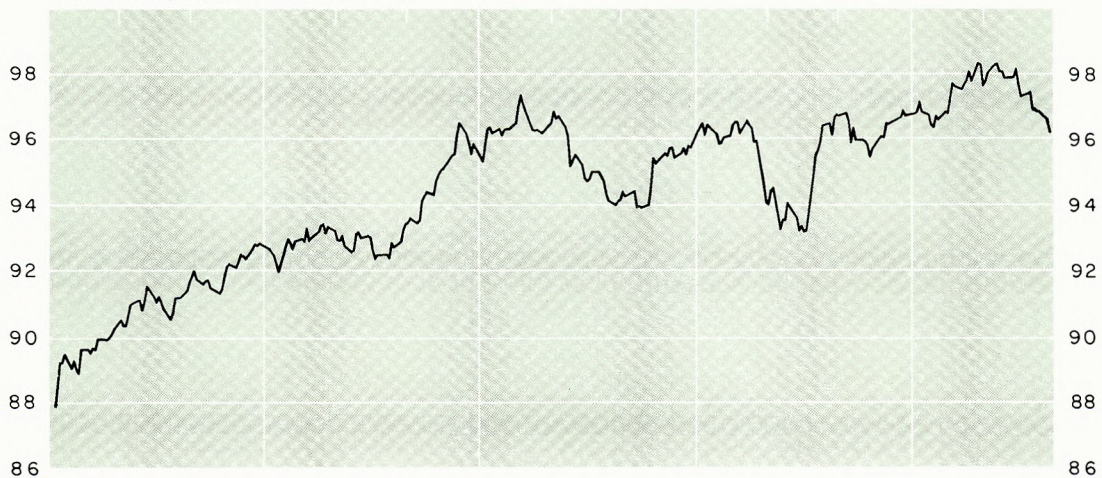
## Foreign exchange operations

During 1988, the Canadian dollar appreciated by about 10 per cent on a trade-weighted basis against the G-10 currencies and by 9 per cent against the U.S. dollar. The greater gain on a trade-weighted basis reflects the U.S. dollar's net appreciation over the period against the major overseas currencies.

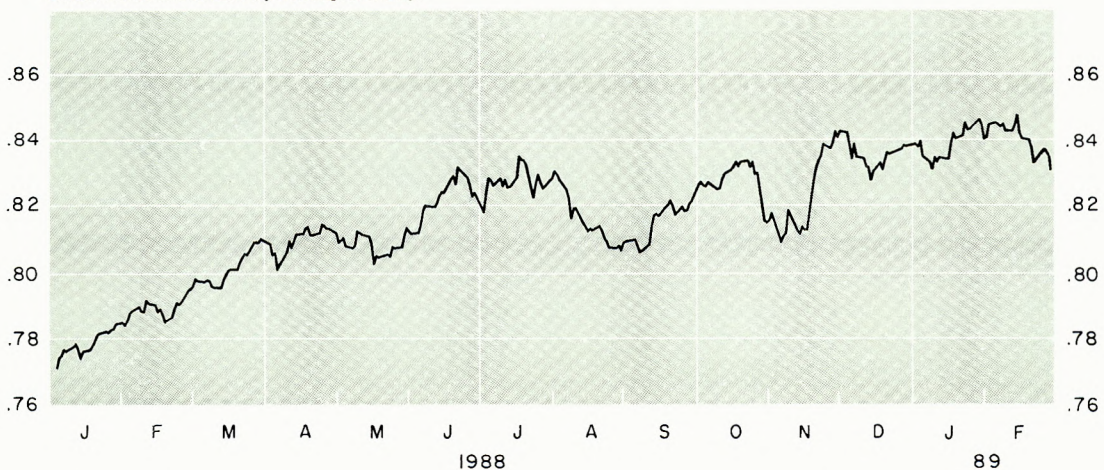
The Canadian dollar rose strongly against the U.S. dollar in the first seven months of the year, increasing from its 1987 closing level of 76.96 cents (U.S.) to 83.73 cents (U.S.) in late July. Through the balance of the year the Canadian dollar traded over a wide range, experiencing two periods of significant weakness – during

### Exchange rates

Canadian dollar against G-10 currencies (1981 = 100)



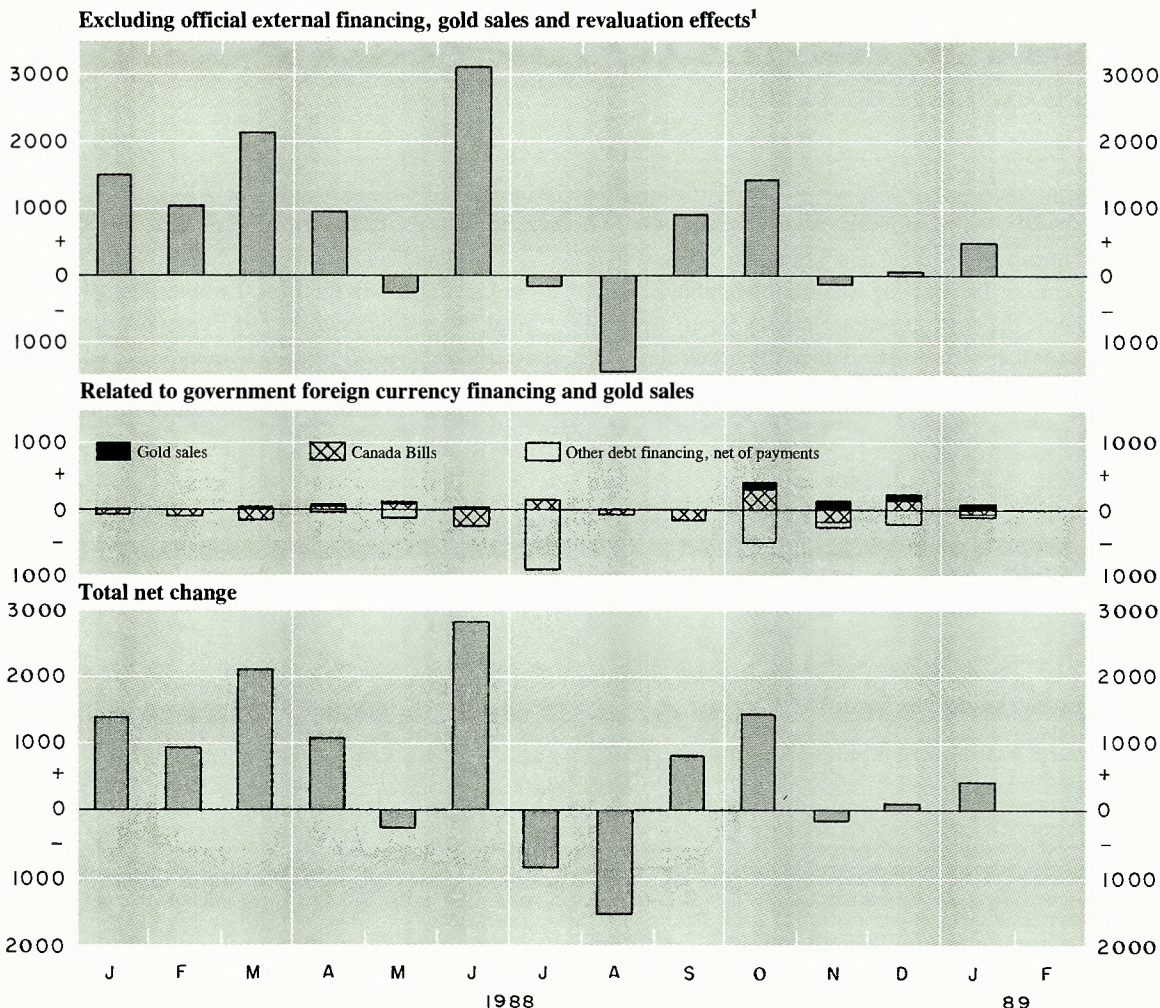
Canadian dollar in U.S. funds (spot closing rates, daily)



Last date plotted 27 February 1989

### Changes in official reserves

Millions of U.S. dollars, monthly



1. The U.S. dollar value of SDR-denominated assets (gold, the IMF position and SDRs) rises when the U.S. dollar depreciates in terms of SDRs and falls when the opposite occurs

August and in late October/early November – and a period of strength following the 21 November federal election. It recorded its 1988 high of 84.44 cents (U.S.) on 5 December before closing the year at 83.86 cents (U.S.). In early 1989, the Canadian dollar rose to levels around 84.50 cents (U.S.) before falling back somewhat towards the end of February.

Foreign exchange market operations by the Bank of Canada, acting as agent for the fed-

eral government's Exchange Fund Account, were aimed at promoting orderly conditions in the Canadian dollar exchange market. Given the strong appreciation of the Canadian dollar in 1988, official purchases of foreign exchange, predominantly U.S. dollars but also German marks and Japanese yen, greatly exceeded sales and led to an increase in official reserves. Reserves almost doubled from U.S.\$8,203.2 million at the end of 1987 to U.S.\$16,197.6 million

at the end of 1988. In January 1989, they increased by an additional U.S.\$406.5 million.

On several occasions during 1988, the Bank of Canada joined central banks of other G-7 countries in concerted action to moderate fluctuations in the exchange rate for the U.S. dollar against the major overseas currencies. Such in-

tervention occurred in both the U.S. dollar/German mark and U.S. dollar/Japanese yen markets. The level of Canada's international reserves was not affected by this intervention, which resulted only in a shift in the composition of foreign currency holdings.



## Note issue, debt service and banking operations

In addition to the activities described in previous sections of this Report, the Bank carries out a number of functions requiring the processing of large volumes of material and data. In particular, the Bank is responsible for the issue of bank notes and, as noted earlier, acts as fiscal agent for the Government of Canada. The Bank also provides banking services to the government and operates deposit accounts for members of the Canadian Payments Association, foreign central banks and international institutions. As well, the Bank is the custodian of unclaimed balances originally deposited with chartered banks and transferred to the Bank after being inactive for ten years.

Over one-half of the Bank's staff is directly involved in carrying out these operations. Despite increasing volumes of work, staffing levels in these areas declined somewhat in 1988 as a result of further streamlining of operations, as well as greater use of automated systems to support the workload. It is estimated that of the Bank's total expenses some three-quarters are attributable to the purchase and issue of bank notes and to the fiscal agent function.

### Note issue

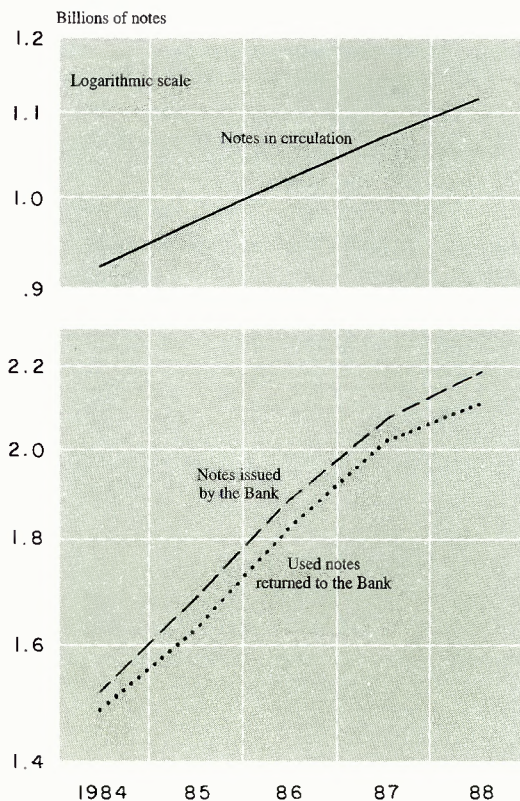
Bank notes are issued by the Bank of Canada to meet the public's demand for additional notes and to replace worn notes withdrawn from circulation. The Bank both issues new notes and reissues used notes still fit for circulation that have been returned to the Bank by financial institutions with surplus holdings.

To process the increasing volumes of used notes returned to the Bank, high-speed note-handling equipment has been installed in all Agencies over the past few years. The financial institutions appear to have increasingly accepted that notes processed with this equipment and reissued by the Bank are of suitable quality for use in automated banking machines. This con-

tributed to a smaller increase in the number of notes returned to, and obtained from, the Bank by financial institutions in 1988. In particular, the flows of \$20 notes were little changed in 1988 following several years of rapid growth. The \$20 note is the principal denomination used in automated banking machines and accounts for over one-quarter of all notes in circulation.

A new one-dollar coin, introduced by the government in mid-1987, is estimated to have displaced about 25 million notes by the end of 1988. The Bank of Canada will cease to issue the one-dollar note on 30 June 1989. The note

### Bank notes



will remain legal tender for its full face value even when it is no longer in general circulation.

On 12 December 1988, the Bank began to sell uncut sheets of 40 one-dollar bank notes over the counter at all Agencies, for \$50 plus provincial sales tax where applicable. By the end of 1988, almost 23,000 sheets had been sold. On 6 January 1989, the Bank announced that uncut sheets could also be ordered by mail for delivery within Canada, at an additional registered mail postage charge of \$5 per parcel. In January, a further 15,000 sheets were sold. It is intended that these sheets remain on sale until 30 June 1989.

### **Debt service**

The volume of work involved in administering the government's debt increased substantially in 1988, with the number of certificates processed and interest payments made rising by over one-quarter. Over 80 per cent of this work is related to Canada Savings Bonds.

Most processing associated with sales of compound-interest Canada Savings Bonds takes place early in the year, following the fall sales campaign. Accordingly, there was a sharp increase in such work in 1988 following the record sales of the 1987-88 Series of Canada Savings Bonds. With lower sales of the 1988-89 Series, there was some decline in work related to the issue of regular-interest Canada Savings Bonds, which are prepared and registered by the Bank of Canada in the year of sale.

The record 1987 Canada Savings Bond campaign led to an increase in the number of interest payments made in 1988. Printing and mailing for Canada Savings Bond interest payments and statements is carried out by Supply

and Services Canada. The number of Canada Savings Bonds redeemed also increased sharply in 1988 in line with the record maturity in November, when the 1981-82 Series of bonds came due. There had been substantial sales of these bonds, and an unusually large proportion was held to maturity, reflecting their favourable yield.

### **Unclaimed bank balances**

The Bank responded to some 9,000 inquiries concerning unclaimed bank balances in 1988, an increase of one-third from the previous year. The number of inquiries has tripled since 1983 when copies of the central records of all balances held by the Bank were placed in each Agency, where they can be reviewed free of charge. In 1988, the Bank searched 6,800 records and made payments of \$1.7 million in respect of 2,700 accounts.

### **The Canadian Depository for Securities**

During the year the Bank continued to work with the Canadian Depository for Securities Limited (CDS) in supporting their effort to make the clearing and settlement of securities transactions more efficient. All new domestic issues of Government of Canada marketable bonds, beginning with the 23 February 1988 auction, have been delivered to the financial community using CDS's "New Issue Distribution Service for Canada Bonds." Work is at an advanced stage on arrangements to permit CDS to declare all domestic issues of Government of Canada marketable bonds eligible for inclusion in their computerized clearing and settlement systems.



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## **APPENDIX TABLES**

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## Bank of Canada assets and liabilities

### Monthly changes, millions of dollars<sup>1</sup>

	Government of Canada securities at book value	Net foreign currency assets	Advances to CPA members	All other assets (net)	Note circulation	Canadian dollar deposit liabilities			
						Chartered banks	Other CPA members	Government of Canada	Other
<b>1988</b>									
January	-514	-1,200	-56	-123	-2,155	-435	-191	932	-45
February	-535	-	-238	-186	81	-407	266	-760	-139
March	1,114	-5	11	-164	140	579	-134	332	38
April	-970	221	-240	101	12	-351	8	-514	-44
May	-889	1,261	241	50	803	-104	-112	-3	79
June	965	-79	-45	-77	445	182	30	5	102
July	568	-401	18	43	202	101	21	-	-95
August	-646	798	-72	-72	-50	-193	47	-2	206
September	1,136	-1,631	44	22	-261	196	-113	2	-253
October	341	507	147	-24	184	614	130	-1	44
November	-502	-276	-282	2	386	-1,369	-93	-	18
December	83	1,959	159	392	1,798	714	112	2	-33
Annual change	151	1,154	-313	-36	1,585	-473	-29	-7	-122
<b>1989</b>									
January	-485	-1,929	7	-137	-2,323	-127	-249	-2	157

1. Components may not add to totals because of rounding

## Chartered bank cash reserves and clearing balances of other directly clearing members of the Canadian Payments Association

Millions of dollars unless otherwise indicated

		Chartered bank cash reserves			
		Total minimum cash requirements	Average holdings of statutory coin and Bank of Canada notes	Required minimum Bank of Canada deposits	Average holdings of Bank of Canada deposits
<b>1988</b>					
<b>January</b>	1-15				1,987
	16-31	5,385	3,483	1,902	2,023
<b>February</b>	1-15	5,563	4,021	1,542	1,606
	16-29				1,635
<b>March</b>	1-15	5,294	3,317	1,977	2,018
	16-31				2,184
<b>April</b>	1-15	5,231	3,291	1,940	2,091
	16-30				2,073
<b>May</b>	1-15	5,165	3,311	1,854	1,973
	16-31				1,890
<b>June</b>	1-15	5,268	3,265	2,003	2,064
	16-30				2,123
<b>July</b>	1-15	5,330	3,469	1,861	1,924
	16-31				2,015
<b>August</b>	1-15	5,443	3,526	1,917	2,015
	16-31				1,965
<b>September</b>	1-15	5,440	3,563	1,877	1,902
	16-30				1,995
<b>October</b>	1-15	5,513	3,574	1,939	2,000
	16-31				2,017
<b>November</b>	1-15	5,432	3,610	1,822	1,854
	16-30				1,894
<b>December</b>	1-15	5,522	3,637	1,885	1,964
	16-31				2,012
<b>1989</b>					
<b>January</b>	1-15	5,472	3,711	1,761	1,849
	16-31				1,798
<b>February</b>	1-15	5,593	4,271	1,323	1,426

Sum of reservable day weights in period	Cumulative excess reserves at end of period	Average excess reserve ratios	Clearing balances of other directly clearing members of the Canadian Payments Association	
			Average holdings of Bank of Canada deposits	Number of clearing days in month
14	1,196	.062		
14	1,692	.087	165	20
15	952	.046		
14	1,303	.067	179	21
15	620	.031		
19	3,933	.155	174	23
14	2,110	.114		
14	1,869	.101	155	20
14	1,662	.091		
16	584	.028	144	21
15	910	.046		
18	2,155	.091	167	22
14	882	.047		
14	2,158	.115	161	20
15	1,455	.071		
16	759	.035	151	23
15	384	.019		
17	2,005	.086	137	21
14	859	.045		
15	1,172	.057	151	20
15	483	.024		
15	1,092	.054	140	21
15	1,175	.057		
18	2,279	.092	185	20
13	1,135	.064		
16	581	.027	129	21
15	1,547	.075		

## Bank of Canada net transactions in Government of Canada securities

Delivered basis, par value in millions of dollars

	Net purchases from (+) or net sales to (-) investment dealers and banks				
	Outright transactions		Transactions under <sup>1</sup>		
	Treasury bills	Bonds	PRA	SPRA	SRA
<b>1988</b>					
January	-145.0	-	+178.6	+961.0	-
February	-370.0	-	-10.4	-1,029.0	-
March	-	-	+622.1	-	-
April	-	-	-893.3	+213.0	-
May	-	-	-	-213.0	-
June	-705.0	-	-	-	-
July	-230.0	-	-	+345.0	-
August	-	-	-	-345.0	-300.0
September	-15.0	-	+137.0	-	+300.0
October	-235.0	-	-137.0	+318.0	-
November	-	-	+50.0	-318.0	-850.0
December	-820.0	-	-50.0	-	+850.0
<b>Total</b>	<u>-2,520.0</u>	<u>-</u>	<u>-103.0</u>	<u>-68.0</u>	<u>-</u>
<b>1989</b>					
January	-185.0	-	-	-	-

1. PRA denotes Purchase and Resale Agreements; SPRA denotes "Special" Purchase and Resale Agreements; SRA denotes Sale and Repurchase Agreements

2. Including PRA, SPRA and SRA transactions

Net transactions with government and other client accounts				Net change in holdings of Government of Canada securities <sup>2</sup>		
Purchases (+) of new issues less matured holdings		Net purchases from (+) or net sales to (-) government accounts and client accounts		Bills	Bonds	Total
Bills	Bonds	Bills	Bonds			
-614.0	+5.0	-861.9	+2.8	-481.3	+7.8	-473.5
+1,667.1	-201.0	-626.9	+0.1	-374.2	-195.9	-570.1
+1,279.4	+26.4	-778.3	-9.0	+1,035.2	+105.4	+1,140.6
+30.1	+75.0	-418.1	-	-975.3	-18.0	-993.3
-343.6	-	-348.4	+1.0	-905.0	+1.0	-904.0
+2,402.0	+78.9	-772.1	+0.5	+924.9	+79.4	+1,004.3
+1,157.2	+75.0	-746.1	-	+526.1	+75.0	+601.1
+919.9	+20.0	-955.9	+2.0	-681.0	+22.0	-659.0
+1,054.8	+85.0	-367.6	-	+1,109.2	+85.0	+1,194.2
+1,335.8	+27.4	-964.7	-	+307.1	+37.4	+344.5
+1,123.7	-59.9	-455.3	-	-439.6	-69.9	-509.5
<u>+1,038.0</u>	<u>+13.3</u>	<u>-965.9</u>	<u>-</u>	<u>+52.1</u>	<u>+13.3</u>	<u>+65.4</u>
<u>+11,050.4</u>	<u>+145.1</u>	<u>-8,261.2</u>	<u>-2.6</u>	<u>+98.2</u>	<u>+142.5</u>	<u>+240.7</u>
+885.2	+10.0	-1,225.0	-	-524.8	+10.0	-514.8

## Bank of Canada advances to members of the Canadian Payments Association; PRA and SRA outstanding

Millions of dollars unless otherwise indicated

		Advances to chartered banks		Advances to directly clearing non-bank members of the CPA	
		Number of days outstanding	Average amount outstanding <sup>1</sup>	Number of days outstanding	Average amount outstanding <sup>2</sup>
<b>1988</b>					
January	1-15	10	389.5		
	16-31	10	379.6	9	19.2
February	1-15	11	346.1		
	16-29	10	372.5	11	30.2
March	1-15	11	328.4		
	16-31	12	317.2	9	21.8
April	1-15	10	301.9		
	16-30	10	278.5	9	12.9
May	1-15	10	289.5		
	16-31	11	287.4	7	15.1
June	1-15	11	278.4		
	16-30	11	266.3	8	22.8
July	1-15	10	267.4		
	16-31	10	224.8	9	25.0
August	1-15	11	217.3		
	16-31	12	222.6	8	25.0
September	1-15	10	218.8		
	16-30	11	216.6	8	12.5
October	1-15	9	215.9		
	16-31	11	211.1	6	12.6
November	1-15	10	228.7		
	16-30	11	213.3	11	10.2
December	1-15	11	169.3		
	16-31	9	182.1	6	17.1
<b>1989</b>					
January	1-15	9	187.5		
	16-31	12	173.3	12	22.0
February	1-15	11	201.0		

1. Average based on the number of reservable days in the averaging period

2. Average based on the number of clearing days in the month

3. Including "Special" PRA



<u>Purchase and Resale Agreements<sup>3</sup></u>		<u>Sale and Repurchase Agreements</u>	
<u>Number of days outstanding</u>	<u>Average amount outstanding<sup>1</sup></u>	<u>Number of days outstanding</u>	<u>Average amount outstanding<sup>1</sup></u>
5	148.8	-	-
5	283.2	-	-
10	287.6	-	-
1	27.1	-	-
6	72.3	-	-
8	243.6	-	-
5	148.9	-	-
3	70.0	-	-
6	226.2	-	-
1	7.1	-	-
5	106.0	2	90.9
-	-	4	130.5
1	11.7	1	10.0
6	189.0	-	-
9	446.6	-	-
4	75.2	1	25.0
5	77.1	-	-
2	36.0	-	-
1	35.0	-	-
3	61.8	-	-
4	213.1	-	-
4	90.0	2	95.5
4	69.1	-	-
3	97.0	-	-
3	69.1	-	-
1	5.7	1	6.3
3	29.3	1	25.0

## Government of Canada direct and guaranteed marketable securities: New issues and retirements

Date in 1988	Issues offered/ retired	Term to maturity	Yield to maturity	Millions of dollars par value	
				Amount delivered	Amount retired
<b>Issues payable in Canadian dollars – Direct and guaranteed</b>					
5 Jan.	10% 1 March 1995	7 yrs. 1 mo. 27 days	10.15	450	
1 Feb.	8¾% 1 February 1988				125 <sup>1</sup>
	10¼% 1 February 1988				500 <sup>2</sup>
	11¾% 1 February 1988				350 <sup>3</sup>
	9¼% 1 March 1991	3 yrs. 1 mo.	9.32	175 <sup>4</sup>	
	9¼% 1 October 1994	6 yrs. 8 mos.	9.53	150 <sup>5</sup>	
	9¾% 1 October 1997	9 yrs. 8 mos.	9.65	425 <sup>6</sup>	
	10% 1 June 2008	20 yrs. 4 mos.	10.00	350 <sup>7</sup>	
				<u>1,100</u>	
18 Feb.	8¾% 1 July 1993	5 yrs. 4 mos. 11 days	8.94	550	
25 Feb.	9% 1 September 1991	3 yrs. 6 mos. 4 days	8.80	500 <sup>8</sup>	
6 Mar.	9¾% 6 March 1988				550 <sup>9</sup>
	8¾% 6 March 1990	2 yrs.	8.81	550	
15 Mar.	10½% 15 March 1988				875 <sup>10</sup>
	8¾% 1 July 1993	5 yrs. 3 mos. 17 days	8.93	525 <sup>11</sup>	
	9% 1 March 2011	22 yrs. 11 mos. 17 days	9.36	350 <sup>12</sup>	
				<u>875</u>	
31 Mar.	9¼% 1 May 1996	8 yrs. 1 mo. 1 day	9.31	450 <sup>13</sup>	
14 Apr.	9% 1 September 1991	3 yrs. 4 mos. 17 days	8.99	125 <sup>14</sup>	
	9¼% 1 October 1994	6 yrs. 5 mos. 17 days	9.35	500 <sup>15</sup>	
	10% 1 June 2008	20 yrs. 1 mo. 17 days	10.04	300 <sup>16</sup>	
				<u>925</u>	
5 May	8¾% 1 July 1993	5 yrs. 1 mo. 27 days	9.40	550 <sup>17</sup>	
12 May	9¾% 1 October 1997	9 yrs. 4 mos. 20 days	9.81	500 <sup>18</sup>	
1 June	5% 1 June 1988				50 <sup>19</sup>
	5% 1 June 1988				100 <sup>20</sup>
	9¼% 1 July 1992	4 yrs. 1 mo.	9.51	175 <sup>21</sup>	
	10% 1 March 1995	6 yrs. 9 mos.	9.89	450 <sup>22</sup>	
	10% 1 June 2008	20 yrs.	10.28	300 <sup>23</sup>	
				<u>925</u>	
6 June	8½% 6 June 1988				550 <sup>24</sup>
	9¼% 6 June 1990	2 yrs.	9.45	550	
23 June	9½% 1 September 1993	5 yrs. 2 mos. 8 days	9.74	550	
30 June	9½% 1 October 1998	10 yrs. 3 mos. 1 day	9.72	500	
21 July	9½% 1 September 1993	5 yrs. 1 mo. 11 days	9.56	275 <sup>25</sup>	
	9½% 1 October 1998	10 yrs. 2 mos. 11 days	9.77	400 <sup>26</sup>	
	10% 1 June 2008	19 yrs. 10 mos. 11 days	10.07	300 <sup>27</sup>	
				<u>975</u>	
4 Aug.	9% 1 September 1991	3 yrs. 28 days	9.75	600 <sup>28</sup>	
11 Aug.	10% 1 March 1995	6 yrs. 6 mos. 21 days	9.97	500 <sup>29</sup>	

Date in 1988	Issues offered/ retired	Term to maturity	Yield to maturity	Millions of dollars par value	
				Amount delivered	Amount retired
<b>Issues payable in Canadian dollars – Direct and guaranteed</b>					
1 Sept.	10¼% 1 June 1992	3 yrs. 9 mos.	10.36	250 <sup>30</sup>	
	10¼% 1 December 1998	10 yrs. 3 mos.	10.51	425	
	10¼% 1 October 2009	21 yrs. 1 mo.	10.78	300 <sup>31</sup>	
				975	
5 Sept.	8¾% 5 September 1988				550 <sup>32</sup>
	10¼% 5 September 1990	2 yrs.	10.25	650	
22 Sept.	10¼% 1 March 1996	7 yrs. 5 mos. 9 days	10.12	550 <sup>33</sup>	
15 Oct.	10¾% 15 October 1988				825 <sup>34</sup>
	9½% 1 September 1993	4 yrs. 10 mos. 17 days	9.96	125 <sup>35</sup>	
	10¼% 1 December 1998	10 yrs. 1 mo. 17 days	10.19	625 <sup>36</sup>	
	10% 1 June 2008	19 yrs. 7 mos. 17 days	10.16	350 <sup>37</sup>	
				1,100	
31 Oct.	9½% 1 September 1993	4 yrs. 10 mos. 1 day	9.62	550 <sup>38</sup>	
15 Nov.	10% 15 November 1988				625 <sup>39</sup>
	9½% 1 October 1998	9 yrs. 10 mos. 16 days	9.81	600 <sup>40</sup>	
5 Dec.	8½% 5 December 1988				600 <sup>41</sup>
	10¼% 5 December 1990	2 yrs.	10.35	650	
15 Dec.	9¾% 15 December 1988				475 <sup>42</sup>
	9½% 1 September 1993	4 yrs. 8 mos. 17 days	10.09	75 <sup>43</sup>	
	10¼% 1 December 1998	9 yrs. 11 mos. 17 days	10.13	625 <sup>44</sup>	
	10% 1 June 2008	19 yrs. 5 mos. 17 days	10.10	325 <sup>45</sup>	
				1,025	
	Total bonds payable in Canadian dollars			17,150	6,175
	Total treasury bills			228,150	207,250
<b>Issues payable in foreign currencies – Direct</b>					
26 Apr.	U.S. \$6 million				
	8½% serial notes due 26 April 1988				7 <sup>46</sup>
1 June	U.S. \$100 million 6½% bonds due 1 June 1988				123 <sup>47</sup>
31 July	Yen 120 billion 7.9% loan due 31 July 1992				1,092 <sup>48</sup>
27 Oct.	U.S. \$500 million 10½% notes due 27 October 1988				602 <sup>49</sup>
	Total notes and bonds payable in foreign currencies			–	1,825
	Total Canada Bills*			6,824	6,974

(Continued)

## Appendix table 5

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- \* Canada Bills are short-term U.S.-dollar-denominated notes issued for terms not exceeding 270 days.
1. Maturity of 8¾% bonds issued 1 February 1978
  2. Maturity of 10¼% bonds issued 1 February 1983, 27 April 1983
  3. Maturity of 11¾% bonds issued 14 November 1984, 19 March 1985, 10 April 1985
  4. In addition to \$550 million 9¼% bonds due 1 March 1991 already outstanding
  5. In addition to \$900 million 9¼% bonds due 1 October 1994 already outstanding
  6. In addition to \$1,150 million 9¼% bonds due 1 October 1997 already outstanding
  7. In addition to \$550 million 10% bonds due 1 June 2008 already outstanding
  8. In addition to \$500 million 9% bonds due 1 September 1991 already outstanding
  9. Maturity of 9¾% bonds issued 6 March 1986
  10. Maturity of 10½% bonds issued 22 February 1983, 15 March 1983, 12 July 1983, 1 February 1985, 19 February 1985
  11. In addition to \$550 million 8¾% bonds due 1 July 1993 already outstanding
  12. In addition to \$1,625 million 9% bonds due 1 March 2011 already outstanding
  13. In addition to \$1,550 million 9¼% bonds due 1 May 1996 already outstanding
  14. In addition to \$1,000 million 9% bonds due 1 September 1991 already outstanding
  15. In addition to \$1,050 million 9¼% bonds due 1 October 1994 already outstanding
  16. In addition to \$900 million 10% bonds due 1 June 2008 already outstanding
  17. In addition to \$1,075 million 8¾% bonds due 1 July 1993 already outstanding
  18. In addition to \$1,575 million 9¼% bonds due 1 October 1997 already outstanding
  19. Maturity of 5% bonds issued 1 February 1964
  20. Maturity of 5% bonds issued 1 June 1963
  21. In addition to \$1,125 million 9¼% bonds due 1 July 1992 already outstanding
  22. In addition to \$450 million 10% bonds due 1 March 1995 already outstanding
  23. In addition to \$1,200 million 10% bonds due 1 June 2008 already outstanding
  24. Maturity of 8½% bonds issued 6 June 1986
  25. In addition to \$550 million 9½% bonds due 1 September 1993 already outstanding
  26. In addition to \$500 million 9½% bonds due 1 October 1998 already outstanding
  27. In addition to \$1,500 million 10% bonds due 1 June 2008 already outstanding
  28. In addition to \$1,125 million 9% bonds due 1 September 1991 already outstanding
  29. In addition to \$900 million 10% bonds due 1 March 1995 already outstanding
  30. In addition to \$1,600 million 10¼% bonds due 1 June 1992 already outstanding
  31. In addition to \$1,000 million 10¾% bonds due 1 October 2009 already outstanding
  32. Maturity of 8¾% bonds issued 5 September 1986
  33. In addition to \$825 million 10¼% bonds due 1 March 1996 already outstanding
  34. Maturity of 10¾% bonds issued 15 October 1983, 8 November 1983, 15 December 1983, 1 May 1985, 22 May 1985
  35. In addition to \$825 million 9½% bonds due 1 September 1993 already outstanding
  36. In addition to \$425 million 10¼% bonds due 1 December 1998 already outstanding
  37. In addition to \$1,800 million 10% bonds due 1 June 2008 already outstanding
  38. In addition to \$950 million 9½% bonds due 1 September 1993 already outstanding
  39. Maturity of 10% bonds issued 23 July 1985, 1 September 1985, 1 October 1985, 23 October 1985
  40. In addition to \$900 million 9½% bonds due 1 October 1998 already outstanding
  41. Maturity of 8½% bonds issued 5 December 1986
  42. Maturity of 9¾% bonds issued 15 November 1985, 6 February 1986, 15 March 1986
  43. In addition to \$1,500 million 9½% bonds due 1 September 1993 already outstanding
  44. In addition to \$1,050 million 10¼% bonds due 1 December 1998 already outstanding
  45. In addition to \$2,150 million 10% bonds due 1 June 2008 already outstanding
  46. Maturity of U.S.\$6 million (Series A) of the U.S.\$30 million 8½% serial notes assumed by Canada on 12 February 1986. Originally issued by Canadair on 26 April 1982
  47. Maturity of U.S.\$100 million 6⅞% bonds issued 1 June 1968
  48. Called yen 120 billion 7.9% syndicated (non-marketable) loan issued 31 July 1984
  49. Maturity of U.S.\$500 million 10⅞% bonds issued 27 October 1983

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**FINANCIAL STATEMENTS**

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## Bank of Canada Statement of revenue and expense

Year ended 31 December 1988  
(with comparative figures for 1987)

	<u>1988</u>	<u>1987</u>
	(thousands of dollars)	
<b>REVENUE</b>		
Revenue from investments and other sources, net of interest paid on deposits of \$21,285 (\$11,378 in 1987) .....	<u>\$2,109,705</u>	<u>\$2,007,604</u>
<b>EXPENSE</b>		
Salaries <sup>1</sup> .....	\$ 67,561	\$ 64,668
Contributions to pension and insurance funds <sup>2</sup> .....	8,720	7,640
Other staff expenses <sup>3</sup> .....	2,207	1,741
Directors' fees .....	107	114
Auditors' fees and expenses .....	516	495
Taxes – municipal and business .....	8,767	8,100
Bank note costs .....	35,074	35,713
Data processing and computer costs .....	5,832	6,005
Premises maintenance – net of rental income <sup>4</sup> .....	19,605	16,810
Printing of publications .....	547	582
Other printing and stationery .....	2,161	2,031
Postage and express .....	1,604	1,572
Telecommunications .....	1,725	1,545
Travel and staff transfers .....	2,284	2,063
Other expenses .....	<u>2,096</u>	<u>2,126</u>
	158,806	151,205
Depreciation on buildings and equipment .....	<u>13,237</u>	<u>12,502</u>
	172,043	163,707
<b>NET REVENUE PAID TO RECEIVER GENERAL FOR CANADA .....</b>	<u><b>\$1,937,662</b></u>	<u><b>\$1,843,897</b></u>

1. Salaries include overtime and are for Bank staff other than those engaged in premises maintenance. The number of employee years worked by such staff (including temporary, part-time and overtime work) was 2,234 in 1988 compared with 2,246 in 1987.
2. Contributions to pension and insurance funds for Bank staff other than those engaged in premises maintenance.
3. Other staff expenses include retirement allowances and educational training costs.
4. Premises maintenance comprises building and equipment maintenance expenses including related staff costs.

(See accompanying notes to the financial statements)

## Bank of Canada Statement of assets and liabilities

As at 31 December 1988  
(with comparative figures for 1987)

	<u>1988</u>	<u>1987</u>
	(thousands of dollars)	
<b>ASSETS</b>		
<b>Deposits payable in foreign currencies:</b>		
U.S.A. dollars .....	\$ 369,087	\$ 305,819
Other currencies .....	<u>262,989</u>	<u>4,877</u>
	632,076	310,696
<b>Advances to members of the Canadian Payments Association (note 2) .....</b>	<u>485,325</u>	<u>798,251</u>
<b>Investments — at amortized values (note 3):</b>		
Treasury bills of Canada .....	9,685,022	9,676,651
Other securities issued or guaranteed by Canada maturing within three years .....	3,051,422	2,603,372
Other securities issued or guaranteed by Canada not maturing within three years .....	7,609,779	7,915,185
Other investments .....	<u>2,357,937</u>	<u>1,187,027</u>
	22,704,160	21,382,235
<b>Bank premises (note 4) .....</b>	139,798	141,290
<b>Accrued interest on investments .....</b>	320,801	320,732
<b>Other assets .....</b>	<u>36,981</u>	<u>69,995</u>
	<u>\$24,319,141</u>	<u>\$23,023,199</u>

(See accompanying notes to the financial statements)



	1988	1987
LIABILITIES	(thousands of dollars)	
<b>Capital paid up (note 5)</b> .....	\$ 5,000	\$ 5,000
<b>Rest fund (note 6)</b> .....	25,000	25,000
<b>Notes in circulation</b> .....	21,032,433	19,447,407
<b>Deposits:</b>		
Government of Canada.....	14,199	23,330
Chartered banks.....	2,177,109	2,648,949
Other members of the Canadian Payments Association.....	259,651	287,129
Other deposits .....	307,487	428,656
	2,758,446	3,388,064
<b>Liabilities payable in foreign currencies:</b>		
Government of Canada.....	472,924	134,409
Other .....	11	12
	472,935	134,421
<b>Bank of Canada cheques outstanding</b> .....	18,838	16,448
<b>Other liabilities</b> .....	6,489	6,859
	\$24,319,141	\$23,023,199

Governor, **J. W. CROW**

Chief Accountant, **J. COSIER**

**Auditors' Report** We have examined the statement of assets and liabilities of the Bank of Canada as at December 31, 1988 and the statement of revenue and expense for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Bank as at December 31, 1988 and the results of its operations for the year then ended in accordance with the accompanying summary of significant accounting policies, applied on a basis consistent with that of the preceding year.

**ARTHUR ANDERSEN & CO.**

**ERNST & WHINNEY**

Ottawa, Canada, January 26, 1989.

## Bank of Canada Notes to the financial statements 31 December 1988

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### 1. Significant accounting policies

The financial statements of the Bank conform to the disclosure and accounting requirements of the Bank of Canada Act and the Bank's by-laws. The significant accounting policies of the Bank are:

#### a) Revenues and expenses

Revenues and expenses are accounted for on the accrual basis except for interest on advances to a bank ordered to be wound up where interest is recorded as received.

#### b) Investments

Investments, consisting mainly of Government of Canada treasury bills and bonds, are recorded at cost adjusted for amortization of purchase discounts and premiums. The amortization as well as gains and losses on disposition are included in revenue.

#### c) Translation of foreign currencies

Assets and liabilities in foreign currencies are translated to Canadian dollars at the rates of exchange prevailing at the year-end. Gains and losses from translation of, and transactions in, foreign currencies are included in revenue.

#### d) Bank premises

Bank premises, consisting of land, buildings and equipment, are recorded at cost less accumulated depreciation. Depreciation is calculated on the declining balance method using the following annual rates:

Buildings	5%
Computer equipment	35%
Other equipment	20%

#### e) Pension plan

The Bank's contributions to the Pension Fund are recorded as expenses at the time they are made. Actuarial surpluses or deficiencies, if any, are amortized over periods not exceeding those provided for by the Pension Benefits Standards Act, 1985, and the regular contributions are adjusted accordingly.

#### f) Insurance

The Bank does not insure against direct risks of loss to the Bank, except for potential liabilities to third parties and where there are legal or contractual obligations to carry insurance. Any costs arising from these risks are recorded in the accounts at the time they can be reasonably estimated.

### 2. Advances to members of the Canadian Payments Association

Advances include a total of \$143,024,668 (\$362,151,392 in 1987) provided to the Canadian Commercial Bank and the Northland Bank for which winding-up orders have been issued by the courts. On the basis of the available information, it is the opinion of the Bank of Canada that this amount will be fully repaid from the proceeds of the liquidations.

**3. Investments**

Investments may include securities of the Government of Canada held under Purchase and Resale Agreements (PRA). As at 31 December 1988 there were no securities held under PRA (\$164,942,690 in 1987).

**4. Bank premises**

	(thousands of dollars)			1987
	1988			
	Cost	Accumulated depreciation	Net	Net
Land and buildings	\$171,415	\$ 64,020	\$107,395	\$110,705
Computer equipment	32,334	25,457	6,877	7,576
Other equipment	44,357	27,999	16,358	14,945
	248,106	117,476	130,630	133,226
Projects in progress	9,168	—	9,168	8,064
	<u>\$257,274</u>	<u>\$117,476</u>	<u>\$139,798</u>	<u>\$141,290</u>

**5. Capital**

The authorized capital of the Bank is \$5,000,000 divided into 100,000 shares of the par value of \$50 each. The shares are fully paid and in accordance with the Bank of Canada Act have been issued to the Minister of Finance, who is holding them on behalf of Canada.

**6. Rest fund**

The rest fund was established by the Bank of Canada Act and represents the general reserve of the Bank. In accordance with the Act, the rest fund was accumulated out of net revenue until it reached the stipulated maximum amount of \$25,000,000 in 1955. Subsequently all net revenues have been paid to the Receiver General for Canada.



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## BOARD OF DIRECTORS

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John W. Crow	OTTAWA Governor <i>Member of the Executive Committee</i>
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Gail C.A. Cook	TORONTO, ONT. <i>Member of the Executive Committee</i>
Edward F. Crease	HALIFAX, N.S. <i>Member of the Executive Committee</i>
Yves L. Duhaime	SAINT-JEAN-DES-PILES, QUE.
Brian R. Heidecker	CORONATION, ALTA.
Frederick E. Hyndman	CHARLOTTETOWN, P.E.I.
Harold W. Lane, Q.C.	SASKATOON, SASK.
Leslie M. Little, Q.C.	VANCOUVER, B.C. <i>Member of the Executive Committee</i>
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Susan H. Patten	ST. JOHN'S, NFLD.
Ernest G. Penner	STEINBACH, MAN.
John F. Robinson	LONDON, ONT.
Guyline Saucier	MONTREAL, QUE. <i>Member of the Executive Committee</i>
<b>Ex-officio</b>	
Frederick W. Gorbet	OTTAWA Deputy Minister of Finance <i>Member of the Executive Committee</i>

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## SENIOR OFFICERS

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Charles Freedman, *Deputy Governor*

W. Albert McKay, *Director of Administration*

Serge Vachon, *Adviser*<sup>1</sup>

Tim E. Noël, *Adviser*

W. Paul Jenkins, *Adviser*

Bernard Bonin, *Deputy Governor*

William R. White, *Deputy Governor*

Jacques A. Bussièrès, *Adviser*

Frank Faure, *Adviser*

Alvin C. Lamb, *Adviser*

Louise Vaillancourt-Châtillon, *Secretary*

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John E. H. Conder, *Head, Office of the  
Director of Administration.*

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L. Theodore Requard, *Deputy Chief*

Ian D. Clunie, *Chief, Market Analysis  
and Open Market Operations*

James F. Dingle, *Securities Adviser*<sup>3</sup>

Patrick E. Demerse, *Securities Adviser*

Kevin Clinton, *Securities Adviser*

Donald R. Cameron, *Chief, Toronto Division*

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Jean-Pierre Aubry, *Research Adviser*

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R. Bruce Montador, *Deputy Chief*

David J. Longworth, *Research Adviser*

Clyde A. Goodlet, *Research Adviser*

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Dorothy J. Powell, *Research Adviser*

Nicholas Close, *Senior Foreign Exchange Adviser,  
Toronto*

Brian O'Reilly, *Research Adviser*

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Roy L. Flett, *Special Adviser*

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Gordon B. May, *Deputy Chief*

C. Ross Tousaw, *Agent, Toronto*

Alexander G. Keith, *Agent, Calgary*

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Bonnie J. Schwab, *Deputy Chief*

### Secretary's Department

Louise Vaillancourt-Châtillon, *Secretary*

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James M. McCormack, *Program Co-ordinator*

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### Personnel Department

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Paul E. Cloutier, *Personnel Adviser*

### Department of Premises Management

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Kenneth W. Kaine, *Deputy Chief*

### Comptroller's Department

Janet Cosier, *Comptroller and Chief Accountant*

### Audit Department

Marcel Morin, *Auditor*

Peter W. Koppe, *Deputy Auditor*

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1. Also Chairman of the Board of Directors of the Canadian Payments Association

2. On leave of absence as Interim General Manager of the Canadian Payments Association

3. Also Alternate Chairman of the Board of Directors of the Canadian Payments Association

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## REGIONAL REPRESENTATIVES AND AGENCIES

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#### Toronto

Donald R. Cameron, *Chief, Toronto Division*

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#### Toronto

Nicholas Close,  
*Senior Foreign Exchange Adviser*

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