INFLATION IN CANADA

a monetarist interpretation & forecast

FRIEDBERG & CO. LTD.
347 Bay Street
Toronto, Ontario
Canada M5H 2R7

Spring, 1978

Our noble and democratic principles have created a voracious monster which, in the end, may ultimately destroy our institutions. Unless draconian economic measures are taken, Canada is headed for a long and painful bout of inflation. The writer holds out little hope for a lasting improvement and deeply regrets becoming a prophet of doom.

In the next few pages, our monetarist model will attempt to explain and document the mechanics of the accelerating currency depreciation that has taken place in Canada over the past decade.

INFLATION

Inflation is a monetary phenomenon. This is axiomatically true for we measure goods and services in terms of their money prices. Clearly, in a pure barter economy there could be no generalized inflation for while some goods and services could rise in value vis a vis all other remaining goods and services(1) all goods and services could not rise vis a vis all goods and services. If money, however, can be thought of as a commodity, then all goods and services could rise relative to money. This would occur if the supply of money rises faster than the supply of goods and services.

There is an exception. If the members of our theoretical society for whatever reason were willing to hold the increased supply of money(2) then money would not necessarily become more plentiful relative to goods and services because the demand for money will increase. The phrase 'hold money' may be equated with a low turnover of money supply. In economic jargon, turnover of money supply is termed velocity. Suffice it to say, for now, that in early stages of inflation, total (3) money supply velocity declines as the public is duped into holding money at high nominal rates of interest (but negative real rates of return). In advanced inflations, the public tries desperately to dump money thus increasing velocity and aggravating the ongoing process of rising prices.

MONEY & CREDIT

Money is a commodity. Unlike commodities, its cost of production is nearly nil. Like commodities, its supply is regulated by the producer, i.e. the Central Bank. If central banks did not intervene in the money

FOOTNOTES:

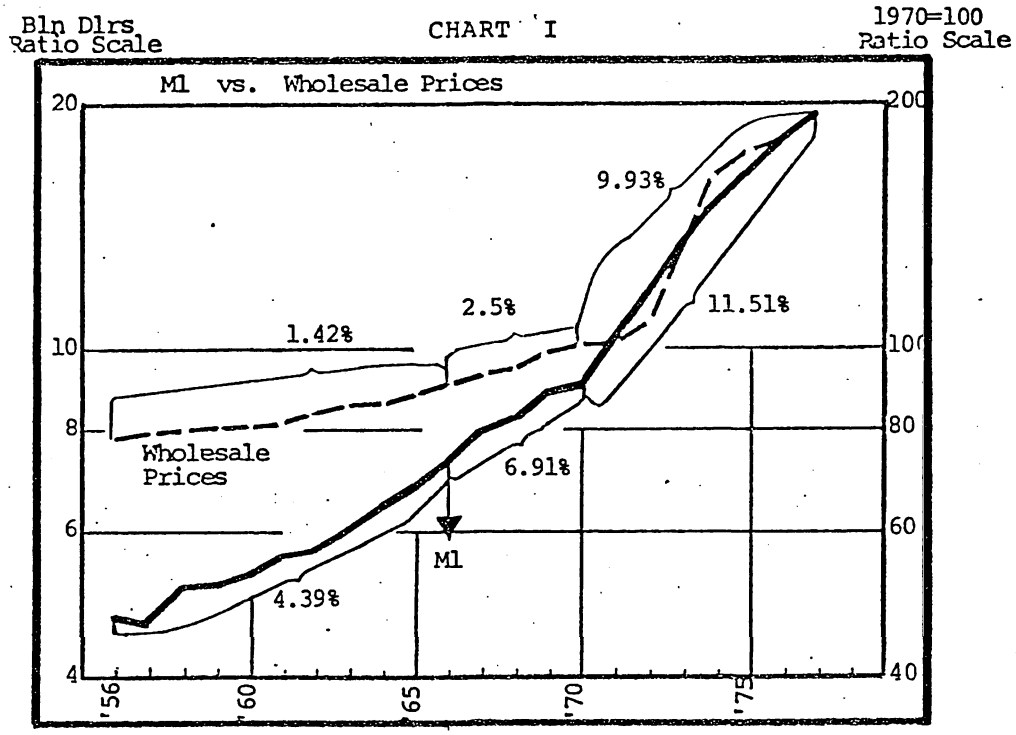
(1) a change in relative values induced perhaps by a catastrophic wheat crop failure i.e. wheat rises or a war that decimates the productive segment of the population, i.e. labor becomes more expensive.

(2) Liquidity needs may be a factor. Another reason may have to do with the potential returns available from holding money in liquid form, such as a 'satisfactory' rate of interest, etc....

(3) See later re: total money supply.

or foreign exchange markets and caused the reserves of the commercial banking system to increase, no new money could be created in the country[4]. It should be noted, however, that the economy at that point may create additional amounts of credit. Credit, as opposed to money, must be settled sometime in the future, usually with a money payment. But,here again, there is a limit to the amount of credit that can be created on a given level of money. As credit increases in proportion to money we say that velocity increases,[5] that is turnover of the same money base increases to accomodate credit demand. The limit to credit creation lie in its cost for if the same dollar of money is asked to perform an ever increasing transactional function, the cost of this service will rise. The cost of this service is what we call interest rates. It is the price of money. As the cost of money or interest rate rises above a level that exceeds the expected return of borrowing that money, demand will be rationed out.

Summing it up, credit demands can be accomodated in either of two ways; a) Money supply can be expanded or b) Money supply is allowed to remain relatively static but its velocity increases. In the former case it is likely that money costs (interest rates) will never truly ration out credit demands, and this demand will remain insatiable. In the latter case rising money velocity - increased use of credit on a relatively static money base - will propel interest rates higher and higher until credit demands are rationed out;[6] the unsustainable momentum will cease and then begin to recede, interest rates will begin to fall.[7] Interest rates then will act as an automatic stabilizer.



Sources : Bank of Canada
Federal Reserve Bank of St. Louis

FOOTNOTES:

(4) This is true once the commercial banking system has fully utilized its excess reserves.

(5) Velocity is here explained in terms of those who demand money as opposed to those who supply money, as described above.

(6) Rising interest rates will make it attractive for the public to 'hold' larger amounts of money. Thus it can be demonstrated that the slowdown in velocity is attributable to both those who demand as well as those who supply funds.

(7) These cyclical movements in velocity can be appreciated readily in Chart (4). See for example the sharp declines in '71-'72 and '75-'76, years of recession.

THE INFLATIONARY PROCESS

Economic units use spendable money - currency and demand deposits - to bid for goods and services. Their evaluation of prices, however, is made on the basis of the totality of money supply. The following example should illustrate this concept. The U.S. Department of Agriculture predicts a large, say, 15% increase in the corn crop for this coming year. This information is based on acreage and weather reports. The market assesses prospective supplies and, if they are thought to exceed likely consumption, corn prices, will begin to fall regardless of the fact that not a single bushel of corn of this crop has yet reached the market. The market will 'mark down' prices in anticipation of the surplus corn that will be marketed in the months ahead. To draw our analogy closer to home, let's compare the corn to be marketed at harvest time to spendable money. It can be seen rather clearly that the impact of spendable money can lag substantially the markdown of the commodity in question, in this case, Money. In other words, by the time money is being spent, Money has already been depreciated by astute traders who correctly foresee its excessive creation. In an economy sophisticated in the ways of inflation, prices of goods and services are marked up much in advance of the actual creation of money that will eventually accomodate this markup. Furthermore, since the process carries its own momentum, by reason of expectations, the creation of spendable money will never be sufficient to accomodate the prior markup. An illusion of money shortage can thus result in the midst of a virulent inflation. In countries less sophisticated in the ways of inflation, such as Canada, traders' perceptions of inflationary trends will run more in line with actual monetary creation and will even tend to underestimate it. In the above two types of economies, the adoption of tight monetary policies will have different results. In the former case, the adoption of tight monetary policies will cause severe economic depression, the more so the more rigid the downward flexibility of wages and prices. In the latter case, tight money should have little or no effect on real economic activity since the price mark-ups had not eroded real income to any great extent.(8)

FOOTNOTES:

(8) In the early stages of inflation, money incomes grow more rapidly than prices and therefore real incomes and real money balances rise. Only in this circumstance can an easy monetary policy be considered stimulative.

There is little doubt that until about 1967, favorable conditions existed in Canada to bring inflation under control. In the years after World War II and until 1966-67, money creation was not excessive and therefore periods of excessive credit demands were self-correcting through the mechanism of rising interest rates. From 1967 to 1970, monetary growth became excessive but inflationary expectations were clearly inferior to the ultimate level of surplus monetary creation and a tight monetary policy throughout this period could have curbed inflation without causing severe economic dislocations, as concluded earlier. From 1970 to the present, total monetary creation mushroomed (as we shall show shortly) to accomodate excessive credit demands, inflationary expectations began to run ahead of actual monetary creation and we began to face the prospects of a depression of similar proportions to the one that occured in the 30's if we applied the expedient of a tight-fisted monetary policy.

TOTAL MONEY, SPENDABLE MONEY AND VELOCITY

Monetary economists preoccupied with finding a definition for that elusive term called Money, have been arguing for years about different M's. As a result in the U.S. we have now developed 13 types of Money Supplies. The Bank of Canada has standarized four types of M: M_1 representing currency and demand deposits, M_{1b} representing currency and all checkable deposits, M_2 representing M_{1b} plus all notice and personal term deposits and M_3 representing M_2 plus foreign currency deposits booked in Canada. It should be noted that the Bank of Canada guides monetary policies and sets targets on the basis of M_1, the best known measure of money supply.

If the effect of money on inflation and real economic activity is viewed solely in terms of its actual spending on goods and services, then obviously we must look at Spendable Money i.e. M_1 or M_{1b}. If however, money is viewed as a commodity as we discussed earlier and, as a commodity, its price is determined by relative supply and demand, then we must search for a broader concept of money.

At this point, however, we must be careful not to confuse money with wealth or total liquid assets: it is the value of money and not assets-denominated-in-money-terms that we are trying to quantify and therefore, bonds, stocks, and other financial instruments are not to be included in our broad definition[9]. We also must be careful to distinguish between money and credit. If a financial institution, call it A, borrows money from John by receiving a cheque drawn on xyz bank, deposits this cheque into its own bank account at abc bank, and then relends this fund to George who, in turn, deposits his money at efg bank, we have merely transferred a demand deposit from xyz bank to efg bank and in the process we have created credit: John is a creditor to institution A and George is a debtor to institution A. Clearly no new money has been created. If, however, the Central Bank creates new reserves by adding securities to its asset portfolio and the commercial banking sector expands (on the basis of increased reserves) its asset portfolio either by way of loans or investments,we have clearly created additional money: the famous and little understood multiplier effect is in operation and the original dollar of reserves will multiply by a fairly predictable amount with the effect of increasing the existing money supply. It is therefore obvious that only the commercial banking sector can create money and therefore a broad definition of money must include all commercial banks' deposit liabilities.

In sum, we believe that all demand and time deposits owned by residents and non residents and even the federal government should be included in a definition of total money supply. It is this gigantic mass of money that confronts the real world of goods and services. Its excessive creation will undermine its value. Its niggardly growth will raise its value vis a vis other commodities.

THE IMPACT ON THE EXTERNAL VALUE OF THE CANADIAN DOLLAR

In an open economy, such as Canada's, large increases in money supply may not be reflected quickly on domestic price levels. The reason may be that the total supply of goods and services can be expanded rapidly beyond the productive capacity of the domestic economy simply by running a deficit on trade and services. Any tendency for domestic prices to rise above competitive world prices triggers an increase in net imports of goods and services. As a result, excessive money supply increases may first be detected in a severe deterioration in the current account of the balance of payments with the consequent downward pressure on the external value of the currency.

A growing current account deficit can thus be regarded as symptomatic of excessive monetary creation. Equilibrium can be regained in either of three ways: a) rising domestic interest rates, which, at first will cause an inflow of foreign funds that will offset the deficit in current account; eventually tight money may eliminate the excessive monetary creation and/or total money velocity will slow down, once again redressing the source of the original problem; b) in an effort to stem the decline of the currency, the Central Bank may allow its foreign exchange reserves to be run down; if no other offsetting money market operation is undertaken, the run down of reserves will contract money supply, and, once again, equilibrium is regained; c) if the Central Bank does not intervene in the foreign exchange market and does not induce short term capital inflows (by raising interest rates, as in (a)), then buyers of foreign currencies must induce sellers to accept their local currency. This can only be accomplished by offering the local currency at declining prices, i.e. a de facto devaluation. In this situation, local money has depreciated vis a vis a different type of commodity - foreign currencies.

Summing it up, unless the excess monetary creation has been mopped up, Money will either depreciate against local goods and services and/or against foreign currencies. Clearly, some sort of depreciation cannot be avoided. (It should also be noted that external depreciation reflects itself on the internal level of prices so that an approximate parity is achieved in the long run).

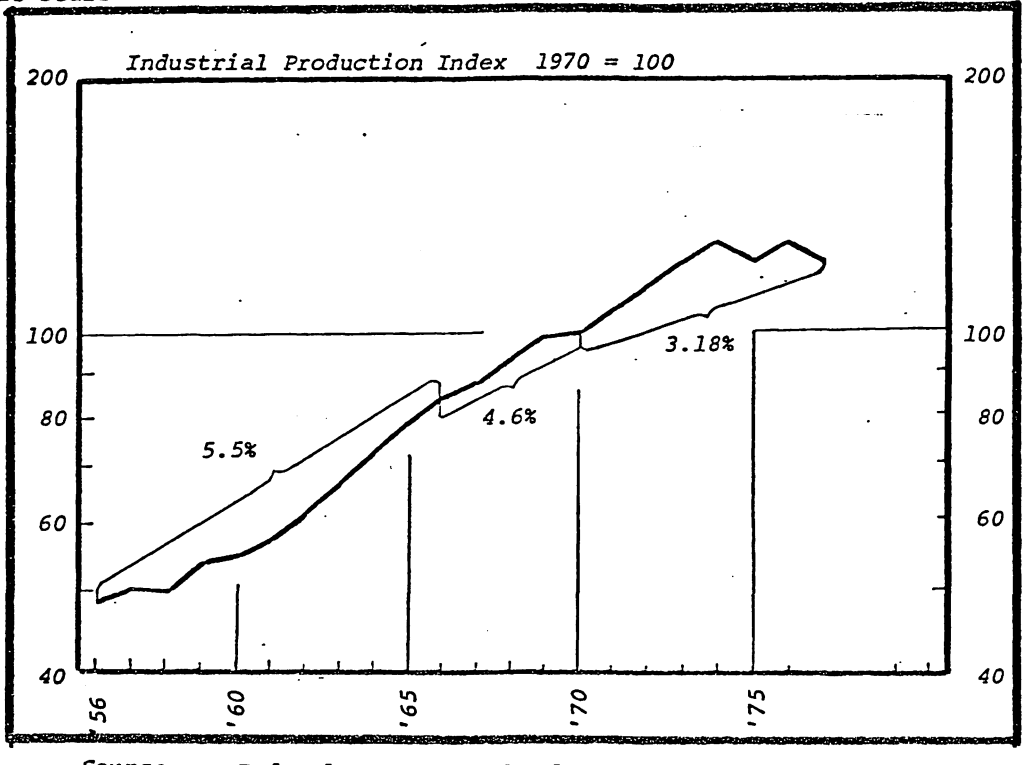
In Canada's case, excessive monetary creation in the early 70's caused strong inflationary pressures. Relative to the U.S., its main trading partner, however, prices remain relatively competitive. The current account, therefore, does not begin to deteriorate until the first quarter of 1975. At this point, excessive monetary creation in Canada begins to reflect itself first in the external sector: the current account swings to a massive 4.8 billion deficit in 1975, $4.2 billion

FOOTNOTES:

(9) Those economists that include various financial instruments in their broad definitions of money supplies try to derive spending behaviour from wealth effects. We believe that these functions, if they exist, are highly unstable and empirical work to date is rather inconclusive.

in 1976 and $4.1 billion in 1977. Perhaps Canadian wage & price controls do not allow the domestic sector to 'absorb' the excess liquidity. Surely, Canadian monetary inflation exceeds that of its trading partners. Be that as it may, a relatively high interest rate structure is maintained by the Bank of Canada throughout 1975 and most of 1976. Short term capital inflows offset the current account deficit and the external value of the Canadian Dollar is stabilized (as in (a) above).

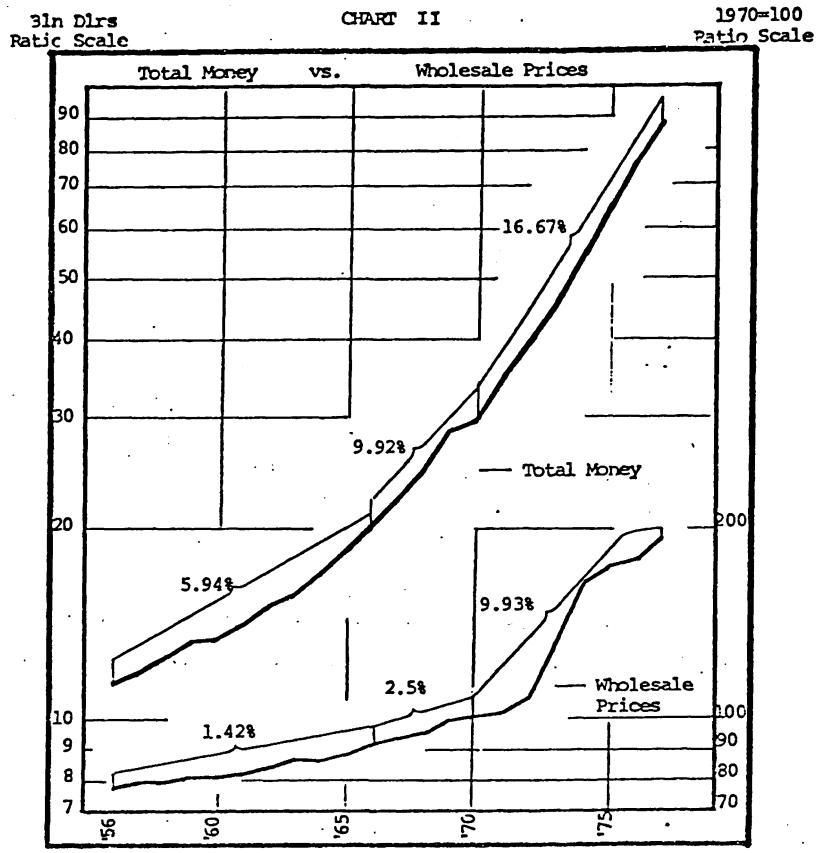
Ratio Scale *CHART IIa* *Ratio Scale*



Source : Federal Reserve Bank of St. Louis

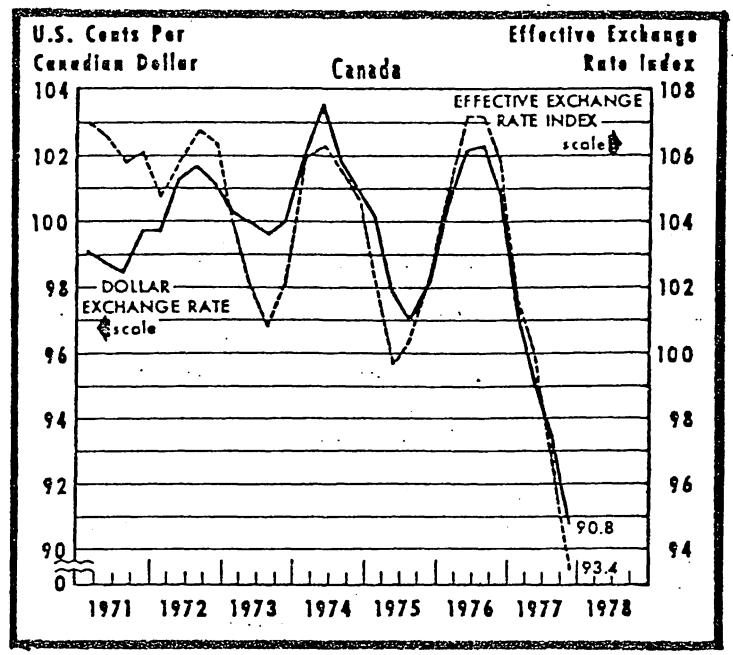
The rate of growth of total money combined with the rate of growth of industrial production and velocity trends go a long way towards explaining the movement in wholesale prices.

CHART II



Sources : Bank of Canada
Federal Reserve Bank of St. Louis

CHART III

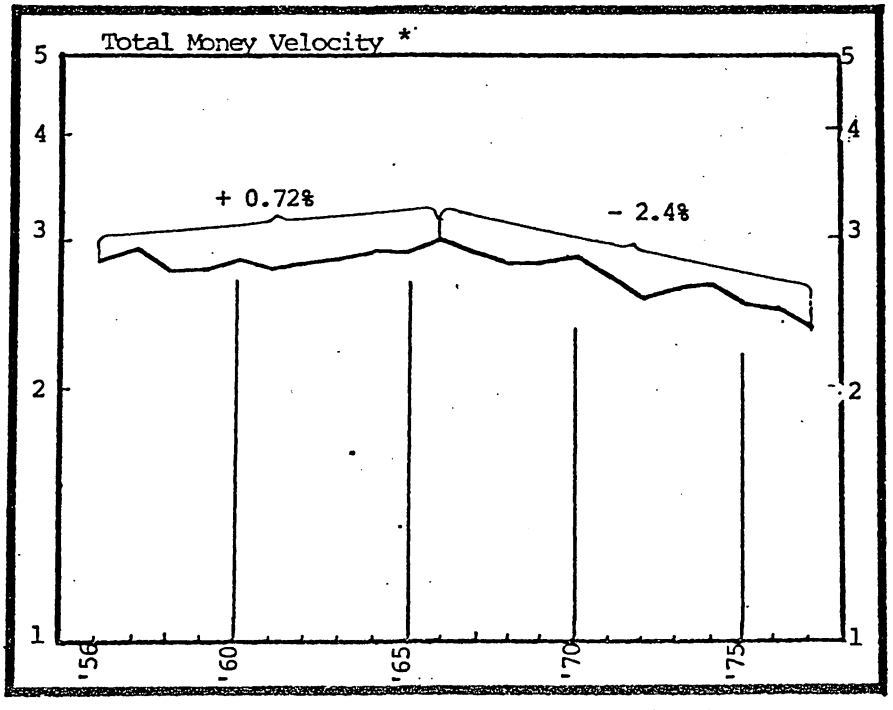


Source : *Federal Reserve*
Bank of St. Louis

In late 1976, the Bank of Canada allows interest rates to fall and differentials vis a vis the U.S. money market narrow sharply. Excess monetary creation takes its toll first on the external value of the Canadian Dollar and in a little over one year, the Canadian Dollar drops over 13% (see Chart 3) on a trade-weighted basis (as in (c) above).

Charts 1 and 2 show percentage increases of M_1, Total Money, and wholesale prices for the periods 1956 through 1966 and 1967 through 1977.

Regardless of which measure of money supply is used, one can clearly discern two stages: 1) the period of 1956 through 1966, where money supply growth can be described as having been moderate and 2) the period 1967 through 1977 which saw a truly phenomenal rate of growth. It is in this latter period that a strange phenomena takes place; the Canadian public becomes willing to hold increasing amounts of Total Money Supply as a percentage of its transactions (Chart 4). This



* *GNP / All Chartered Banks' Deposit Liabilities*
Average Annual GNP; Average Annual Total Money

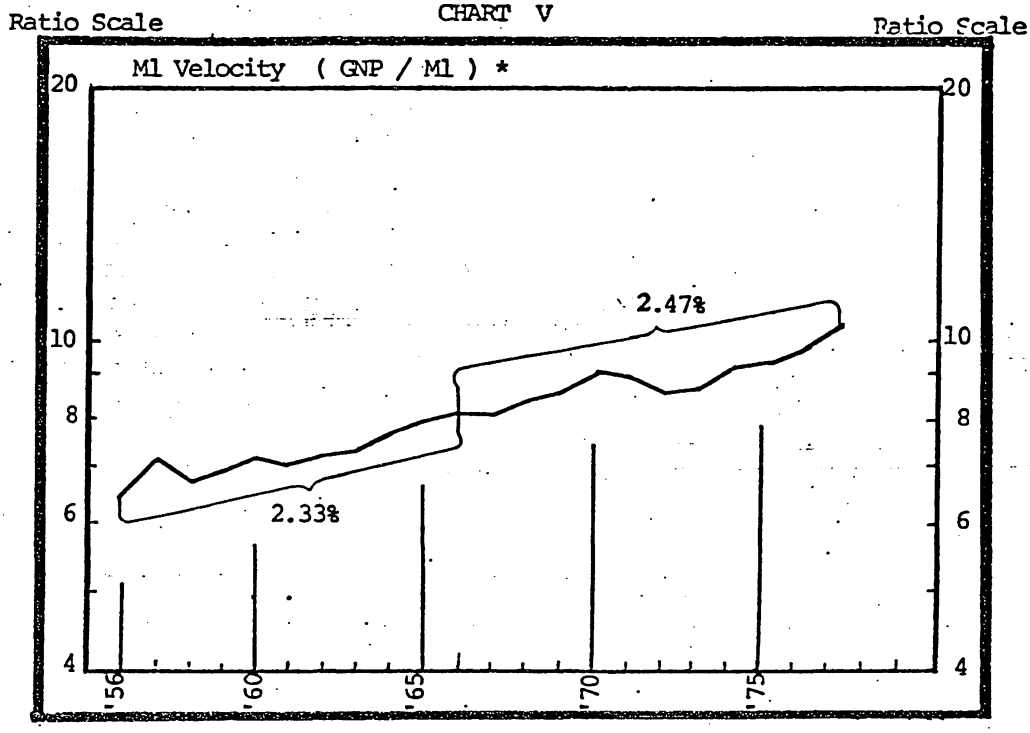
Sources : Bank of Canada
Federal Reserve Bank of St. Louis

drop in the velocity of money has already been noted by the Bank of Canada (Annual Report, 1976) which states that "the inference is that as incomes have risen over this period, most people wish to hold larger proportion of their incomes in the form of interest earning deposits". In terms of our earlier discussion of velocity, it is also a way of saying that every dollar of money turned over fewer and fewer times in the past 10 years to accomplish a given rate of economic growth. Excessive credit demands were being accomodated rather easily by the further creation of money, and therefore, interest rates were not

allowed to perform their credit allocative function.

M_1 velocity, (Chart 5), on the other hand, has tended to increase slightly during the period in question as the public responds to higher nominal rates of interest and therefore attempts to economize money balances.

CHART V



* Average Annual GNP; Average Annual M1

Sources : Bank of Canada
Federal Reserve Bank of St. Louis

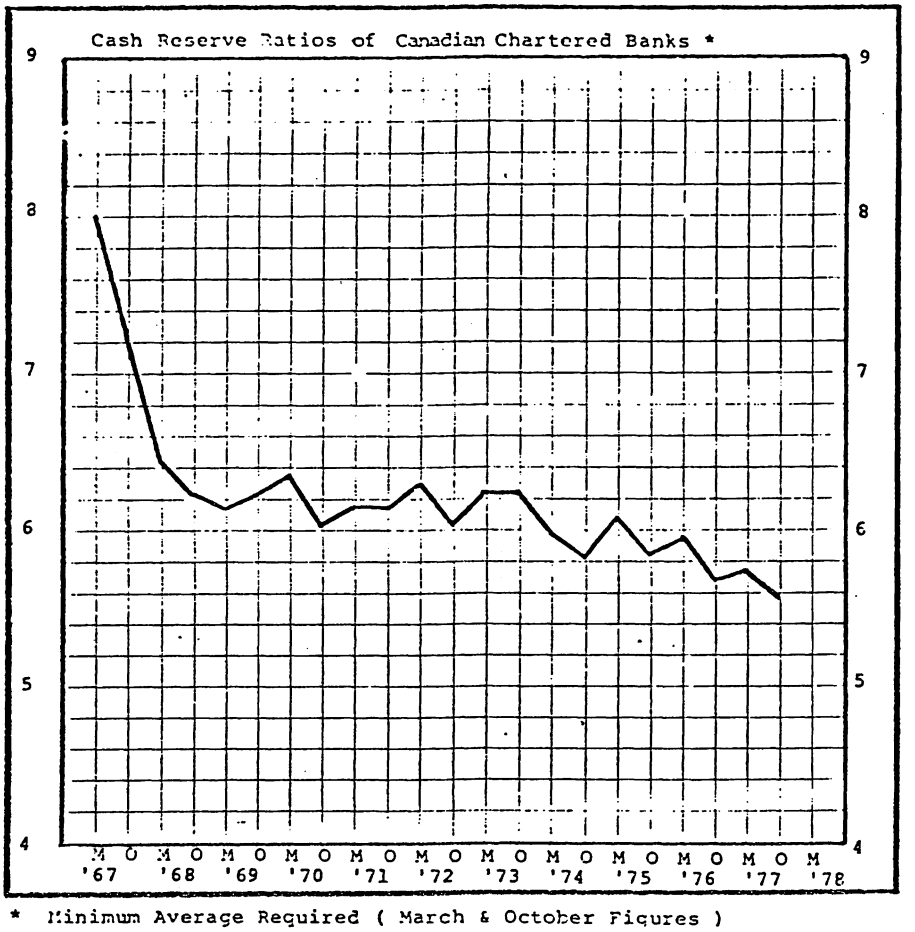
An increasingly larger share of transactions is being carried out on relatively smaller spendable money balances.

Spendable money (M_1) becomes an increasingly smaller portion of total money supply as the public tries actively to economize balances in the face of rising interest rates and the commercial banking sector, as we shall see later on, is able to increase its asset portfolio by shifting from demand deposits, which require high fractional reserves, to time deposits, which require much smaller fractional reserves. In the near hyper-inflation stage which is yet to come, the public perceives that nominal interest rates being paid on their time deposits are in effect negative (particularly when taxes are taken in consideration) and an orgy of spending takes place as a direct consequence of the public trying to economize on all money balances. At this point, the M_1 - oriented Bank of Canada faces the excruciating choice of having to force interest rates up to astronomical levels (positive rates of return) to re-divert spendable money into notice and term deposits and thus avoid a huge bulge in M_1. If total money supply were used as a target, however, the damage may be seen to have been done already: the hugh increments of money are already being reflected in prices before they are being spent!

THE PROCESS OF INCREASING MONEY SUPPLY

As every student of money and banking knows, the fractional reserve system under which we operate is able to multiply a certain amount of times an original injection of reserves created by the Central Bank in the process of adding to its asset portfolio. What is less well known is the additional leverage that exists in the banking system which enables it to catapult one dollar of reserves further and further by the mere expedient of shifting its deposit liabilities, i.e. from high to low required ratios. As explained in the notes to the Bank of Canada Review, January 1978 "The required cash reserve ratio is prescribed by the Bank Act. Until June 1967 it was 8% of total statutory deposits i.e. Canadian Dollar demand and notice deposits. For the next 8 months the required minimum monthly average on demand deposits was increased by 1/2 of 1% while that of notice deposits was decreased by 1/2 of 1%. Since February 1968 the required ratios have been 12% for demand deposits and 4% for notice deposits as prescribed by the Bank Act." The banking system is thus able to accomodate increasingly larger credit demands - and in the process create money - by bidding aggresively for term and other notice deposits whose required cash ratios are lower than those required by demand deposits. A look at Chart (6) will show that, in effect, minimum average

CHART VI



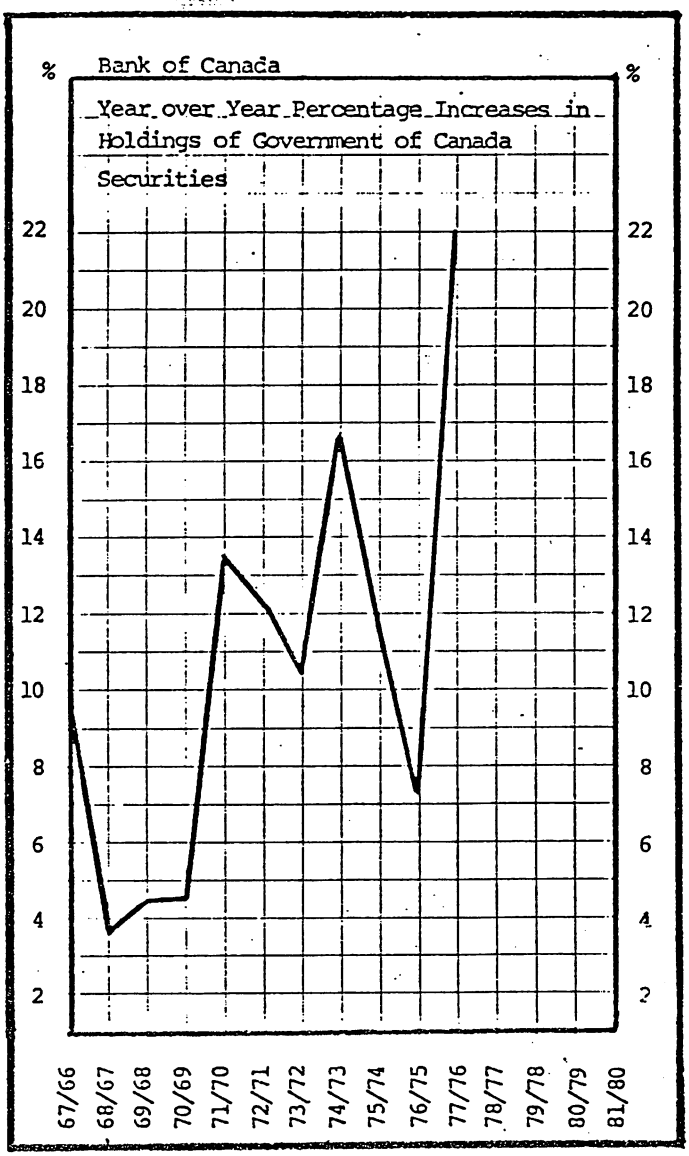
* Minimum Average Required (March & October Figures)

Source : Bank of Canada Review

required cash reserve ratios have fallen continuously for the past ten years.

Chart (7) shows the growth of total assets (and/or liabilities) of the Bank of Canada for the period 1967-1977. On the average, more than three-fourths of the total increase of the Central Bank's assets

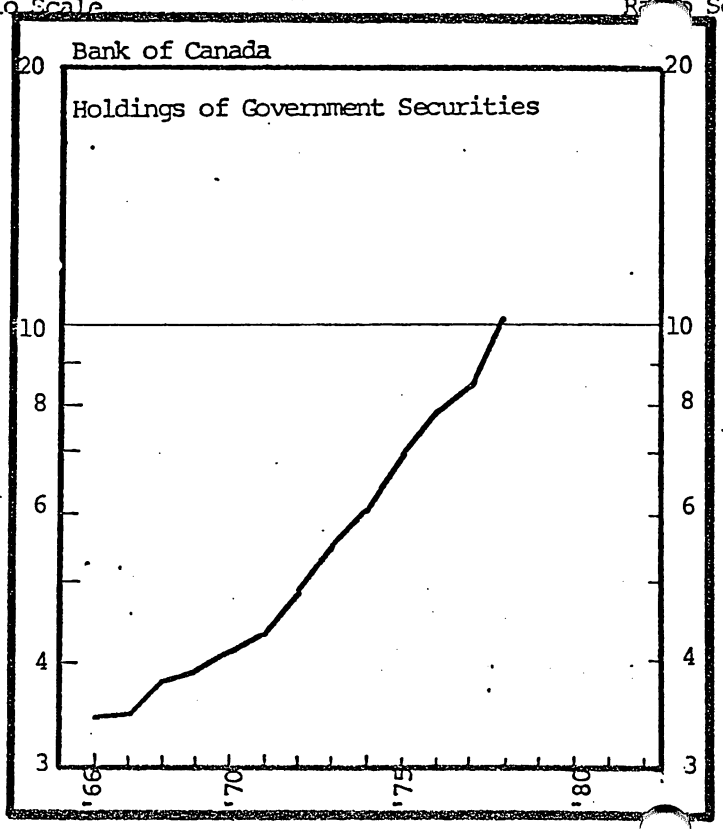
CHART VIII



Source : Bank of Canada

Bln Dlrs
Ratio Scale

CHART VII



Source : Bank of Canada Review

has been accounted for by purchases of Government of Canada obligations. The proportion was as high as 84.9% in 1967 and decreased steadily to 70.8% in 1976 but recovered once again to 76.2% in 1977. Chart (8) shows the growth in such holdings of government obligations on a year to year basis. After peaking in 1974 at slightly over 16%, the Bank of Canada once again increased its holdings of government obligations at an increasing clip; the 21.93% growth rate is a new record high for the past 10 years and unmistakeably points to the inexorable upward trend and acceleration of debt monetization.

THE FISCAL CONNECTION

Having seen that over 75% of the growth in Bank of Canada assets can be attributed to increases in holdings of government obligations, it behooves us to probe the linkage between fiscal activity and monetary expansion.

Keynesians and neo-keynesians are quick to point out the economic benefits to be derived from running a budget deficit. They are quite remiss, however, in analysing the financial impact of these deficits. In order to identify the latter, we must examine the government of Canada's net financing requirements (including foreign exchange financing).

TABLE I

	(a) Government of Canada Net Financing Requirements	*(b) Bank of Canada Purchases*	*(c) Purchase / Requirements*
1966 - 68	*2,578*	*471*	*18 %*
1969 - 71	*3,671*	*925*	*25 %*
1972 - 74	*3,271*	*2,172*	*66 %*
1975 - 77	*14,334*	*2,513*	*17.5 %*
(To & including 3rd Qtr)			
1977	*4,682*	*1,098*	*23.5 %*
(To & including 3rd Qtr)			

Source : Bank of Canada Review

in Millions of Canadian Dollars

Table (1) is a summary of the GVT of Canada's net financing requirements (including foreign exchange financing) for the period 1966-1977. Two points stand out rather vividly: a) net financing requirements tend to rise rather sharply over the 11 year period culminating in a massive increase registered for the 1975-1977 period equal to almost 5 1/2 times the 1966-68 requirements and b) the net financing requirements drop off only a very slightly during the boom years of 1972-1974 despite the immense credit demands that were being put on the financial markets by the private sector, the classical case of crowding out. Column (b) in Table (1) shows the absolute dollar amounts of GVT of Canada obligations taken up by the Bank of Canada in its efforts to finance the growing Government deficit. Column (c) shows the steady progression of the required support provided by the Bank of Canada as a percentage of

net financing requirements. What stands out clearly, and this is a crucial point, is the inability or the unwillingness shown by the Government of Canada in obtaining non-inflationary financing, i.e. sales to the non-banking general public and its increasing reliance on the printing presses.

As posited earlier, if credit demands rise faster than money supply, the competition for funds causes interest rates to rise, thus rationing out the weakest borrowers, i.e. those unwilling or unable to pay the higher cost of funds. If, however, at this stage the Central Bank prefers to keep interest rates from rising too quickly, either because it fears derailing the ongoing expansion or because, in its wisdom, it feels that interest rates are "high enough", then it is forced to monetize the increasing credit demands.

This is exactly what happened in that ill-fated period of 1972-74 when the Treasury and/or the Central Bank feared bidding up funds too aggressively (so as to place the entire government loan with the investing public) with the result that the Bank of Canada was forced to take up as much as 66% of the Government's net financing requirements. The enormous appetite of the public sector acts as a drag to the economy by crowding out the private sector; caught in this delima, the Bank of Canada comes to the rescue and purchases (i.e. monetizes) Government debt. In the subsequent 1975-77 period, as the Canadian economy moved into a severe growth recession and private sector credit demands abated, the Government was able to place an increasing proportion of financing requirement directly with the private saver, principally through two very successful Canada Savings Bonds Campaigns.

During 1977, as the economy improved somewhat and the Government incurred a new record high fiscal deficit, the Bank of Canada had to come to its aid one more time: preliminary figures indicate that almost 24% of the Government financing requirements have been provided by the Central Bank. Herein lies the weakness of a politically controlled Central Bank, unable to pursue an independent monetary policy for it is at the mercy of enormous credit demands imposed upon the economy by an expanding public sector.

FORECAST

As we move into Fiscal Year 1978 and Fiscal Year 1979 we face a frightening prospect: net financing requirements well in excess of 10 billion dollars per year are expected atop a reviving private sector, which will either force interest rates up to stratespheric levels or, worse yet, will require monetization on a grandiose scale. If we estimate rather conservatively, that the Bank of Canada monetizes 25% of the Government's net financing requirements for fiscal years 1978 and 1979 and if we, furthermore, assume that every dollar increase in Bank of Canada assets multiplies into approximately 6 1/2 dollars of Total Money,(10) we will have created an increase of 34 billion dollars in Total Money, an approximate increase of 40% in just two years!(11).

FOOTNOTES:

(10) Actually, due principally to the shift to deposit liabilities with low cash ratios, the multiplier has risen year after year: $1 dollar

of Central Bank money multiplied itself into $5.52 of Total Money in 1970, $5.78 in 1971, $5.75 in 1972, $5.82 in 1973, $5,98 in 1974, $6.26 in 1975, $6.42 in 1976 and $6.52 in 1977. A $6.50 ratio for 1978 is quite a conservative estimate.
(11) In absolute dollars, this increase matches the entire period of 1966-1977.

In terms of potential inflation, total money velocity would have to decrease by more than 10% a year (an unprecendented decline) (12) just to keep inflation below the double digit rate on each of these two years.

More likely, we estimate the Government deficit will exceed $10-11 billion dollars, perhaps by 10%, the Bank of Canada's allocation will average as much as 40% of the Government's net financing requirements, the multiplier will rise to average 6.6, and total money velocity will remain unchanged in line with its pro-cyclical behavior. The net result:a whopping $61 billion or 70% increase in total money supply - over a two year period, which should translate into a 25% annual compounded rate of depreciation. (13) (14)

Naturally, the sensible approach would be for the Government of Canada to eliminate its 10-11 billion deficit, perhaps over a 3-year period and achieve a balanced budget. This will allow a monetarist Central Bank to follow steady and non-inflationary policies. From a monetarist point of view, it is irrevelant if the budget deficit were eliminated by cutting expenditures or by raising taxes or a combination of both. It would seem to us, however, that raising taxes would totally demoralize whatever is left of our shackled private sector with the result that it would erode even further our supply base and cause shortages that, in the end, will aggravate our inflationary problem.

Alternatively, the Government of Canada may decide to raise a substantial portion of its net financing requirement abroad. Provided that the foreign currency thus obtained is exchanged for C$ in a freely floating foreign exchange market, the net effect would be to raise the external value of the Canadian Do-lar and to diminish the potential monetization of the deficit, with beneficial side-effects in the anti-inflation effort. If, however, the foreign currency is converted into Canadian Dollars and absorbed into foreign currency reserves, the Bank of Canada will have monetized a different asset i.e. foreign currency instead of bonds, and the inflationary impact would remain.

FOOTNOTES:
(12) And not a likely occurence given the tendency of velocity to move pro-cyclically, i.e. up during expansions and down during contractions, despite the well defined secular downtrend.
(13) As shown earlier, such a depreciation may occur in either the external or the internal value of the Canadian Dollar.
(14) We allow real production to grow ay 5% per annum.

The realities of the political processes in present-day Canada, relegate the achievement of a balanced budget to the category of an impossible dream. If we are to live with huge government expenditures and deficits, let us find a formula that will transfer the real savings of the private sector to finance this maddening venture rather than having to resort to printing presses. It may very well mean the difference between stagflation and stagnation and the latter, by definition, is the lesser of the two evils.

Our compromising and defeatist formula requires that the Government of Canada issue indexed bonds to cover substantially all of its borrowing needs. These bonds, as their name imply, would be indexed to the Consumer Price Index and would carry a nominal rate of interest of perhaps 1-2% per annum. The indexation 'gain' would not be taxable, thus offering the saver an investment vehicle with a positive real rate of return. In our opinion, such an offering of 'indexed' bonds for up to $10-11 billion would be oversubscribed in a matter of hours. The Government would no longer have to resort to the Bank of Canada for financing and the latter would no longer stand accused as Canada's prime engine of inflation.

SUMMARY

Our simplified monetarist model started out by comparing money to a commodity and thus its worth to its own relative supply. Next, we discussed the effects of excessive monetary growth on interest rates, credit demands, velocity and prices. We then differentiated between credit and money and between spendable money and total money supply to arrive at a practical definition of money supply. It was clearly shown that the responsibility for the increases in total money supply rested squarely on the shoulders of the Central Bank but that it was politically responding to the massive growth of the public sector and its increasing net financing requirements. In addition we showed that the naive distinction made in the 1967 Bank Act differentiating minimum reserves cash ratios for demand deposits and notice deposits, was responsible for further leveraging chartered banks' reserves already bloated by Central Bank monetization. Finally the frightening prospects of two 10-11 billion dollar deficits back to back for the next two years was discussed and analyzed within the framework of a crudely constructed multiplier which indicated that rates of inflation in excess of 25% per annum for each of the next two years was a real possibility unless immediate surgery was applied to the federal budget.

Given the political implausibility of achieving a balanced budget and the well explained linkage between fiscal deficits and monetary creation, alternatives were sought to minimize inflationary results. Two approaches were found satisfactory: a) a large foreign currency loan, provided that the currency proceeds were not absorbed into reserves and b) the floating of a large issue of indexed bonds, carrying a nominal rate of return but exempt from taxation on the indexation 'gains'. Either approach was preferable to resorting to the printing presses.

Albert D. Friedberg
Vice-President, Commodities