4

EXTERNAL INFLUENCES ON THE CANADIAN PRICE LEVEL

THAT there is a connection between Canadian and foreign price levels is obvious enough. What we have tried to establish is the closeness of the connection and to what extent it is a necessary connection. This chapter is therefore concerned with the answers to two questions:

1. To what extent have Canadian price trends followed or deviated from price trends in other countries, particularly the United States, and for what reasons?
2. Under what conditions can Canadian prices be held down while prices in the United States and elsewhere are rising?

The Statistical Problem

In comparing Canadian prices with those in other countries one is led inevitably to the use of composite price indexes. For all their defects, they are the best measure of general price changes available and they do provide a basis for reasonably accurate comparisons. The two indexes which seem to be most representative of price movements in statistically advanced countries like the United States, the United Kingdom and Canada are the index of wholesale prices and another index which measures the retail cost to consumers of a selected basket of goods, called variously consumers price index or cost-of-living index. These two indexes are generally based on a broad cross-section of the commodities entering into wholesale and retail trade. Although the construction and make-up of the indexes may differ between countries, just as the structure of production and consumer habits vary, a comparison of the composite indexes such as these are more likely to reflect a true picture of price movements than a comparison between the movements in the prices of a few important commodities common to the economies. Nevertheless, both methods of comparison, the composite index and the specific price, have their place. Of the two indexes, the wholesale index is particularly useful, since it represents a much wider group of commodities than the cost-of-living index.

How Prices Moved in the United States, United Kingdom and Canada

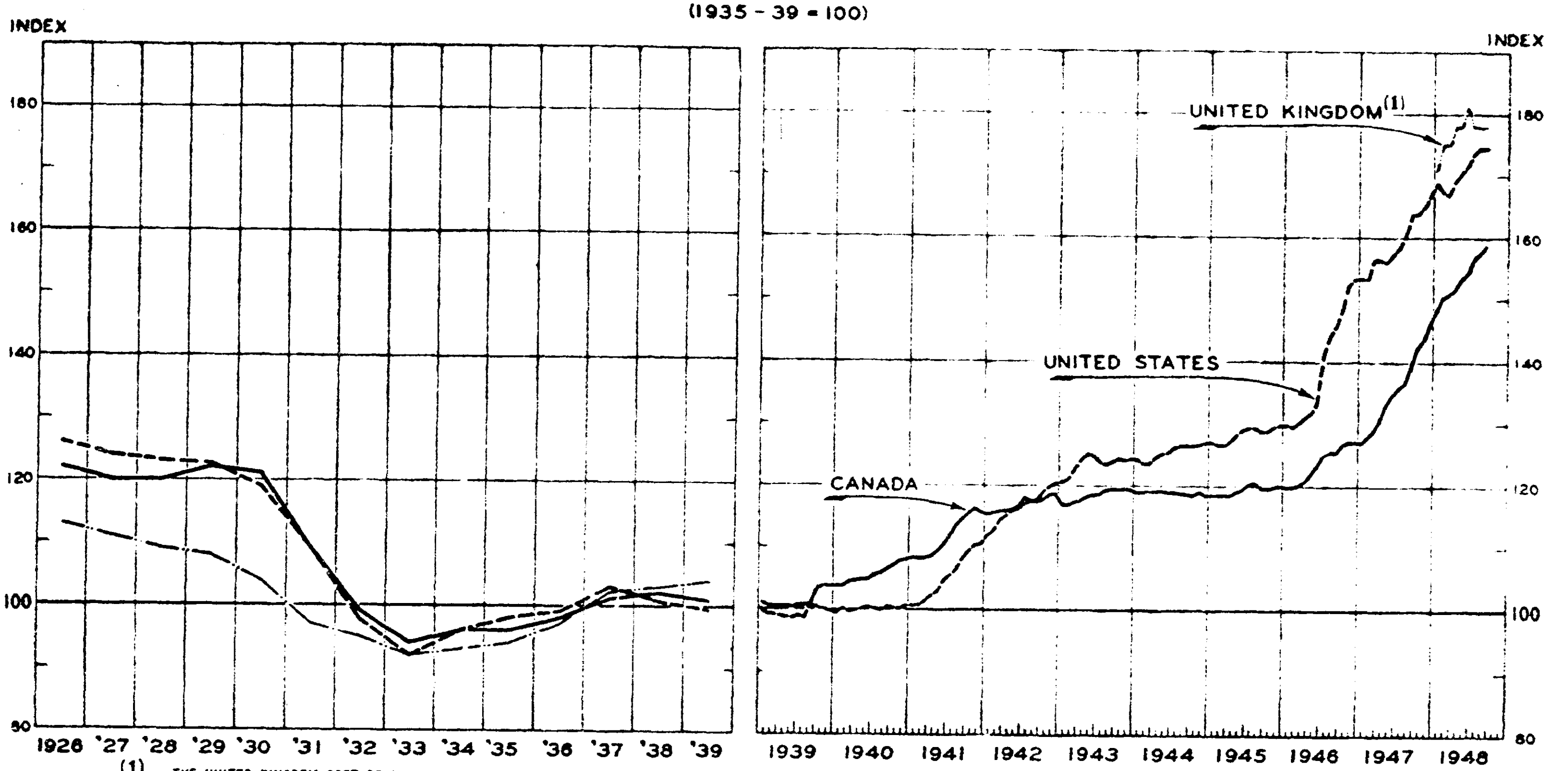
Two countries are selected for comparison with Canada: the United States and the United Kingdom. Eighty per cent of our imports are bought from them and over 70 per cent of our exports are sold to them. Moreover, these two countries play a dominant role in international trade generally. Wholesale prices and cost-of-living indexes for the three countries for the period since 1926 appear on the accompanying chart.

CHART V

RETAIL PRICE INDEXES

CANADA - UNITED STATES - UNITED KINGDOM

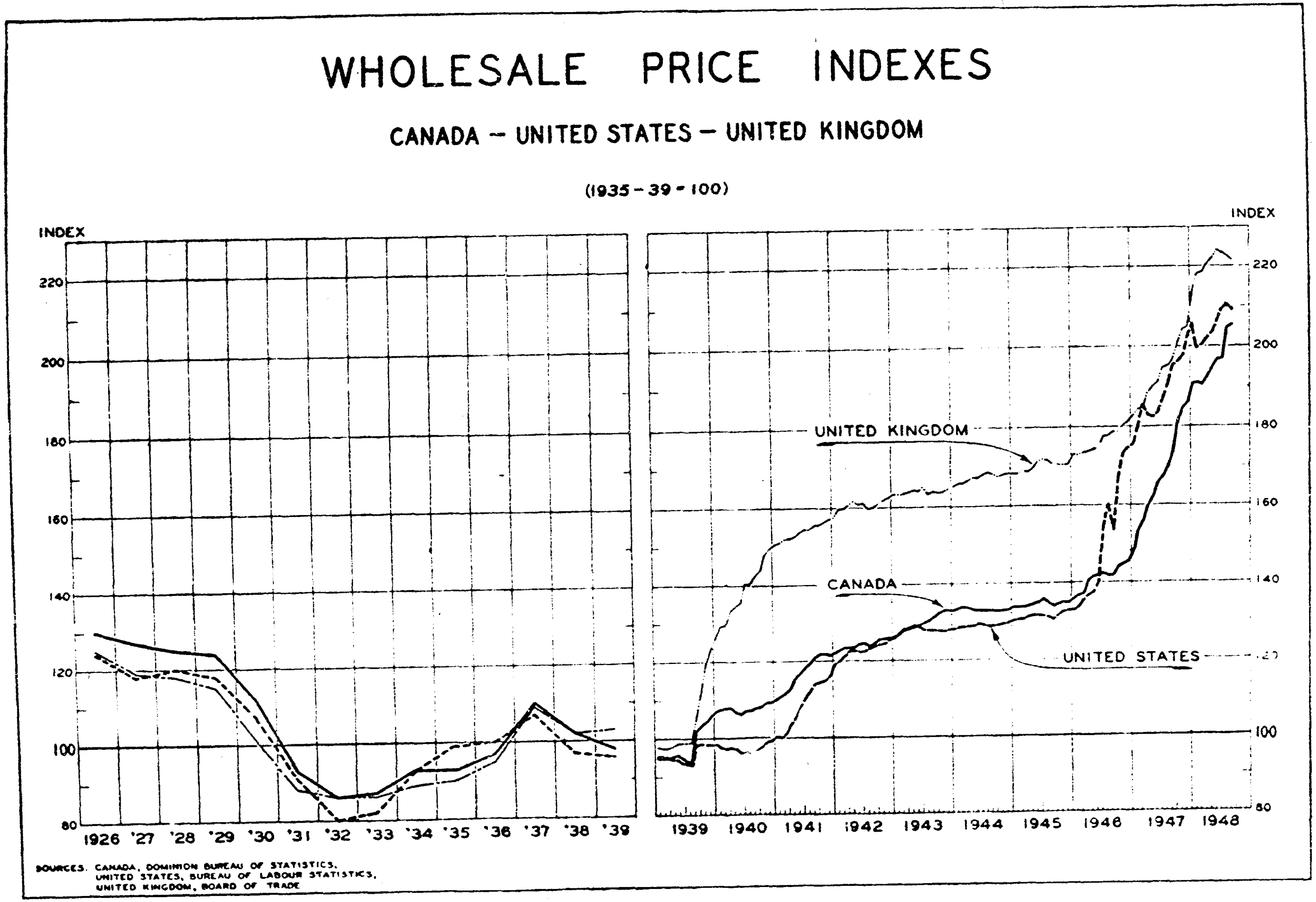
(1935 - 39 = 100)



(1) THE UNITED KINGDOM COST-OF-LIVING INDEX WAS DISCONTINUED IN JUNE 1947 AND REPLACED BY A NEW "RETAIL PRICE INDEX" ON THE BASE JUNE, 1947 = 100. THE FORMER SERIES WAS INADEQUATE FOR TWO REASONS. IT USED A 1913 BUDGET FOR WEIGHTING PURPOSES AND SEVERAL ITEMS IN THE NARROW LIST OF CONTENTS HAD BEEN HEAVILY SUBSIDIZED, THUS KEEPING THE INDEX LOWER THAN WOULD HAVE BEEN THE CASE IF IT HAD BEEN A PROPER SAMPLE OF CONSUMER PURCHASES OF BOTH SUBSIDIZED AND UNSUBSIDIZED ARTICLES. UNFORTUNATELY THERE HAS NOT BEEN PROVIDED AN OFFICIAL OVERLAP FOR THE NEW 1947 BASED INDEX, TELLING WHAT IT WOULD BE ON A POST-WAR BASE. COMPETENT ESTIMATES HAVE BEEN MADE HOWEVER; THESE FIRST APPEARED IN THE <u>LONDON AND CAMBRIDGE ECONOMIC SERVICE</u>, AUGUST 1947, P 75 AND AGAIN IN FEBRUARY, 1948, IN ARTICLES BY R G D ALLEN. THESE PLACED THE INDEX ON A 1938 BASE AT 160 IN JUNE, 1947. THIS FIGURE BECOMES 164 6 WHEN MULTIPLIED BY 102 9, IN ORDER TO PLACE IT ON A 1935-39 BASE. MULTIPLYING 164 6 BY THE NEW OFFICIAL SERIES GIVES THE FOLLOWING INDEXES FOR 1948: JANUARY, 171, FEBRUARY, 175, MARCH, 175, APRIL, 178, MAY, 178, JUNE, 181, JULY, 178, AUGUST, 178, SEPTEMBER, 178

SOURCES: CANADA, COST-OF-LIVING INDEX, DOMINION BUREAU OF STATISTICS.
UNITED STATES, CONSUMER PRICES INDEX, BUREAU OF LABOUR STATISTICS,
UNITED KINGDOM, RETAIL PRICE INDEX, MINISTRY OF LABOUR

CHART VI


WHOLESALE PRICE INDEXES
CANADA — UNITED STATES — UNITED KINGDOM
(1935 - 39 = 100)
INDEX
220
200
180
160
140
120
100
80
1926 '27 '28 '29 '30 '31 '32 '33 '34 '35 '36 '37 '38 '39
1939 1940 1941 1942 1943 1944 1945 1946 1947 1948
UNITED KINGDOM
CANADA
UNITED STATES
SOURCES. CANADA, DOMINION BUREAU OF STATISTICS,
UNITED STATES, BUREAU OF LABOUR STATISTICS,
UNITED KINGDOM, BOARD OF TRADE

The close relationship between the movement of prices in all three countries up to the outbreak of World War II is obvious. There was a greater divergence after the war, for reasons with which we shall presently deal, but even during this more recent period it is the similarity rather than the differences that strike the observer and that demand explanation.

Foreign prices affect Canadian prices most directly through the purchase abroad of consumer goods, capital goods and materials by Canadians, and through the impact on domestic prices of the prices received by Canadians for the goods they export.

Influence of Import Prices

Prior to World War II, roughly 20 per cent of the value of all the goods and services sold by Canadians, either to other Canadians or as exports, originated outside Canada. During the war the proportion dropped slightly to 17.8 per cent in 1942, and to 18.7 per cent in 1945 but in 1947 it returned to the approximate pre-war average, 21.2 per cent.

High as this percentage is, it tends to underestimate the importance of the import content of goods purchased by Canadian consumers for use, and by business men for the production of goods to be sold in Canada. In the first place goods exported from Canada do not contain anything like 20 per cent by value of import content. The reason is that, unlike the situation that prevails in the United Kingdom where a large proportion of imports are processed and re-exported, the bulk of Canadian exports consists of primary production like grain, newsprint, lumber, and base metals. Although depreciation on import of capital equipment used in producing these primary products as well as interest and dividends payable to foreign owners may be regarded as elements in the costs of production, such items are relatively small compared to purely domestic costs. Furthermore, the import content of government expenditure, which forms a part of the Gross National Expenditure, is likely to be below the average of all expenditure, since such a large proportion of government expenditure consists of the purchases of services, mainly, the payment of wages and salaries to Canadian citizens.

Therefore, although it is exceedingly difficult to allocate imports amongst various kinds of expenditure, it is reasonable to assume that the import content of private expenditure on consumer and capital goods is much higher than the 20 per cent to 22 per cent average figures for all expenditure. Possibly the figure for goods purchased by consumers is around 30 per cent; for capital goods and equipment purchased by business men it may be even higher.[1]

The effects are widely felt, for Canadian requirements from abroad are infinite in their variety. Almost every manufacturing plant in Canada is dependent in some way on imported fuels, materials, and machinery. The consumer is, of course, affected not only by changes in the price of the imported components of the goods he buys from Canadian manufacturers

[1] In 1948, imports supplied about 36 per cent of Canadian expenditures for machinery and equipment. Cf. Chapter 5. The Investment Boom.

but by changes abroad in the prices of the goods which are imported in final form directly for sale.

The list of goods which Canada buys abroad is so comprehensive and varied that only a few of the more important items can be mentioned here. For example, 90 per cent of the petroleum used in Canada in 1947 was imported. Two-thirds of coal burned in Canada, including all the anthracite coal used, is imported. All the cotton and most of the wool, the basic components of most Canadian clothing, come to us from abroad. Fresh fruits and vegetables in the winter season, citrus fruits the year around, and a host of manufactured goods from automobile parts and automobiles to complex electrical machinery all form an integral part of Canadian consumption habits and Canadian productive processes.

Influence of Export Prices

If an increase in the price of imports may be said to have a "pushing" effect on Canadian prices, then the prices which can be obtained abroad for Canadian goods may be said to exert a "pulling" effect.

The pushing effect of higher import prices is immediate and direct. To some extent so is the pulling effect of export prices. One excellent recent example of this was the action taken by the government in August, 1948, to remove the export embargo on cattle and beef shipments to United States. For some weeks in advance, prices in Canada climbed in anticipation of the lifting of the embargo, and continued to rise to the American level after the event took place. Mr. J. S. McLean of Canada Packers Limited, stated in evidence that, after the United Kingdom contract price increases became effective on January 5, 1948, the domestic prices of beef and pork went up in direct proportion to the export prices.[1]

But since the bulk of the goods that Canada produces for export are concentrated in a few products which have a limited sale within the country these direct effects of export prices are probably not as great as the direct effects of import prices.

The effect of export prices upon domestic prices can also be modified more readily than the effect of import prices. Whereas insulation of the Canadian economy against higher import prices requires the payment of subsidies, the direct effect of higher export prices can be offset by export embargoes which prevent foreign demand from draining away domestic supplies, by bulk contracts which may fix the export price at levels below world prices and by export controls combined with price control.

Export prices are less likely to follow United States prices as closely as do import prices, since the proportion of exports sold to the United States is smaller than the proportion of imports bought from that country, and since the principal United States purchases are newsprint and wood-pulp which exert relatively little direct influence on Canadian price levels. However, during the past year the intensification of Canada's efforts to

[1]Evidence, Special Committee on Prices, p. 2190.

expand exports to the United States, and the greater diversification in those exports, has resulted in closer relationship between Canadian export prices and the United States price level.

Indirect Influences of External Prices

It is doubtful whether the closely related movement of Canadian and United States prices can be entirely accounted for by the actual interchange of goods between the two countries. Other less obvious influences were at work. It does not, for example, require an actual shipment of goods across the border to bring price trends into line in the two countries. The mere possibility that such a movement might take place is often sufficient.

In addition to the direct price increases resulting from the higher price levels prevailing abroad for exported products, the bidding of Canadian exporters for factors of production have raised wages and prices of materials generally in all industry. In this way, for example, prices under the British cheese contract have affected the price of butter consumed entirely in Canada. These indirect effects of higher export prices are matched on the import side by the effect of higher prices on wage demands, which in turn produce secondary effects on the price structure and by the effect of higher import prices on the prices of competing or substitutable domestically produced goods.

The influence of proximity is another intangible which cannot be overlooked. The influence of the United States has permeated the thinking of Canadians in almost all fields of business and economics. Canadian security prices tend to take their lead from New York. United States business papers and periodicals have a wide circulation in Canada. Of even greater importance is the fact that with the degree of integration of industry that exists between the two countries, a large section of Canadian industry and the labour employed therein is subject to American control or guidance, and decisions affecting policies and prices set by the Canadian subsidiary or affiliate will frequently be made in the United States. For example, in evidence presented before us, Mr. W. C. Brown, of the United Shoe Machinery Company of Canada, Limited, disclosed that the terms prescribed by the parent company for the rental of its machinery in the United States applied equally to Canada.[1]

The Exchange Rate

So far we have been discussing how foreign prices affect Canadian prices without regard to the fact that foreign prices are expressed in terms of foreign currencies whereas Canadian prices are expressed in terms of Canadian dollars. The link between them is, of course, the exchange rate, that is, the rate at which a foreign currency can be changed into Canadian currency or vice versa.

[1]Evidence, Royal Commission on Prices, pp. 708-711.

Prior to 1939, Canadian foreign exchange had never been subject to direct control. On September 16, 1939, the Foreign Exchange Control Board was established by Order in Council. The Order in Council was subsequently replaced by the Foreign Exchange Control Act of January 1, 1947. The function of foreign exchange control has been defined as follows:

> "The purpose of exchange control was to maintain exchange stability and to conserve Canada's supply of United States dollars for essential war and civilian requirements by ensuring that it was not dissipated on non-essential purposes such as capital export."[1]

The fixed rate of exchange thus became, in 1939, an expression of government policy and the Foreign Exchange Control Board became the agency through which such policy was administered. All of the foreign assets of the Bank of Canada and certain foreign assets of the chartered banks were taken over by the Board. The chartered banks were no longer independent dealers and operators in foreign exchange and became merely the agents of the Board.

The rates of exchange at which transactions in Canada can be carried on are prescribed by the Governor in Council under the Foreign Exchange Control Act. The Foreign Exchange Control Board buys and sells foreign currencies at the exchange rates thus prescribed.

On September 15, 1939, at the inception of foreign exchange control, the Canadian dollar was fixed at 10 per cent discount in terms of the United States dollar. This rate continued until July 6, 1946, when the Canadian dollar was adjusted to parity with the United States dollar. This relationship continues to the date of writing this report.

The Foreign Exchange Control Act and the regulations of the Board passed by the Governor in Council thereunder do not authorize the Board to place restrictions on the international transfer of goods. In respect of exports the Board's function is to ensure that payment of not less than the fair value of the goods in a currency designated by the Governor in Council as acceptable is received within six months after the goods are exported. In respect of imports the Board is responsible for ensuring that payment does not exceed the fair value of the goods and is made in a currency designated by the Governor in Council as payable. In respect of the international exchange of services the principal role of the Board is to administer the government's policy with respect to reducing the expenditures of Canadians travelling abroad.

The main economic cause, as we understand it, of a policy of foreign exchange control as contrasted with free foreign exchanges, is to be found in the problem of capital transfers. It is entirely possible that an exchange rate which is in equilibrium on current balance of payment could be materially affected by sudden and large transfers of capital. For example, the Canadian-American exchange rate might be at par and a sudden desire to take capital out of Canada would put the Canadian dollar at a very large

[1]Foreign Exchange Control Board, Report to the Minister of Finance, Ottawa, March, 1946.

discount. The results on current trade and the whole economy could be drastic.

To make a reasonable or intelligent judgment on the actual policy—which also includes Canadian adherence to the International Monetary Fund—would require a knowledge of foreign exchange matters which we could not reasonably be expected to obtain. In effect it is a field of inquiry in itself. In our analysis therefore, we have had to proceed on the basis of the existence of foreign exchange control.

It is pertinent to consider whether or not it would be possible to vary these rates so as to moderate the effects of rising prices abroad, particularly in the United States.

Suppose, for the sake of argument that, as United States prices rose, the Canadian government had been prepared to sell United States dollars at a correspondingly lower price. What would have happened? Import prices in general would have remained much as they were. Exporters, though able to sell for a greater number of United States dollars, would have realized about the same amount in Canadian dollars.[1] The net result therefore would have been to increase the demand for imports above what it would otherwise have been and to reduce the incentive for exporters to sell abroad. In other words, the current demand for foreign exchange would have tended to increase and the current supply to decrease.

Hence, unless such an exchange policy had been accompanied by a concurrent decline in the demand for goods from abroad or by a concurrent increase in the supply of goods for export or in some other change in the situation sufficient to offset the effects of the cheaper rate for the foreign currency, there would have been an increased drain on the reserves of foreign exchange.

These few remarks will have indicated why manipulation of the foreign exchange rate as a means of offsetting rising prices abroad has very definite limitations. In the final analysis, the exchange rate cannot be altered for purposes of moderating price increases abroad without giving consideration to the effect of the measure on the balance of payments and foreign exchange reserves.

The Effects of Devaluation

At the outbreak of World War II Canada found herself in the unenviable position of being a heavy importer from a non-belligerent, the United States, while at the same time facing the prospect of obtaining an inadequate cash return from the sale of Canadian foodstuffs and materials to traditional customers abroad who were at war. It was evident at that time that United States dollars were to become a scarce commodity, and within a few hours after Canada entered the war foreign exchange control was instituted to conserve the limited United States dollar earnings and reserves. The Canadian dollar was fixed at a rate of 10 per cent below

[1]Gold mines which sell at a fixed price in United States dollars would have received less in terms of Canadian dollars.

parity with the United States dollar; the pound sterling was set at a 10 per cent discount from its previous parity rate with the Canadian dollar, and 20 per cent below the United States dollar.

By October, 1939, the Canadian wholesale index was 10 per cent higher than it had been in August. The increase was fairly well distributed over foods, raw materials and manufactures, although the increase in food prices can probably be ascribed as much to the foreign demand for Canadian grains as to the increase in the cost of food items imported from the United States. An explanation for the increase in the raw and partly manufactured component of the index was that prices set in United States dollars (newsprint and base metals) held firm and in some instances increased, and Canadian prices rose in correspondence with the higher Canadian dollar return accruing to exporters. On the whole it seems evident that the depreciation of the Canadian dollar vis-a-vis the United States was an important factor in the increase in Canadian wholesale prices, although the rise in Canadian foods and materials may also be attributable in part to the general increases that occurred in United States and world prices.

Effect of Price Controls

The introduction of price controls in Canada in the autumn of 1941 reduced the disparity between the indexes which had arisen following the depreciation of the Canadian dollar. The more rapid increase in United States prices, however, ceased after the Office of Price Administration controls were imposed in 1942, and for the remainder of the war the difference between the two indexes remained at about the 1942 level.[1] The Canadian wholesale index, between October, 1941, and August, 1945, increased from 119.3 to 134.9, which just about equalled the increase in the United States wholesale index during that period, from 114.6 to 131.1.

The cost-of-living indexes showed a wider variation. Between August, 1939 and October, 1941 the Canadian cost-of-living index increased from 100.8 to 115.5; from then until August, 1945 the index increased only another five points. The United States consumers' price index during the same periods increased from 98.6 to 109.3 to 129.3 in August, 1945.

We find that the divergence between the two trends in the two countries was due primarily to the fact that

(a) components of the Canadian index which were relatively unaffected directly by foreign prices, such as rent, transportation, electricity and medical services, were amenable to controls and showed a very small increase during the war. (Rent, fuel and light, miscellaneous expenditure on transportation, personal care, recreation and insurance, with a total weight of 48 in the index, increased only eight per cent over the wartime period compared with an increase of over 35 per cent in food and 22 per cent in clothing);

[1]Cf. Chapter 2, The Course of Prices and National Income.

(b) the major commodity items in the cost-of-living index, foods and textiles, were heavily subsidized by the Canadian government, by direct assistance on imports and by controls on exports;

(c) the Canadian controls were on the whole more effective than those in the United States.

SUMMARY OF WAR-TIME EXPERIENCE

On the basis of Canadian experience during the war, it is not clear how much of the credit for keeping Canadian prices down can be attributed to the government price control and subsidy program, and how much to the fact that United States prices during the period were also maintained at a reasonable level. The Canadian wholesale index which had been at approximately the same level as the United States wholesale index when the war began, was between three and four points higher when it ended. That the increase in Canadian price levels was less than one might expect from the Canadian-United States dollar exchange rate may possibly be attributed to the superior efficacy of Canadian controls and related fiscal policy, but if United States prices had risen more sharply ours would probably have been somewhat higher too. As we have said before, it would have been exceedingly difficult, if not impossible, to hold the line in Canada had it not been for the timely control of prices in the United States early in 1942.

The cost-of-living indexes showed a wider variation during the war which suggests that the Canadian government's efforts in this field met with more success. Some of the burden of price increases in imported necessities was shifted from the low-income group to the population as a whole through the greater use of subsidies.

EFFECT OF OPA COLLAPSE ON CANADIAN PRICES

The first real test of whether Canada's price level could be isolated from increases in United States and world prices did not come until the summer of 1946, when OPA controls were removed in the United States. As the charts indicate, the United States wholesale index experienced sharper increases between May, 1946, and March, 1947, than in any period in its history. The over-all index increased from 137.7 in May to 154.7 in July, to 166.4 in October, to 174.8 in December and to 185.5 in March, 1947, a total increase of 47.8 points or 35 per cent. The United States consumers price index during that time increased by 19 per cent compared with an increase during the preceding seven years of approximately 32 per cent. This index was of course subject to some of the influences which tended to keep Canadian cost-of-living index increases lower than the rise in wholesale prices. For example, rents were still controlled, electricity prices were stable and transportation services had still to feel the influence of higher labour and material costs.

During this 10 month period (May, 1946 to March, 1947) the two Canadian indexes for the first time showed a wide deviation from the

American trend. The wholesale index increased by only 10 per cent with most of the increase concentrated in the first three months of 1947. The cost-of-living index increased less than six per cent.

If it is true that United States prices have a significant influence on Canadian prices, how could such a wide divergence occur in so short a period? It is hardly likely that any one single factor can account for the whole story, although the action taken by the Canadian government to reduce the impact of the rapid United States price increases probably played the major role.

Government Action to Moderate United States Price Increases

This action took three main forms; (i) the appreciation of the Canadian dollar to parity with the United States dollar, (ii) the retention of price controls and subsidies on both imported and domestic commodities, and (iii) the retention of embargoes on the export of scarce products.

In 1939, when the external value of the Canadian dollar was fixed at a discount of 10 per cent in the terms of United States currency, the need for protecting the Canadian price level against increases in United States prices was a minor factor. The foremost consideration was the looming breakdown of the Atlantic triangle of trade, which up to that time had enabled Canada to meet its United States obligations with receipts from exports to the United Kingdom, the sterling area and Europe.

In July, 1946, however, when the Canadian dollar was returned to parity, the dollar shortage, which became so acute some 16 or 17 months later, was either not foreseen or, if foreseen, was not considered to be necessarily related to the immediate problem of rising prices. The government took the line that

> "a very marked difference has developed between the general price levels of Canada and the United States" and that "we were faced with the alternative of either changing the exchange rate or of setting in motion, as the process of decontrol continued, an increase in our own price and cost structure more or less to the American level plus 10 per cent".

The second facet of the government's efforts to neutralize the impact of rising United States prices on the Canadian economy (as well as the control of latent inflationary forces inside the country) was that the rate of decontrol, originally contemplated, was slowed down.

Early post-war price developments had been so favourable that the government had taken steps to implement its decontrol program early in 1946. When the United States trend became apparent the government reconsidered its program and instead of proceeding with the rapid dismantling of the price control machinery, and the elimination of subsidies, it left a large list of basic foods, materials and consumer goods under control. With regard to subsidies, the Minister of Finance, in the statement referred to above, made the further comment:

"The change in import price policy does not affect imports of materials basic to the cost of living which are at present being subsidized. We may find it necessary to increase subsidy payments, notwithstanding the government's desire to reduce and ultimately to eliminate all wartime subsidies of this character. And the same will be true of certain domestic subsidies."

A third element of government policy to neutralize the effect of higher prices abroad was its control over exports through permit regulations. These prevented higher export prices from stripping the domestic market of essential or scarce commodities, which would have tended to push up their price. The commodities principally affected were lumber, meat, grains, fertilizers and many products manufactured out of steel.

In addition to this direct control over exports, the bulk contracts with the United Kingdom for foodstuffs, base metals and lumber, in most instances at prices somewhat below prevailing world levels, established a yardstick for the domestic prices of these commodities, and frequently set a ceiling as well as a floor price.

Rate of Price Increase of Imports

Government efforts to offset United States price increases in the early months of the post-OPA removal period were assisted by two rather fortuitous circumstances. The prices of the principal imports from the United States showed on the whole a much lower rate of price advance in the 10 months May, 1946, to March, 1947, than did the general United States wholesale index. Some representative increases are shown in the following list of items. The calculations are based on the United States wholesale indexes for each of the items shown.

TABLE 14
UNITED STATES WHOLESALE INDEXES FOR CERTAIN COMMODITIES
(Increases in United States Wholesale Prices)
May, 1946 to March, 1947

	Per Cent
Over-all United States Wholesale Price Index	36
Textile Products	28
Coal—Bituminous	15
Coal—Anthracite	10
Clothing	11
Petroleum Products	29
Motor Vehicles	32
Agricultural Implements	15
Structural Steel	6
Metal and Metal Products	28
Iron and Steel	20

Source: Standard and Poor's—United States Wholesale Price Index.

The second favourable occurrence from the point of view of price control efforts was that aggregate export prices during the period rose by only 14 per cent and helped hold in check those domestic prices which were determined by or related to export prices. This low rate of increase was, however, in part derived from the stability in the prices of the commodities sold under bulk contract to the United Kingdom and referred to earlier.

The increase of eight per cent experienced by the cost-of-living index during the 10 months was not out of line with the previous movement of the index, with the service components, rent, fuel and lighting, and miscellaneous items again serving as a buffer against the larger increases that occurred in home furnishings, clothing and food. The United States consumers' price index showed a similar lag behind the wholesale index, increasing by only 19 per cent, contrasted with the 36 per cent for the wholesale index.

Rapid Increase in Canadian Prices in 1947

In the 12 months following April, 1947, the Canadian wholesale index climbed a further 25 per cent from the May, 1946, base compared with a rise of only 10 per cent for the corresponding United States index. In April, 1948, the United States wholesale index was only five per cent higher than the Canadian, compared with 20 per cent in December, 1946, when the deviation between the two was at its peak. In October, 1948, for the first time since June, 1946, the Canadian index was higher than the United States index, 206.5 compared with 204.7.

The whole issue of the relationship between Canadian and United States prices hinges about this price rise in Canada in 1947 and 1948. Could Canadian prices have been held down or were the forces tending to bring prices in the two countries together too great to be harnessed, without at the same time bringing about a degree of state intervention incompatible with the functioning of a free economy in peacetime? This is a matter of opinion, for there can be differing ideas about the meaning of a free economy. That the degree of state intervention would have had to be very great we have little doubt. Mr. K. W. Taylor, Chairman of the Wartime Prices and Trade Board, expressed the view, before the Special Committee on Prices, that Canadian prices cannot

> "be insulated from these external forces except by an elaborate continuing system of export controls by license and permit or by a government monopoly of the selling; and by a very complicated system of import subsidies and import allocations, and government monopoly of the buying."[1]

Perhaps such subsidies and controls could have been justified if there had been a prospect that external prices would shortly have fallen to correspond with internal Canadian prices. But the outlook was highly uncertain and in fact external prices have not yet[2] fallen to anywhere near that level by February, 1949.

The Dollar Problem in 1947 and 1948

A factor of great importance in the determination of government economic policy in 1947 was the emerging dollar problem. Methods adopted by the Canadian government to offset price increases tended to have an

[1]Evidence, Special Committee on Prices, p. 59.
[2]Autumn, 1948.

adverse effect on the balance of payments with the United States. The step of appreciating the currency to moderate United States price increases can hardly be said to have helped the balance of payments situation, although whether or not it worsened it to any degree is a matter for debate. Nevertheless the cumulative effect of the appreciation linked with the subsidies that were retained on some imported goods, undoubtedly provided a stimulus to the importation of a larger volume of goods. While the bulk commodity agreements with the United Kingdom eased the problem of keeping domestic prices down, they prevented their sale to the United States for United States dollars.

As 1947 progressed and the dollar problem became more acute the basic conflict between the two issues of price control and a better balance in Canada's United States dollar account became more obvious. If prices of United States imports were held down people tended to import more of them; if the prices were let go the consumers were hurt. There was apparently no middle road. In the end the need of dollars pushed the price issues into the background. Since November, 1947, whenever the conflict of interests has appeared, the dollar shortage usually has taken precedence. The ban on imports from United States and scheduled countries brought about price increases in home-grown substitutes; quotas on United States textiles forced the manufacturers and wholesalers to import more costly products from the United Kingdom; the so-called austerity taxes were designed to cut consumption of goods with a high United States content by increasing their price. Canada had been buying in the United States because the goods were cheaper or unobtainable elsewhere; interference with this mechanism meant recourse to more expensive markets or substitutes. Selling more products to the United States forced up the domestic prices of these products. One example of this was the lifting of the embargo on cattle and beef exports. The action produced a substantial amount of United States dollars for Canada, and higher income for the farmer, but it also resulted in an increase of close to three points in the cost-of-living index.

Effect of Balance of Payments' Surplus in 1948

The program that was designed to improve Canada's balance of trade with the United States helped bring about a current account balance of payments' surplus of considerable magnitude (possibly \$400 to \$500 million in 1948 compared with a balance of less than \$50 million in 1947). Such a surplus has inflationary effects. The production of goods for export creat , income; if no compensation is received for the exported products in the form of imported goods or services, disposable income will exceed the market value of goods available for consumption at current market prices.

The other side of the coin is seen in the monetary effects of an export surplus. In the days of the gold standard, a balance of payments' surplus would bring about an inflow of gold. This would expand the base of the money supply and prices would go up. In theory this would reduce foreign demand for the exports and lead to equilibrium in the balance of payments.

In Canada to-day an export surplus is financed mainly by government loans or credits to foreign countries or by the accumulation of gold and United States dollars by the Foreign Exchange Control Board. Each of these has the same effect of using the funds accumulated by government budgetary surplus, thus neutralizing its deflationary effect by the amount of the balance of payments' surplus or of requiring the government to obtain the needed cash by borrowing.

It should be noted that as an inflationary influence, a balance of payments' surplus falls into the same category as investment in capital goods. It withdraws products from the supplies available for consumption without decreasing the income created by their production.

TABLE 15

ADVANCES TO FOREIGN COUNTRIES UNDER THE EXPORT CREDITS INSURANCE ACT AND UNITED KINGDOM FINANCIAL AGREEMENT ACT

(millions of dollars)

(By Calendar Years)

	1945	1946	1947	1948	Total
Export Credit Countries:					
Belgium	18.0	33.0	16.0	1.0	68.0
China	—	16.5	16.2	18.4	51.0
Czechoslovakia	0.7	3.2	8.2	4.3	16.3
France	—	143.8	54.6	43.8	242.2
Netherlands	25.0	35.4	44.2	14.2	118.9
Bank for Netherlands Indies	0.6	4.8	4.6	5.0	15.0
Norway	6.2	10.2	3.6	3.4	23.3
U.S.S.R.	2.5	0.4	0.02	—	2.9
Totals	53.0	247.3	147.42	90.1	537.6
United Kingdom	—	540.0	423.0	52.0	1,015.0
Grand Totals	53.0	787.3	570.42	142.1	1,552.6

Source: Department of Finance, Ottawa.

The Inflationary Effect of Loans and Credits

We have referred to the relation between foreign loans and credits and the balance of payments' surplus. These loans and credits were of such magnitude that they deserve more than passing mention. Indeed, one witness included them among the important causes of rising prices in Canada.[1]

[1]Evidence, Special Committee on Prices, p. 58.

As will be seen from the Table 15, advances to foreign countries in 1945 totalled $53 million, in 1946, $787 million, in 1947, $750 million, and in 1948, $142 million. Although the rate of drawings is not strictly comparable to the movement of goods, in 1946 the advances approached one-third of total commodity exports (slightly under one-quarter of total current account credits) and in 1947 approximately 20 per cent of commodity exports or 15 per cent of total credits. In addition during the same period Canada provided military relief and made contributions through UNRRA and post-UNRRA agencies and to the International Refugee Organization totalling about $275 million.

Obviously if exports of the volume indicated had not taken place, the drop in Canadian income would have been large enough to dampen down some of the inflationary pressures, although the deflationary influence would have been felt initially and most severely in the regions which produced the bulk of the primary products financed by the credits. Nevertheless, looking back on the two years 1946 and 1947, it is possible that exports would not have been so greatly affected by the absence of export credits as might appear at first glance. Some of the products sold to Europe on credit could have been sold to the United States or Latin America for cash. In other instances the needs of the European countries were so compelling that they would have purchased the goods out of their rapidly diminishing reserves rather than do without. Even so, undoubtedly some balance of exports could not have been sold. From this point of view, the credits can be considered inflationary only to the extent that they facilitated the export of goods not otherwise saleable.

On the other hand, had Canada demanded and been able to obtain "cash on the barrel head" in the early post-war years, more cash, that is, United States ~~dollars,~~ would have been available to buy more United States goods, thus adding to the total supply of goods in Canada and perhaps reducing the necessity for import restrictions.

Because they were inflationary in effect does not imply that Canada should not have extended loans and credits and other assistance to needy countries. We are inclined to agree with the views of the Canadian Congress of Labour, expressed to us through Mr. Forsey, that "it was not only our moral duty but also in our long-run economic and political interest to extend such loans and assistance".[1] But the decision to provide this aid, however much it was justified, did add to demand without adding immediately to supply and thus contributed to inflationary pressures. Foreign loans and credits in this respect are like domestic investment expenditures.

> "The immediate effect of such loans or assistance is to send large quantities of goods overseas for which we get no immediate payment. The Canadian farmers and workers who produce these goods get paid in Canadian dollars supplied by the Canadian government, but there is for the time being no return flow of goods to Canada to match this additional spending power. The effect on the economy

[1]Evidence, Royal Commission on Prices, p. 2108.

as a whole is to maintain or increase Canadian incomes and at the same time to reduce or retard the expansion of the supply of goods on which these incomes can be spent."[1]

Other Factors in 1947 and 1948

Attention should also be drawn to the fact that price increases in the import items which in the early months after OPA collapsed had lagged behind the United States wholesale price index, gained momentum, and in most instances showed a greater increase in the last six months of 1947 and first six months of 1948 than did the wholesale index. The most spectacular increase was in petroleum products, Canada's leading import in 1947. Although 30 per cent of imports came from sources other than the United States, the price was determined in the United States, where it jumped 50 per cent between April, 1947 and April, 1948.

The Canadian cost-of-living index rose from 136.6 on August 1, 1947, to 157.5 one year later, an increase of 15 per cent compared with increases of 21 per cent in the Canadian wholesale index and 10 per cent in the United States wholesale index during the same period. Part of its increase was attributable to direct increases in the cost of imported commodities, part to the removal of subsidies, and part to the rising level of domestic foods which had been released from export control. There were also evidences of secondary or delayed reactions in some of the service items, although rent and electricity held fairly steady. As wages and basic materials prices rose, the prices of such services as medical and hospital fees, automobile and tramway costs were subject to pressure. Although it is questionable if all of these increases can be laid directly at the door of import and export prices, it is valid to attribute responsibility to foreign prices to the extent that they contributed to price and wage increases.

Summary and Conclusions

The degree to which Canadian price movements have corresponded with those in the United States can only be accounted for by the existence of some mechanism which transmits these price changes from one country to the other. With the dominance of the United States economy this has meant, with rare exceptions, that Canadian prices follow those in the United States. The mechanism through which this transmission of price movements takes place has several elements, the principal one being the pervasive influence of imports from the United States on Canadian productive processes and markets. Prices received by Canadian exporters tend to have a similar though probably less direct effect on the domestic price level, since the consumption in Canada of most of the main export commodities is small in relation to the volume of production. The direct and indirect effects of import and export prices on the Canadian price level are reinforced by the unusually close business and personal relationships that exist between Canada and the United States. The feeling of most Canadians

[1]Evidence, Special Committee on Prices, p. 58.

that if United States prices go up those in Canada are bound to follow, results frequently in decision that will assist in bringing about a rise in Canadian prices. The very existence of an investment boom in the United States is found to affect the Canadian economy.

That the equilibrating mechanism can be temporarily interfered with by government action was demonstrated most clearly in late 1946, although deviations of lesser magnitude had occurred previously. When controls collapsed in the United States in the summer of 1946, the Canadian government took steps to appreciate the Canadian dollar and at the same time retained a modified version of the wartime price and export controls and subsidies. Government efforts to neutralize United States price increase were aided by a rate of increase in the price of imports lower than the corresponding increase in the United States' price as a whole; as a result for some months Canadian and United States prices diverged widely. Since April, 1947, however, Canadian prices have risen faster than United States prices and, at the time of writing, the Canadian wholesale index has caught up and passed the United States' index.

The fact that the government could hold Canadian prices down, even for a short period, while United States prices were rising, has led many observers to conclude that prices could have been held indefinitely at levels roughly approximating those of 1945. The evidence submitted by the officials most concerned suggests strongly that a continuation of controls on a scale necessary to accomplish this objective would have led to insuperable problems of administration and enforcement. The wartime controls were effective not only because the disparity between Canadian and United States prices was relatively small during the war but because of overwhelming public support.

The difficulties of holding prices down at home were increased by the emergence of the dollar problem in 1947. The subsidies and mark-up controls on imported goods, although a partially effective price control measure, tended to produce an increased volume of imports in the subsidized products. When steps were taken in late 1947 to restrict the purchase of some United States goods, the use of domestic substitutes or similar goods obtained from other countries resulted in higher prices in Canada. A larger volume of exports to the United States to improve the dollar position meant in many instances an increase in the domestic price.

5

THE INVESTMENT BOOM

A NUMBER of witnesses before the Special Committee on Prices and ourselves dealt with the effect of the recent high level of capital expenditure upon price levels in Canada.

Mr. K. W. Taylor, Chairman of the Wartime Prices and Trade Board, included it among the "five more specific factors bearing directly on the Canadian price structure". Mr. Eugene Forsey, Director of Research for the Canadian Congress of Labour, said, "there appears to be little doubt that the boom in industrial capital expenditures has had an important inflationary effect". Mr. Graham Towers, Governor of the Bank of Canada, said that it was probable "that the tremendous rate of capital development did have an upward influence on costs and prices in that field". Mr. Courtland Elliott, when he appeared before us on behalf of the Canadian Chamber of Commerce, answering a question about the use of retained profits for capital expansion, said that he thought that

> "in any short period, particularly in a period of abnormal scarcities, the competition of business for scarce materials would have some effect on the price level. It should not be overlooked, however, (he went on) that business only makes these investments with a view to their productive use, and the productive use of such investments in past years has led to such technological advances and to such an improvement in the ways of production, particularly of war production, that whatever the temporary effect upon the price level might be, in the long run it has the effect of holding prices down".

The Relation of Investment to Inflation

When there is a supply of idle labour and productive capacity in the construction and machinery industry, increased expenditures for investment purposes may take place with little or no rise in prices. But when the increased demands are sudden and large the supply of resources already in the field may be inadequate to meet them. In such circumstances the industry will have to compete for a supply of materials and labour with other industries, and this is usually accompanied by rising prices. We discuss the specific way in which supply in the machinery and construction industries has adjusted itself to the post-war demands created by the substantial rise in investment expenditures in some detail, at a later point in this chapter.

In addition to the direct effects which an increase in investment expenditures may have on prices in the construction and machinery industry there are other and in many respects more important effects on price levels in general. These effects arise out of the special relation which investment expenditures bear to our economy. In analyzing this relationship it is convenient to distinguish between short-run and long-run effects.

In the short run any increase in the volume of investment expenditures results in an increase in income to which there corresponds no immediate flow of goods on the consumer market. When workers, business firms, or other groups attempt to spend this increased income there will be an increased demand for consumer goods. The effects of increased demand may be either an increase in the output of consumer goods or a rise in prices. At a time when there are unemployed workers and unused plants which can be put to work increasing the flow of consumer goods, these increased expenditures out of income earned in the production of investment goods are likely to result primarily in increased production. But in a period like the past few years when there has been little or no unemployment these increased incomes bidding for consumer goods result mainly in a rise in prices.

This effect of investment upon prices is directly related to our willingness to save part of our current income. These savings are only partially made by the same individuals or business firms that do the investing. In fact, the investment decisions, the decision of an individual to buy a new house or a business firm to build a new factory are often made quite independently of the decision to save part of current income. Although part of the investment may be financed out of current savings, a substantial part may also be paid for by drawing on past savings or by borrowing from the banks or other financial institutions. This means that some groups in society are spending more than their current income. Unless other groups save enough to offset this excess, the country as a whole will be trying to spend more than it is currently producing. If this occurs, the attempt to make these extra expenditures places an upward pressure on prices. In general, once the economy is fully employed, if investment expenditures just balance the amount of savings which all groups in society are prepared to make, prices are likely to stay at about the same level. If investment expenditures are greater than this, an attempt to make these expenditures will tend to force up the level of prices. On the other hand if investment expenditures fall short of the amount of savings which all groups in the economy are prepared to make, total expenditures will prove too small to maintain the existing price and income levels. The result will be a decline in prices or in production or in employment or in all three.

The data we examine below will show that the past few years have been years in which the investment expenditures made by business firms and individuals have consistently exceeded the amount which Canadians at existing price levels saved. The result was an upward pressure on prices.

There can be no assurance that investment expenditures will remain at a level which ensures both stable prices and adequate levels of employment. A survey of our history shows that private investment expenditures have been one of the most unstable elements in our economy, rising to high levels in periods of prosperity and falling to very low levels in periods of depression.

In the longer run also, investment expenditures bear an important relation to inflation. The increased quantity of capital equipment available, capital which incorporates the latest and most efficient production techniques, results in an increased flow of production. Both the increased quantity of capital per worker and its greater technical efficiency increase the average worker's productivity and reduce unit production costs. These gains in productivity have been and undoubtedly will continue to be an increasingly important factor in slowing up the rise in prices and will perhaps lead to an eventual decline as more and more of the factories and machinery come into production.

Definition of Investment

Before turning to an examination of the size and effects on prices of the investment program it is convenient to adopt a number of definitions for different components and types of investment. We define investment as the aggregate of all goods and services which add to the stock of durable physical assets held by producers and housing owned by consumers, which effect a net change in the level of inventories held by producers, and which result in a net change in foreign assets abroad held by Canadians. The first two mentioned flows of goods and services are called domestic gross investment or domestic gross capital formation, the third net investment abroad, and the sum of the three items total gross investment.[1] Our analysis is primarily concerned with the effects of domestic gross investment and only incidental reference is made to net investment abroad.[2]

Investment in durable physical assets consists of additions to buildings, installations, engineering works and machinery and equipment irrespective of whether these expenditures are made for entirely new projects or for the replacement or improvement of existing assets. Buildings cover those used by business, institutions, governments and as residences. The goods (and services) which are purchased for investment purposes are called capital goods. They are used in substantially the same form over an extended period of time. However, each year some of the productive value of these capital goods is used up or diminished either from production (wear and tear) or from the passage of time (obsolescence). Business attempts to allow for this reduction in value through depreciation charges. If this reduction in value of existing durable physical assets is deducted from current gross additions to the existing stock, a smaller quantity, called net investment in durable physical assets, is arrived at. Expenditures for capital goods involve a major outlay at the time of acquisition, but further investment expenditures are small until replacement or expansion becomes necessary. Consequently, the production of capital goods in any one year may be above or below the amounts used up, depending upon the current need for replacement and the apparent and foreseeable demand for increased capacity.

Investment in inventories is the change in stock of goods necessary for production and distribution purposes but not yet in the form or the location

[1]For a more detailed discussion of the concepts involved see Public Investment and Capital Formation, a study of Public and Private Investment in Canada, 1926-1941, Dominion-Provincial Conference on Reconstruction, Ottawa, 1945.
[2]Net investment abroad was $17 million in 1947, a negligible portion of the total investment of $2.9 billion.

in which these goods are finally used. Inventories must be kept on hand if there is to be a continuity of production and an efficient working of the distribution system. Inventories include such things as stocks of raw materials, work in progress and finished consumer and producer goods.

Quality of Statistical Data Used

As a result of the significant advance in the development of economic statistics in Canada in recent years, particularly in the field of the national accounts, sufficient evidence is available to present a picture of the role and behaviour of investment in Canada. However, since some of the estimates are based on scanty primary data, they can only be considered as first approximations. Estimates for 1948 are in all cases preliminary.

THE SIZE OF INVESTMENT EXPENDITURES

How large have domestic investment expenditures actually been in recent years?

The question may be answered in several ways. One way is to compare total domestic investment expenditures, (gross home investment) for a given period with the total available supply of goods and services. This total supply consists of Canada's current production as measured by "Gross National Expenditure" and "Gross National Product" plus our imports of goods and services.

TABLE 16

COMPARISON OF GROSS HOME INVESTMENT WITH GROSS SUPPLY OF GOODS AND SERVICES, CANADA, SELECTED YEARS, 1929-1948

(billions of dollars)

Year	Gross Supply of Goods and Services (amount)	Gross Home Investment Expenditures (amount)	Per Cent of Gross Home Investment to Gross Supply of Goods and Services
1929	7.9	1.1	14
1933	4.3	.1	3
1939	6.9	.9	13
1945	14.6	.6	4
1946	14.7	1.8	12
1947	17.0	2.9	17
1948	18.7	3.4	18

Sources: Dominion Bureau of Statistics, National Accounts, 1926-1947, Table 102. Preliminary estimates for 1948 from Economic Research Branch, Dept. of Reconstruction and Supply.

It appears from the foregoing table that Canadians spent in 1948 the largest amount they ever spent in any one year on new construction, the purchase of machinery and equipment and additions to inventories. But in order to view the situation in true perspective, it is necessary to carry the analysis somewhat further. First, it will be observed that even in 1948, investment expenditures absorbed only four per cent more of the gross supply of goods and services available than in 1929, the peak year of economic activity in the pre-war period.

Moreover, in 1948, inventories went up, absorbing some four per cent of the gross supply of goods and services, whereas in 1929 inventories hardly changed at all. So that, in terms of investment in durable physical assets, that is, new construction and the purchase of machinery and equipment, the investment boom of 1948 had much the same relative importance as the investment boom of 1929 (14 per cent). But this percentage does not allow for price changes of capital goods which occurred in this period. If allowance is made for this factor the ratio of investment in plant, equipment and housing to total gross supply of goods and services is reduced to 12 per cent for 1948, as compared with 14 per cent for 1929.

The recent investment boom is, of course, very much larger in absolute terms than any previous year, including 1929. After deducting the increase in inventories which occurred in 1948, the dollar value of investment in 1948 was more than double 1929. Making adjustment for the difference in price levels between the two years, 1948 investment expenditures in physical units were about one-third higher than in 1929. The following table is constructed to indicate the relative position in terms of both "current dollars", that is, actual dollars spent and in terms of "constant dollars", that is, after price changes have been eliminated.

TABLE 17

INDEX NUMBERS OF INVESTMENT IN DURABLE PHYSICAL ASSETS, CURRENT AND CONSTANT DOLLARS, CANADA, SELECTED YEARS, 1929-1948

(1939 = 100)

Year	Current Dollars	Constant Dollars
1929	165	152
1933	43	47
1939	100	100
1945	144	106
1946	203	143
1947	301	183
1948	374	197

Source: Economic Research Branch, Department of Reconstruction and Supply.

Another basis for judging the size of Canada's investment program is by comparison with the size of similar expenditures in the United States. Reasonably comparable data are available for non-government investment in durable physical assets in the two countries.

It is significant that over the past two decades, a larger portion of Canada's resources has been consistently devoted to investment than in the United States. With reference to the post-war period, there was very little difference in the relative importance of investment expenditures between the two countries in 1946. In 1947 and 1948, however, the investment boom assumed much greater relative importance in Canada than in the United States.

TABLE 18

NON-GOVERNMENT INVESTMENT IN DURABLE PHYSICAL ASSETS AS A PROPORTION OF GROSS NATIONAL EXPENDITURE, BY TYPE, CANADA AND UNITED STATES, SELECTED YEARS 1929-1948

(per cent)

Year	Manufacturing		Housing		Other		Total	
	Canada	United States	Canada	United States	Canada	United States	Canada	United States
1929	3.3	2.8	3.5	2.8	11.8	8.1	18.6	13.7
1933	1.2	1.4	1.4	.6	3.8	3.2	6.4	5.2
1939	1.9	2.1	2.1	2.4	5.9	5.0	9.9	9.5
1945	1.7	1.5	1.7	.4	4.0	2.9	7.4	4.8
1946	2.7	2.9	2.8	1.7	5.6	5.7	11.1	10.3
1947	3.8	3.2	3.4	2.3	8.0	7.0	15.2	12.5
1948	3.9	3.2	3.6	2.5	8.4	8.1	15.9	14.1

Source: Estimate for Canada, Department of Reconstruction and Supply and Dominion Bureau of Statistics. Estimates for the United States from the Survey of Current Business, United States Department of Commerce, July, 1947, (Supplement), February, 1948, and August, 1948.

Other information available to us showed, however, that the United States is devoting a larger share of resources to provide new machinery and equipment than is Canada. Consequently, our housing and other construction expenditures have been correspondingly larger in proportion to our resources.

Private and Public Investment Expenditures

Who has been making the investment expenditures and for what purpose? A significant division is between expenditures initiated by private individuals and organizations and those undertaken by governments. Let us look first at the gross figures (excluding inventories).

TABLE 19

INVESTMENT IN DURABLE PHYSICAL ASSETS, PRIVATE AND PUBLIC INVESTMENT, CANADA, SELECTED YEARS 1945 to 1948[a]

(millions of dollars)

Year	Private Investment	Public Investment	Total Investment	Public Investment as a Proportion of Total (per cent)
1945	832	316	1,148	27.5
1946	1,276	344	1,620	21.2
1947	1,901	498	2,399	20.8
1948	2,281	703	2,984	23.5

a) Data for years prior to 1945 not available.
Source: Economic Research Branch, Department of Reconstruction and Supply.

TABLE 20

INDEXES OF INVESTMENT IN DURABLE PHYSICAL ASSETS

(1939 = 100)

Year	Private Investment		Public Investment	
	Current Dollars	Constant Dollars	Current Dollars	Constant Dollars
1929	176	162	137	124
1933	41	45	47	52
1939	100	100	100	100
1945	144	106	142	105
1946	222	157	155	107
1947	330	202	224	134
1948	396	210	317	165

Source: Economic Research Branch, Department of Reconstruction and Supply.

More than three-quarters of post-war investment expenditures were initiated privately. It is worth noting, however, that not all of this private expenditure was privately financed. For example, 19 per cent of privately-built housing in 1947 was built with some government assistance. Looking more particularly at the post-war boom, it is significant that private expenditures have increased much more rapidly than public expenditures. In 1946, for example, public expenditures in dollar terms were 55 per cent above 1939, in 1947, 124 per cent above the same year, and in 1948, 217 per cent higher, whereas private investment expenditures were 122 per cent above 1939 in 1946, 230 per cent above in 1947, and 296 per cent above in 1948. The current volume of private investment is more than twice its pre-war level, while public investment is only up by two-thirds.

Business and Other Investment

Business investment differs from private investment by the inclusion of public utilities and government-owned corporations and by the exclusion of housing and institutional building. It is a measure of the investment being made to maintain and improve the productive capacity of the country. Non-business expenditure comprises housing, institutional and direct government building. A general indication of the relative importance of the two groups is given by the following table.

TABLE 21

INVESTMENT IN DURABLE PHYSICAL ASSETS, BUSINESS AND OTHER INVESTMENT, CANADA, 1945-1948[a]

(millions of dollars)

Year	Business Investment	Other Investment	Total Investment	Business Investment as a Proportion of Total Investment (per cent)
1945	570	578	1,148	49.7
1946	953	667	1,620	58.8
1947	1,486	913	2,399	61.9
1948	1,873	1,111	2,984	62.8

a) Data for years prior to 1946, not available.
Source: Economic Research Branch, Department of Reconstruction and Supply.

A study of the components of business investment shows that from 1945 to 1947, the two main driving forces were investment by manufacturing and by primary industries, including the construction industry. But the situation changed in 1948, with both these types of investment levelling off and two segments of investment, utilities and commercial, merchandising and service establishments pushing ahead to take a larger share of the total.

TABLE 22

INVESTMENT IN DURABLE PHYSICAL ASSETS, BUSINESS BY TYPE, CANADA, 1945-1948[a]

(millions of dollars)

Year	Manufacturing		Primary Industries and Construction Industry		Utilities		Commercial Merchandising and Services		Total Business Investment
	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount	Per Cent of Total	Amount
1945	196	34.4	170	29.8	121	21.2	83	14.6	570
1946	321	33.7	229	24.0	239	25.1	164	17.2	953
1947	513	34.5	369	24.8	371	25.0	233	15.7	1,486
1948	594	31.7	432	23.1	528	28.2	319	17.0	1,873

a) Data for years prior to 1945 not available.
Source: Economic Research Branch, Department of Reconstruction and Supply.

Investment in New Construction, Machinery and Equipment

Investment in durable physical assets may be subdivided further into (1) new construction such as factories, buildings, houses, bridges, and roads or (2) new machinery and equipment. Expenditures on new construction, major improvements and alterations represent currently about three-fifths of total investment in durable physical assets. Construction in 1948, was 83 per cent above the volume of 1939, while machinery and equipment were 117 per cent above their 1939 level in terms of constant dollars.

TABLE 23

INVESTMENT IN DURABLE PHYSICAL ASSETS, CONSTRUCTION AND MACHINERY AND EQUIPMENT, CANADA, 1945-1948[a]

(millions of dollars)

Year	New Construction and Major Improvements and Alterations	New Machinery and Equipment Purchases	Total
1945	706	442	1,148
1946	1,014	606	1,620
1947	1,359	1,040	2,399
1948	1,704	1,280	2,984

a) Data for years prior to 1945 not available.
Source: Economic Research Branch, Department of Reconstruction and Supply.

TABLE 24

INDEXES OF INVESTMENT IN DURABLE PHYSICAL ASSETS

(1939 = 100)

Year	New Construction and Major Improvements and Alterations		New Machinery and Equipment Purchases	
	Current Dollars	Constant Dollars	Current Dollars	Constant Dollars
1929	165	147	164	159
1933	49	54	35	37
1939	100	100	100	100
1945	150	110	135	101
1946	216	147	185	138
1947	289	168	317	205
1948	363	183	390	217

Source: Economic Research Branch, Department of Reconstruction and Supply.

Housing

More houses were built in 1947-1948, than in any two previous years. As the following table shows, Canada is currently building almost twice as many units as in 1939. Even if account is taken of changes in population, the results for 1948, 6.3 units per thousand population, are still considerably above the 4.3 units per thousand built in 1939. The demand for new houses does not depend on population increases alone but also on what is called in technical language "net family formation", that is, the number of new families formed minus the number of existing families dissolved or removed in any one year. Because of the high marriage rate in the war and post-war years and more lately the higher rate of immigration, the number of new families in Canada has increased substantially in the last decade. The current rate of family formation is over 50 per cent greater than it was before the war. Only in the last two years has the rate of housebuilding caught up with annual increase in the number of new families. Since the majority of these new families are looking for housing accommodation the present rate of housebuilding, remarkable as it has been, has done little so far to reduce the aggregate pressure for added and improved housing accommodation built up during the depressed 'thirties and the war period of the 'forties.

Investment in Inventories

Business firms have made substantial additions to the volume of goods held in inventories during the last three years. The most rapid increase occurred in the first full post-war year, with inventories continuing to increase in 1947 and 1948 but at a somewhat slower rate. Part of these increased stocks was necessary to provide working stocks for the increased production of peacetime commodities. Some part also went towards building up the stocks in wholesale and retail channels which had become depleted

TABLE 25

POPULATION, NET FAMILY FORMATION AND DWELLINGS BUILT, CANADA, SELECTED YEARS, 1939-1948

Year	Total Population as at Dec. 31, (thousands)	Net Family Formation (thousands)	Dwellings Built (thousands)	Number of Dwellings Built per 1,000 Population
1939	11,334	54	49	4.3
1943	12,229	59	49	4.0
1946	12,467	108[a]	67	5.4
1947	12,708	76	79	6.2
1948[b]	13,059	83	81	6.3

a) Including the arrival of 32,000 war brides.
b) Preliminary.
Source: Joint estimate by Economic Research Branch, Department of Reconstruction and Supply and Economic Research Department, Central Mortgage and Housing Corporation based on data supplied by the Dominion Bureau of Statistics.

during the war. Despite this general inventory accumulation there was little in the evidence presented before us of any deliberate withholding of stocks from the market in anticipation of a further rise in prices. Where inventories have been built up in substantial quantities this seems to have been more a result of output catching up with sales than a result of a deliberate policy of withholding goods. In general business men seem to have been following a cautious policy with respect to inventories.

Due to the higher prices now prevailing the value of inventories has, of course, risen a good deal more than the actual quantity of goods in stock.

TABLE 26

INVESTMENT IN INVENTORIES AS REFLECTED BY THE CURRENT VALUE OF PHYSICAL CHANGE, CANADA, SELECTED YEARS, 1929-1949

(millions of dollars)

Year	Business Inventories		Sub-Total	Farm Inventories			Total Inventories
	Non Agricultural Inventories[a]	Grain in Commercial Channels		Grain on Farms	Live Stock on Farms	Sub-Total	
1929	+ 125	+ 34	+ 159	− 144	—	− 144	+ 15
1933	− 73	+ 10	− 63	− 29	—	− 29	− 92
1939	+ 195	+ 127	+ 322	+ 34	+ 25	+ 59	+ 381
1945	+ 126	− 212	− 86	− 167	− 71	− 238	− 324
1946	+ 434	− 46	+ 388	+ 66	− 107	− 41	+ 347
1947	+ 391	+ 22	+ 413	− 74	− 26	− 100	+ 313

a) Includes Inventories of Farm Products held by manufacturing enterprises.
Source: Economic Research Branch, Department of Reconstruction and Supply.

INVESTMENT DEMAND AT THE END OF WORLD WAR II

In the 'thirties, investment in durable physical assets was about two-thirds of what it had been in the 'twenties. Investment in all sectors of the economy dropped to a very low level in 1933 and recovered slightly by 1937. However, while investment dropped, new inventions, new industrial techniques and a larger population were all creating a latent demand for new investment.

The outbreak of the war in 1939 effectively halted any significant investment which might have been made for civilian purposes, as a large part of the nation's resources was diverted to war production. Throughout the war, little building material and fewer workers could be spared to meet the need for civilian plant and equipment.

By 1945, therefore, Canada had accumulated a large volume of investment projects which were the result of the lack of replacement, modernization and expansion of the capital structure during the depression of the 'thirties and the low volume of investment for purely civilian purposes during the war.

Sources of Funds for Investment

Apart from an accumulation of demand, there was also an accumulation of liquid funds. In 1945, business firms and individuals held over $9 billion in Dominion government bonds and funds in the form of cash and bank deposits amounting to nearly $6 billion. Although these financial resources, more than two and one-half times as large as in 1939, were particularly important in 1945, the rise in prices reduced their effectiveness. At the end of 1948, the total of liquid funds was about the same as in 1945, though differing in composition but, by the end of 1948, this total was no larger in proportion to our Gross National Product than it had been in 1939. This is illustrated by the following table.

TABLE 27
BUSINESS AND INDIVIDUAL HOLDINGS OF DOMINION GOVERNMENT BONDS, INACTIVE NOTICE DEPOSITS AND MONEY SUPPLY, CANADA, SELECTED YEARS, 1939-1948
(As at December 31 in billions of dollars)

Item	1939	1945	1946	1947	1948
1. Business[a] and Individual Holdings of Dominion Government Bonds	2.8	9.2	8.4	8.0	7.5
2. Money Supply	1.4	3.5	4.0	3.9	4.2
Cash	0.3	1.1	1.1	1.1	1.2
Bank Deposits	1.1	2.4	2.9	2.8	3.0
3. Inactive Notice Deposits	1.5	2.4	2.9	3.1	3.4
4. Total (1) + (2) + (3)	5.7	15.1	15.3	15.0	15.1
5. Total (4) as a Per Cent of Gross National Product (per cent)	102	129	129	112	100

a) Excluding holdings by the chartered banks and life insurance companies but including small holdings of other types of financial institutions, investment dealers and some net purchases by foreigners.
Source: Data supplied by the Bank of Canada.

Thus the sum of these three forms of liquid assets, Dominion government bonds, inactive notice deposits and money supply, after rising to 129 per cent of Gross National Product in 1945 had, by the end of 1948, fallen back to about the same ratio that existed in 1939.

Account must also be taken of the high level of earnings of corporations and the large proportion of these earnings which has been retained in the form of undistributed profits. About 60 per cent of corporate profits after taxes have been retained by corporations during the past few years as compared with 44 per cent in 1939. In 1947, corporate undistributed profits plus depreciation allowances were sufficient to finance over one-half of the total private investment in plant, equipment, housing and inventories. For investment made by corporations alone, the proportion financed from these two sources is believed to have been substantially higher than this, but no exact estimates are available.

Where business firms were unable to finance capital expenditure out of their own financial resources they found conditions for borrowing in the first post-war years, on the whole, favourable. Not only were the chartered banks willing to lend for business purposes, but the low interest rate policy followed by the financial authorities made it possible to obtain funds on what must be regarded as favourable terms. Only in the stock market have conditions discouraged the raising of funds.

Some firming of interest rates occurred early in 1948 and this was coupled with a deliberate policy on the part of the banks, encouraged by the Bank of Canada, of limiting the extension of new loans. Though these deterrents have not prevented investment expenditures for 1948 from reaching their highest level on record, further expansion becomes increasingly difficult. Some data on interest rates and current loans of the chartered banks are given in the following table.

TABLE 28

SELECTED CREDIT AND INTEREST INDICATORS, CANADA, SELECTED YEARS, 1939-1948

(average month-end figures)

Item	1939	1945	1946	1947	1948
Current Public Loans in Canada by Chartered Banks, (millions of dollars)	855	1,100	1,223	1,693	1,935
Dominion of Canada Bonds, Payable in Canada only, Theoretical 15-year Bond Yield, (per cent)	3.16	2.93	2.61	2.57	2.92

Source: Data supplied by the Bank of Canada.

Another notable feature of the recent investment boom has been its almost complete reliance on domestic financing. This represents a contrast with past Canadian experience. In the 1896-1913 period of economic expansion, the volume of investment was financed to a large extent by substantial capital inflow directed particularly to the settlement and development of western Canada. In this period international capital movements, particularly from Great Britain, were the major source for financing economic development in Canada. During the late 'twenties the amount financed by international capital movement was not as important as in the earlier investment boom but still represented a significant portion of capital development.

While both the backlog of demand for capital goods and the funds available to finance these demands provide important explanations of the volume of investment expenditures, perhaps the most vital factor is the attitude of business men or individuals themselves. The business man's attitude towards investment is based on his appraisal of the economic outlook in general and the prospects for his firm in particular. In the final analysis it is the degree of business optimism which largely determines the course of private investment. It may be concluded from their behaviour that, throughout the post-war period, business men have held optimistic views of the future of the Canadian economy.

Private investment in housing is determined largely by the decisions of the individual consumer and here, too, demand has been keen. The pressing need for shelter seem to have provided incentives to build which have outweighed the deterrent effects of high construction costs and the risks which would surround a mortgagee in a possible subsequent period of falling prices and incomes.

The Adjustment of Supply to Increased Demand[1]

Under the impact of these post-war investment demands there has been a sharp expansion in the production of construction materials, in the supply of machinery and equipment and in the size of the construction industry itself. A large volume of imports from the United States, particularly in the field of machinery and equipment, also helped to meet Canada's rapidly expanding post-war demands. These expanded supplies were obtained only at the cost of a substantial rise in prices and, by mid-1948, investment costs were about twice those of 1939. Construction costs have risen between 107 and 117 per cent and machinery and equipment costs are up a little more than 80 per cent. Despite these price advances demand has continued to exceed supply in almost all lines of capital goods and building material.

Let us look at each of these developments in turn, beginning with the supply of basic materials.

Basic Materials

For a number of basic raw materials used by the capital goods industry, Canada is an exporter on a substantial scale and, for these, production during the post-war period was far in excess of domestic demand. Thus in

[1]The following sections are based on official statistics supplemented by special information obtained from various government departments.

1947 Canada exported 50 per cent or more of her output of lumber, asbestos, gypsum, copper, lead, zinc and nickel. Export controls continuing after the end of the war helped to keep sufficient quantities of basic materials at home to meet the most pressing domestic needs in the face of urgent foreign demands. Production of all these items increased substantially between 1939 and 1948 except in copper and lead.

In the case of four other primary materials, iron ore, coal, coke and steel, Canada depends on imports for a substantial portion of the total supply. Imports of coal and iron ore are about twice current domestic production while imports of steel mill forms in 1947 made up about 31 per cent of our total supply and imports of coke about 14 per cent. The increase in the import prices of each of these commodities has contributed to the rise in Canadian construction costs.

Steel is the only one of the above materials where Canada seems to face the prospect of a major continuing shortage. Canada's output of basic steel has doubled since 1939 and is currently about 3.2 million tons a year, equivalent to the peak war level of 1942. In spite of this significant increase in output which, in 1948, was supplemented by over 1.1 million tons of imports, demand has continued to exceed supplies. In 1949, with a reduction in imports from the United States, and a new demand on steel to provide for a military preparedness program, this shortage may become even more acute. Since steel is a basic material for a wide range of capital goods, this shortage can be expected to limit expansion both in the investment program and in the production of a number of durable consumer goods.

Construction Labour

A rapid increase in the construction labour force was one of the important factors which made possible a large expansion of the volume of construction. This increase occurred in two waves. The first was the return of veterans formerly in construction occupations and the entry of those who had learned a construction trade in the armed forces. Most of these men were absorbed into the construction labour force between 1945 and 1946, with the result that the number of employees in this industry, including independent tradesmen, rose by 56,000 in one year. In the second full post-war year, this source was reduced to a trickle, but veterans who were undergoing construction training, war workers formerly working in construction jobs, and an increase of immigrant construction workers, were sufficient to raise the labour force in 1947 by 24,000 over the 1946 level. The second wave came in 1948, when 41,000 men joined the construction labour force. They came from greater numbers of young apprentices who had completed their training, a trebling of immigrant construction workers, and, for the most part, a shift of manual labourers from lower-paying industries to the construction industry where wages were considered good and take-home pay was increased by overtime and special holiday rates. For 1948 as a whole, the available labour force averaged over 300,000, with a variation of about 100,000 between the peak and low point for the year. Many men would be working in other industries than construction in the off-season but would return to construction during the spring to autumn seasons. Data on employment and unemployment in the industry are given in the following table.

TABLE 29

EMPLOYMENT AND UNEMPLOYMENT IN THE CONSTRUCTION INDUSTRY, CANADA, 1945-1948

(annual averages)

Year	Employed	Unemployed	Total Labour Force
1945	171,000	13,000	184,000
1946	227,000	13,000	240,000
1947	252,000	12,000	264,000
1948	291,000	14,000	305,000

Source: Dominion Bureau of Statistics, Ottawa.

In over-all terms, the construction labour force increased by two-thirds between 1945 and 1948. But the increase in the supply of tradesmen was uneven, with the result that during 1948 shortages of skilled workers in some trades and certain areas persisted, with surpluses in other trades and different localities. In some measure the rapid increase in the size of the labour force was made possible by the entry of a large number of semi-skilled and unskilled men into the field.

Building Materials

Most of Canada's building materials are produced from Canadian raw materials and are manufactured in Canadian plants. The industry is closely geared to the domestic market and, with a few exceptions, is not either an important importer or exporter. The only major building material for which Canada depends almost entirely on imports is window glass, which is brought in mainly from the United Kingdom, United States, Belgium and Czechoslovakia. Except for structural steel, imports of other items are insignificant or non-existent. The volume of construction undertaken in the post-war period was, therefore, largely dependent on how rapidly the domestic building material industries could expand to meet the orders waiting to be filled.

When the war ended, the building materials industries were in a much stronger position than at the start of the war. Many of the industries had expanded to produce building materials for war plants and military installations. As these orders declined after the peak of the industrial war effort of 1943, favourable military events and decreasing war production orders in 1944 made it possible for these industries to plan and prepare for peacetime production for about a year to a year and a half before V-J Day. As a result, the building materials industries found themselves in a position to turn out a considerably larger volume of building products in

1945 than in 1939. Data on these increases in production for the period from 1939 to 1945 and for 1945 to 1948 are given in the following table.

TABLE 30

CHANGES IN THE PRODUCTION OF SELECTED BUILDING MATERIALS, CANADA, 1939-1948

(per cent)

Item	1939 to 1945	1945 to 1948[a]	1939 to 1948[a]
Lumber	+ 13.5	+ 17.0	+ 33.0
Cement	+ 36.7	+ 69.5	+131.6
Building Brick	+ 18.2	+ 64.4	+ 94.3
Structural Tile	+ 6.2	+ 94.5	+106.5
Rock Wool Batts	+278.5	+161.9	+891.3
Bulk Rock Wool	+200.0	+116.7	+550.0
Gypsum Wallboard	+ 71.4	+ 84.6	+216.4
Gypsum Plaster	− 4.0	+152.4	+142.4
Asphalt Shingles	+189.9	+ 39.7	+304.9
Smooth and Mineral-Surfaced Rolls	+ 84.6	+ 41.7	+161.5
Cast Iron Soil Pipe and Fittings	+ 12.1	+ 89.2	+112.1
Cast Iron Water Pipe and Fittings	+ 38.7	+ 52.5	+111.5
Steel Pipe and Fittings	+ 53.9	− 10.3	+ 38.1
Furnaces, Warm Air and Heating Boilers	+ 23.0	+ 53.7	+ 89.4
Cast Iron Radiators	+ 44.1	+ 11.4	+ 60.5
Electric Water Heaters	+148.7	+ 30.2	+223.9
Hot Water Storage Tanks (Range Boilers)	+ 33.1	+ 37.0	+ 82.2
Paints, Varnishes and Lacquers[b]	+ 48.4	− 4.9	+ 41.1
Wire Nails and Spikes	+ 5.3	+ 11.4	+ 17.3
Builders' Hardware[b]	+ 64.0[c]	+ 26.8[c]	+107.0[c]
Rigid Insulating Board	+ 67.9	+ 37.6	+131.2

a) Estimated.
b) Deflated series.
c) Data used for 1945 and 1948 are factory sales.
Source: Dominion Bureau of Statistics, Ottawa.

Great as the increases of output were in terms of pre-war measurements, they were inadequate to meet the large demand for building materials facing the industry in the post-war period. To cope with this demand, the industry expanded both its plants and its labour force. Between 1945, and 1947, the industry more than doubled its annual capital expenditures, and by 1948, the industry was spending at the rate of three times the outlay made in 1945. The labour force of the building materials industry increased steadily. From 84,000 employed in 1946, the working force was 98,000 in 1947, an increase of 16 per cent. In 1948, employment in these industries was well over the 100,000 mark, a further increase of about 10 per cent. This large expansion began to yield results in 1947 and by 1948, when peak output had been reached, surpluses appeared in a few lines.

Although for most building materials, imports added little to the over-all supply, the proximity of the great industrial potential of the United States made it possible for Canadian consumers of building materials to obtain an increased supply of selected items at times when domestic shortages were particularly pressing. This frequently meant that projects which had been held up, say because of shortages of nails or gypsum plaster, could be completed much sooner than would have been possible had the building material user waited his turn for domestic supplies. This increased buying abroad of building materials which were in short supply in Canada, was of particular significance in 1946 and 1947, and helped overcome some of the construction industry's worst bottlenecks.

Despite these substantial gains, the demand for building materials in the post-war period has consistently exceeded the supply. Early in 1948, supply had caught up with demand in a few lines, but, at the end of the year, there were still many shortages and for the construction industry as a whole, the supply of most items represented an important limiting factor on the volume of work that was undertaken. Some of the items for which the shortage at the end of 1948 was still severe were plumbing equipment and fixtures, range boilers, galvanized and other pipe, soil pipe, cement, nails, wallboard and lath, furnaces and flooring. Many of the larger construction firms are currently working at or near capacity and have orders on hand which will keep them at work for a year or more.

More than one-quarter of the capital expenditures currently made in Canada on machinery and equipment are made on imports. In addition Canada's own machinery industry uses a substantial amount of imported materials, parts and supplies.

The demand for foreign produced machinery and equipment varies greatly, depending on the type of investment projects. A study of the machinery and equipment purchases of 23 groups of manufacturing industries showed that 13 groups depended on foreign manufactured machinery and equipment to the extent of 25 to 50 per cent of their total outlay. Only in six industrial groups was the proportion less than 25 per cent. In the remaining four groups the proportion exceeded 50 per cent.

Imports of machinery and equipment from abroad amounted to some $360 million in 1947, the highest on record for any peacetime period. These imports were two and a half times the value or almost twice the volume of 1929, and five times the value or two and a half times the volume of 1939. From 1945, to 1947, imports increased at the rate of about 40 per cent per annum and were mainly from the United States.

TABLE 31

IMPORTS OF FOREIGN COMPLETED MACHINERY AND EQUIPMENT, CURRENT AND CONSTANT DOLLARS, CANADA, SELECTED YEARS, 1929-1948

(millions of dollars)

Year	Current Dollars	Constant Dollars
1929	132	128
1933	19	20
1939	77	77
1945	167	124
1946	235	166
1947	360	223
1948	370	210

Source: Economic Research Branch, Department of Reconstruction and Supply.

In the three years following the end of the war Canada's own machinery and equipment industry, readjusted to the growing peacetime demand of Canadian industry, turned out an increasing volume of machinery and equipment, with most of the increases achieved going into domestic investment. As a result of this shift towards greater dependence on domestic production, the ratio of imports of foreign produced machinery and equipment, which had been 35 per cent in 1946, and 33 per cent in 1947, was down to about 27 per cent in 1948.

TABLE 32

PRODUCTION OF SELECTED MACHINERY AND EQUIPMENT INDUSTRIES[a] CURRENT AND CONSTANT DOLLARS, CANADA, SELECTED YEARS, 1929-1948

(millions of dollars)

Year	Current Dollars	Constant Dollars
1929	417.1	382.6
1933	119.4	120.3
1939	274.1	267.7
1945	859.5	645.7
1946	749.7	567.5
1947	962.4	622.7
1948	1,150.0	678.0

a) The principle of selection was to choose machinery and equipment industries concerned to a large extent in meeting domestic requirements for private capital expenditures. The industries covered include electrical appliances, machinery, railway rolling stock, sheet metal products, agricultural implements and other iron and steel products.

Source: Dominion Bureau of Statistics, Ottawa, and Economic Research Branch, Department of Reconstruction and Supply.

Price Increases in the Capital Goods Industry

The rapid expansion in the supply of capital goods under the impact of high level of investment demands has been accompanied by a sharp advance in prices. By mid-1948, wholesale prices of construction and building materials had risen 53 per cent since 1945, and were up 118 per cent over their level in 1939. At the same date wage rates in the construction industry were up about 31 per cent over 1945, and about 71 per cent over 1939. A weighted average of these two shows an increase in construction costs of about 43 per cent since 1945, and about 97 per cent since 1939. This, of course, makes no allowance for changes in the efficiency with which labour and materials are used or for variations in contractors' profits both of which are important factors in final costs. The effect of these two factors on construction costs is discussed below. Data on machinery and equipment prices are less reliable than in other fields, but some evidence suggests that costs here are up about 80 per cent over their 1939 level.

For building materials the amount of price rise has been subject to a good deal of variation as between different types of material. This is shown in the Table 33.

TABLE 33

INDEX NUMBERS OF WHOLESALE PRICES OF BUILDING AND CONSTRUCTION MATERIALS, SELECTED YEARS, CANADA

(1939 = 100)

	1945	1946	1947	1948 (July)
Lumber	170.7	181.3	233.1	283.8
Paint Materials	125.0	130.9	186.3	211.3
Structural Steel Shapes	123.7	137.1	144.5	161.9
Wire Nails	100.0	115.5	129.7	142.7
Clay and Allied Products	121.3	130.0	147.7	154.2
Plaster	105.7	105.7	107.4	116.0
Building Stone	110.1	110.3	121.0	124.7
Cement	109.0	108.7	114.4	129.1
Total Building Materials	141.9	150.3	185.5	217.8

Source: Dominion Bureau of Statistics, Ottawa.

The sharpest advance in price was registered by lumber, up 184 per cent since 1939.[1] In contrast cement is up by only 29 per cent, building stone by 25 per cent, and plaster by 16 per cent over their 1939 levels. Structural steel, too, with a rise since 1939 of 62 per cent, has increased considerably less than the average of all prices. Thus the extent to which construction costs have risen may vary a good deal depending on the type of project undertaken. In a project where the major materials are steel and cement, the rise in cost has been a good deal less than for some other items, such as houses, which use a substantial proportion of lumber.

The increase in wage rates of the construction worker since 1939, 71 per cent, is considerably below the general average of 94 per cent. Earnings of construction workers, however, have risen more rapidly than wage rates would suggest, because of the fact that construction workers in times of high levels of employment increase their earnings by overtime and holiday work, with rates one and a half times to twice the prevailing rates. In addition, the fairly common practice during the war and immediate post-war period of paying skilled workman wages to semi-and unskilled construction workers contributed to the increase in the average annual earnings.

The increases in prices of building materials and wage rates of construction labour which have occurred since 1939 are of about the same magnitude as those that occurred during and after the first World War. Between 1913 and the middle of 1920, when prices turned downwards, wholesale prices of building materials rose by 115 per cent. This is slightly less than the increase of 118 per cent which occurred between 1939 and July, 1948. Wage rates of construction labour, however, were faster in their upward movement during and after the first World War (81 per cent) than during and after the second World War (71 per cent). By April, 1920, prices in the construction field had pretty much reached their

[1] Cf. Chapter 11, Vol. III, The Lumber Industry.

peak and a downturn set in, slowly at first for the remainder of 1920, but more rapidly in 1921.

On a relative basis, building material prices have shifted upward since 1920 in comparison with the general level of prices. The index of wholesale prices of building material is now more than one-third higher than the peak reached in 1920 whereas the general index of wholesale prices is still below its previous high. The reverse is true of construction wage rates. In comparison with 1920 they have shown a somewhat smaller increase (61 per cent) than has the general index (81 per cent).

In explaining the reason for the price rises in this field it is necessary to discuss briefly the way in which purchasers have reacted to these price increases and the nature of the market for capital goods. Since most capital goods are expected to last over a long period of time the original cost should be an important consideration in determining the time of purchase. Business firms will be hesitant to buy at high prices if they expect construction costs to fall within a few years enabling their competitors to build at lower prices. Similarly, individuals will be hesitant to build new houses if they expect more favorable prices within a year or two. This consideration will be more important in large projects and projects which are expected to be in use for a long period of time. Notwithstanding this, investment demands have not only remained strong but have shown a tendency to increase in the face of rising construction costs and rising prices for machinery and equipment. There are several possible explanations for this. It may indicate a doubt that investment costs will fall sufficiently and in a short enough time to justify waiting. Building immediately has important advantages; the project will at once begin to earn an attractive rate of return. It will also enable the firm to maintain its competitive position in the field. In addition, most firms have found themselves able to finance their investments without too much difficulty. A study of our past history indicates that the majority of new investments are made in periods of prosperity (and are of course one important cause of the prosperity) when construction costs are relatively high rather than in periods of depression when costs are lower. This would seem to indicate that in the timing of investments, the degree of business optimism, the level of earnings, and the ease of financing have generally outweighed considerations of cost.

The competitive nature of the market which supplies capital goods varies a good deal. In some instances, the market is quite competitive. In others, one or two firms may have an almost complete monopoly (cement). Exports are extremely important in some cases (lumber) and imports in others (machinery). Again some commodities may be produced in a few areas and sold on a national market (electric motors) whereas for others transport costs may limit the supply to a relatively small area (bricks), leading frequently to local monopolies. In general, for most types of machinery and equipment there are only a few large suppliers, but competition in this field is increased by imports, chiefly from the United States. In 1948, imports of completed machinery and equipment formed about

27 per cent of Canada's investment in machinery and equipment. A similar domestic supply situation, that is, a few large producers for each commodity, exists for quite a large number of construction materials. Because steel is such an important material both in construction and for the machinery and equipment industry its price has an important effect on investment costs. Steel also is supplied by a relatively small number of producers both in Canada and the United States. The lumber industry in most areas is fairly competitive but is affected substantially by the export market.

This variation in the degree of competition in different sections of the market partially explains the extreme divergence in the amount of price rise shown by different construction materials. There is some evidence that industries where some degree of monopoly exists have maintained more rigid price policies, limiting the amount of price advance in times of prosperity and the amount of price decline during a period of depression.

The eight per cent sales tax on machinery and building materials was removed in the fall of 1945 so that the amount of price rise to the producer actually includes this eight per cent in addition to the rise shown by the official index. Price control is still retained on a number of types of steel and inter-company shipments have been subsidized in order to maintain maximum use of rolling mill capacity.[1]

According to some sources, investment costs have also been increased by a decline in the efficiency of labour and management on the construction project and by an increase in contractors' profits. Quantitatively the effects are difficult to assess. As an indication of the order of magnitude, a special study undertaken in early 1948 found that these factors had added from 10 to 20 per cent to construction costs of housing.[2]

Adding the above-mentioned allowance for extra costs to increases in prices of building materials and construction wage rates, it is estimated that total construction costs were up between 107 and 117 per cent by mid-1948 as compared with 1939. This increase is almost as high as the construction cost increases which occurred in the United States. According to the Department of Commerce composite construction cost index, by July, 1948, American costs were 116 per cent above the average for 1939. Similarly, construction costs in the United Kingdom in 1948 appeared to be considerably more than twice the costs in 1939.

The Effects of Investment Expenditures on the Price Level

Investment expenditures, in addition to bidding up prices in the capital goods industry, may effect prices indirectly throughout the economy. This is likely to occur only when the economy's resources are fully or almost fully employed. At such a time, if investment expenditures exceed the amount which all groups in the economy are prepared to save at that level of prices, the result will be an upward pressure on prices, but no one can state categorically whether the excess demand arises from an excess of investment or a deficiency of saving.

[1] Cf. Chapter 3, II, Price Control and Rationing.
[2] See Housing in Canada, July, 1948. Central Mortgage and Housing Corporation, Ottawa, p. 22.

Statistics on the composition of savings and investment provide some data on this question. The following tables show the various sources of savings in Canada and uses to which these have been put in the last few years.

TABLE 34

A. SOURCES OF SAVING, CANADA, SELECTED YEARS, 1939-1947[a]

(millions of dollars)

Item	1939	1944	1945	1946	1947[b]
Personal Saving	320	1,738	1,368	961	605
Depreciation Allowance	582	863	785	846	928
Undistributed Corporation Profits	219	334	386	411	608
Government Surplus	—	—	—	—	932
Undistributed Wheat Board Surplus	—	− 19	64	37	57
Inventory Revaluation Adjustment[c]	− 56	− 2	− 2	− 8	− 18
Residual Error of Estimate	− 10	+189	+170	− 9	−106
Total	1,055	3,103	2,771	2,238	3,006

B. DISPOSITION OF SAVING, CANADA, SELECTED YEARS, 1939-1947[a]

(millions of dollars)

Item	1939	1944	1945	1946	1947[b]
Gross Home Investment	881	674	565	1,788	2,884
Net Foreign Investment	123	27	683	326	17
Government Deficit	42	2,591	1,694	116	—
Residual Error of Estimate	9	189	171	8	105
Total	1,055	3,103	2,771	2,238	3,006

a) In this table gross home investment includes all private investment in plant, equipment, housing and inventories. Net foreign investment represents the excess of privately financed exports of goods and services over imports. Government deficit or surplus is the difference between government revenues and expenditures (on the basis used in the national accounts). Government deficit is treated as a use of saving while the government saving has been regarded as one form of saving. The residual error of estimate arises from the independent estimation of the same total with two different methods and reflects the imperfections in the basic statistical materials.
b) Preliminary.
c) This adjustment has been made only to grain held in commercial channels.
Source: Dominion Bureau of Statistics, Ottawa.

During the period 1939 to 1946, individuals and business saved more than was used domestically for investment purposes. The balance was absorbed by an increase in net foreign investment and by government deficits. The government deficits helped to finance large military expenditures during the war and reconversion and rehabilitation expenditures during the immediate post-war period. By 1947, however, gross home investment had replaced government expenditures as the major demand for savings. The government deficit had turned into a surplus and net foreign investment ceased. The prime source for investment was business savings in undistributed corporate profits and depreciation allowances, while personal savings contributed only about one-fifth of the total. There is reason to believe that this situation has continued into 1948.[1]

[1]Cf. Chapter 6, Fiscal and Monetary Policy.

Government Policies and Investment

What attitude has been taken and what policies have been followed by the Dominion government with respect to investment during the post-war period?

The principles underlying its policies find their most complete expression in two documents: the White Paper on "Employment and Income with Special Reference to the Initial Period of Reconstruction (April, 1945) and the "Proposals of the Government of Canada to the Provinces on the occasion of the Dominion-Provincial Conference on Reconstruction" (August, 1945).

According to these documents one of the government's primary objectives has been to maintain the high levels of production, income, and employment achieved during the war years. This was to be accomplished within the framework of a "free enterprise" society. Recognizing the fluctuations that have taken place in the Canadian economy during the past, the government's view was that the best way to achieve this would be through offsetting or compensating for the forces that make for extremes. The initial post-war problem was to replace the large government expenditures upon which the wartime economy was based. To this end, the government's policy was directed toward the expansion and stabilization of expenditures having their source in exports, private investment and public investment.

As part of this program, the Dominion government stated that it was its intention to use public investment to help in compensating for fluctuations in private investment. It was the declared intention of the government to institute a system of managing its capital expenditures so that they would contribute to the maximum to the improvement and stabilization of employment and income.

It was recognized that the Dominion government was only one contributor to the total public investment expenditures made in Canada. Co-operation between the Dominion and provinces was therefore considered essential to produce a public investment program of sufficient size to be used as an instrument for moderating cyclical fluctuations. However, a co-ordinated public investment program has not yet been developed.

Volume of Public Investment

Since the end of the war the stated policy of the Dominion government has been to defer postponable public works projects. It has also expressed the hope that a similar policy would be followed by other levels of government.[1]

[1] "In the case of the Dominion government, we have deliberately endeavoured to keep this increase (i.e. in post-war expenditures on supplies and services) to the minimum required by urgent post-war projects, and in particular we have pruned our public works and other construction programs drastically in order to avoid demands on building materials and building labour urgently required for housing. I hope that provinces and municipalities will find themselves able to follow a similar policy." Minister of Finance House of Commons Debates, June 27, 1946.

Actual expenditures by various levels of government are shown in the following table for a series of years.

TABLE 35

DIRECT GOVERNMENT EXPENDITURES[a] ON NEW DURABLE PHYSICAL ASSETS, CURRENT AND CONSTANT DOLLARS, CANADA, SELECTED YEARS, 1929-1948

(millions of dollars)

Year	Dominion Government	Provincial Governments	Municipal Governments	All Governments
Current Dollars				
1929	53	54	47	154
1933	23	24	33	80
1939	34	92	39	165
1945	141	48	47	236
1946	36	89	69	194
1947	57	143	84	284
1948[b]	57	151	95	303
Constant Dollars				
1929	48	48	42	138
1933	25	27	36	88
1939	34	92	39	165
1945	105	36	35	176
1946	25	61	48	134
1947	35	84	48	168
1948[b]	30	77	49	156

a) Excluding government-operated institutions and government-built housing.
b) Preliminary estimate.
Source: Economic Research Branch, Department of Reconstruction and Supply.

These data indicate that investment expenditures of municipal and provincial governments have expanded somewhat more than those of the Dominion government during the post-war period. To some extent this reflects a high degree of urgency for such projects as new hospitals and schools. Even so, as already pointed out, capital expenditures by governments have not expanded at anything like the rate of private capital expenditures. Eliminating the price rise, the physical quantity of new durable assets acquired by governments was probably lower in 1948 than in 1939.

Policies Related to Private Investment

We turn now to the steps taken by the Dominion government to influence the level of private investment in the post-war period.

To begin with, steps were taken to facilitate the liquidation of wartime obligations and the war-created industrial structure through cancellation and settlement of oustanding war contracts, renegotiation of completed war contracts, disposal of government-owned war materials, stores, plant and equipment in excess of peacetime needs, and the winding up or reconstitution of Crown companies established during the war.

A number of direct fiscal incentives were adopted to encourage industrial expansion pending the revision of the over-all restrictive wartime tax structure. Such fiscal aids included the privilege of writing back or carrying forward losses to allow business firms to approach more nearly to an average profit basis for taxation purposes; the granting of a flat tax rate for the first year of operation of newly-established companies, thus exempting them in part from the full taxation load under the Excess Profits Tax Act; tax concessions to encourage the exploration and drilling for oil and the exploration and prospecting for base metals and strategic minerals; permission to write off current expenditures for research in the year of expenditure and capital expenditures over a three-year period; removal of indirect taxes on machinery and building materials; and provision for special depreciation on new investment in industrial plant and equipment of a type that would speed up the process of industrial adaptation in the transition period.

The high level of wartime taxation was gradually reduced to provide incentive for increased production. The low interest rate policy was continued.

At the same time, two other measures taken by the government in the first post-war year were designed to exercise a restraining influence on the effects of increased investment demands. The transfer of government-owned war plants to Canadian industry for peacetime use meant that the industries whose needs were met did not have to build new or expand existing plants. The sale to Canadian industry of large supplies of machinery and equipment accumulated during the war meant that orders for new machinery and equipment were lower than they otherwise would have been.

Before long it became apparent that reconversion was proceeding more rapidly and with less unemployment than had been expected. Investment expenditures increased rapidly and, together with exports and consumer expenditures, easily took up the slack caused by the dropping off in government war expenditures.

Consequently, the federal authorities took some measures designed to restrain the level of private investment expenditures. Interest rates were increased slightly early in 1948 although this was not expected to have more than mildly restraining influence on the high level of capital expenditures. The Bank of Canada encouraged the chartered banks to restrain loans for capital purposes.[1]

All projects on which a claim for special depreciation noted above was to be made must be completed by March, 1949. Also the steps taken under the Emergency Exchange Conservation Act had the incidental effect of restricting the import of capital goods and probably tended to check the volume of investment. Preliminary evidence indicates that imports of capital goods during 1948 under this Act have been kept at about the 1947 level in dollar terms. Because of the increase in prices since 1947, this indicates some decline in the volume of these imports.

[1]Cf. Chapter 6, Fiscal and Monetary Policy.

The Special Case of Housing

The Dominion government's housing policy deserves special consideration for it differed in many respects from its policy towards other forms of both private and public investment.

In the first place, it engaged in a relatively large-scale program of public housing. This took several forms. During wartime about 19,000 dwellings were built to rent to munitions workers by the Crown Company, Wartime Housing Limited. After the war direct building was continued, the primary purpose being the provision of low-rental housing for veterans and their families. Since 1945, an additional 19,000 veterans' houses have been built under this program, involving expenditures in the neighborhood of $100 million. The venture of the insurance companies into the building field through Housing Enterprises Limited, although undertaken initially by private enterprise, may be included in the federal housing building program for it was largely financed by government funds and was eventually taken over. This covered the erection of over 3,300 dwellings. In addition the Dominion government has been building houses for rental to married service personnel and has participated in a program to provide emergency shelter.

Financial assistance also took several forms. The Veterans' Land Act included assistance for veterans who desired to build houses on small holdings. Under the National Housing Act, loans and partial guarantees were provided for ownership and rental housing, and a form of rental insurance was offered to encourage the building of rental housing projects. Special depreciation for new rental housing falls into the same category.[1,2]

SUMMARY AND CONCLUSIONS

In the light of the preceding analysis how much responsibility can be attributed to domestic investment expenditures for the recent rise in prices in Canada? Clearly enough, these expenditures were very large in both dollar amounts and physical terms, exceeding any previous period in our history. Yet they absorbed about the same share of the available goods and services as in 1929 when investment went forward without any important rise in the general price level. In fact, the volume of investment in plant, equipment and housing absorbed a slightly smaller proportion.

The only firm conclusion that can be reached therefore is that domestic investment expenditures plus other expenditures (consumption and exports) within Canada were too large in total to be made without upward pressure on the price level. It was a case of trying to do too much of too many things at one time. Moreover, even if competing demands had been on a smaller scale, there would have been sharp increases in construction costs and prices of capital goods generally because of the

[1] A description of the various housing programs under way, can be obtained from the Annual Reports of the Central Mortgage and Housing Corporation to the Minister of Reconstruction and Supply for 1946 and 1947. A statistical measurement of the progress made so far is contained in Housing in Canada, July, 1948, and preceding issues.

[2] Various provincial governments also provided financial assistance for housing.

impact of the greatly increased demands upon a capital goods industry that was not equipped at the end of the war to handle with its previous efficiency such a large volume of business.

On the whole, investment expenditures by government, apart from housing, were not responsible for much of the increased demand. This is indicated most clearly by the fact that these expenditures in the post-war period have not been larger in physical terms than in the years immediately preceding the outbreak of war. The Dominion government appears to have adhered fairly well to its stated policy of deferring postponable projects. Provincial and municipal expenditures on public works have been relatively larger but we cannot say that they have been excessive considering the urgency of some of the demands such as those for schools, hospitals, etc.

The chief elements in the investment boom were therefore the high level of business investment expenditures and housing construction. To a significant extent the Dominion government itself is responsible by its own housing program and its priority and financial assistance to private builders, supplemented by some provincial help, for the large volume of new housing. Without this government intervention it is unlikely that as large a proportion of labour, materials and equipment would have been devoted to house building during the period since the end of the war. However, we doubt whether any other aspect of government policy in the post-war period had greater public support.

Business investment in new plant and equipment was high, primarily because of the desire to make good the deficiencies which accumulated during the pre-war depression and the period of the war and to enlarge productive capacity to meet the anticipated high level of post-war demand for consumers goods and exports, and, to some extent, it would appear, also because financial conditions were favourable. There was a coincidence of desire to expand, availability of the necessary funds and some positive encouragement from the authorities.

That there should have been a large scale expansion in the productive capacity of the country can hardly be questioned. The crucial point is whether or not such a large program should have been concentrated into such a short period when other demands were competing for resources. The objective for which we should aim is not only a high standard of living but a reasonable degree of stability. We shall not presume to say that recent investment expenditures have been on too high a level, for only time will tell if this is so. It is reasonable to assume, however, that there seems to have been a good deal more concern about a possible deficiency of demand in the post-war period than of possible excess of demand. In Canada, as in the United States, to quote Professor Jacob Viner, "recollections of the Great Depression of the 1930's and of the lesser and shorter depression after the first World War, moreover, cast a spell over all thinking in this field, and breed caution lest in ending a prosperous inflation, the prosperity also should be ended."[1]

[1]Jacob Viner, "Can We Check Inflation?" The Yale Review, December, 1947, No. 2, p. 208.

Finally, while it is evident that our desire to make investment expenditures on a large scale at the same time as we were bidding for resources for other purposes has contributed to rising prices, it is very difficult to determine how important this factor has been in relation to other price raising factors that were at work in the economy. As we have pointed out elsewhere, strong upward pressures were placed on Canadian prices by the rapid increases in prices in markets to which we sell and from which we buy. Canadian prices would have responded to these external pressures in any event. Probably the most that can be said is that if investment expenditures had been on a smaller scale, external influences would not have spread through the economy as rapidly as they did and construction costs would not have risen so high in relation to prices generally. Furthermore, external influences not only affected prices in Canada through imports and exports, but played their part in the generation of the investment boom. True, there was no great influx of capital such as occurred early in the century and again in the twenties; on the contrary, as we have noted, this investment boom has been financed almost wholly from Canadian sources. Nonetheless, external demands for Canadian goods, new methods and ideas originating abroad and the example and effect of the United States boom have played no small part in spurring Canadian investment.

6

FISCAL AND MONETARY POLICY

WE turn from a consideration of direct controls to the other major type of action through which the government was in a position to influence economic activity and the level of prices, namely, fiscal and monetary action. But first a few words of explanation.

At the outset it may be well to clarify one general point which could be the cause of some misunderstanding if it is not dealt with specifically. Government spending, taxing, borrowing and debt repayment can be looked at from two points of view. Primarily governments spend money to provide services that the public wants. They tax to raise the necessary revenues and to repay debt. They borrow, as any individual or corporation borrows, to raise capital for projects of a durable character or to meet temporary or extraordinary expenses such as arise in wartime. But these government operations also have effects on economic activity. We shall be concerned more especially with these economic effects. Nevertheless, while most of our discussion will be along these lines, it should not be concluded that we are unaware of the primary purpose of spending, taxing, borrowing and debt repayment. Whatever other effects it may have, a tax is primarily a means of paying government expenses. Equally, a budget surplus arising from an excess of revenues over expenditures, while it will be examined in terms of its effect as an anti-inflationary measure, is after all simply a means of reducing the public debt and thereby reducing future interest charges on the public exchequer.

Fiscal action is concerned with the spending, taxing and borrowing activities of the government. Monetary action is concerned with the activities of the government and the central bank, usually referred to as the monetary authorities, designed to influence the total supply of currency and bank deposits in the hands of the public.

The government buys goods and services; for example, it buys steel for public works and it pays salaries to civil servants. It also invests; that is, it lends money to individuals, business men and other governments which is repayable at some future time but which enables the borrower to spend now. This is not, in the Canadian budgetary sense, government spending, but it has much the same economic effects. The government also makes "transfer" payments such as family allowances and payments to the province under the taxation agreements. These add to the spendable income of the recipients. On the other hand, the government collects taxes.

Government spending, therefore, adds directly to the total demand for goods and services or puts money into the hands of others which may be spent. Government taxing, on the other hand, while its primary purpose is to raise revenues to pay government expenses, incidentally reduces disposable incomes and money holdings out of which individuals and businesses can spend. There are other effects which we shall leave for later discussion.

To the extent that tax receipts and other revenues fall short of total expenditure, including investment, the government has to borrow. It can borrow so as to transfer existing money from the general public to the government, for example, by the sale to John Jones of a government bond paid for by a cheque drawn on his bank account. Or, it may borrow from the chartered banks or the Bank of Canada in such a way as to add to the total money supply, for example, by the creation of a new deposit in favour of the government rather than the transfer of an existing deposit from one account to another.

To the extent that tax receipts and other revenues exceed total expenditure, including investment, the government has received more money from the public than it has spent. The initial effect of a surplus besides reducing the public debt is, therefore, to restrain public spending. But what is done with the surplus may also have an effect. For example, repayment of publicly-held debt gives the former holders of the redeemed bonds more cash which they can spend themselves or turn over to others for spending. Repayment of debt held by the chartered banks simply results in a simultaneous reduction in their assets (investments) and their liabilities (deposits). If the surplus is accumulated, that is, turned over to the Bank of Canada, it withdraws cash from the banking system just as would a sale of securities in open market operations (see below).

How the government finances its operations and manages its debt therefore affects the total money supply, that is, the amount of currency and active bank deposits held by the public. Apart from this, however, the financial authorities are in a position to influence the money supply by exerting a general influence upon the supply, cost and availability of cash reserves to the chartered banks. This, as has been said, is referred to as monetary action.

The Canadian chartered banks, like banks everywhere, keep a certain amount of cash on hand to meet the demands of their depositors; they are required by law to do so but the customary reserve ratio (that is the ratio of cash to deposits) is higher than the legal minimum. The volume of money, most of which is in the form of bank deposits, is therefore directly related to the amount of the cash reserves of the banks. If the amount of cash were strictly limited there would be a point beyond which the money supply could not expand. In fact, however, the supply of cash can be increased. The chartered banks can obtain more by borrowing from the Bank of Canada, although transactions of this type have been rare. More cash will also become available to the system if the Bank of Canada buys securities on the market and conversely, of course, less will be available if it sells securities; these are known as "open market operations". It does not matter whether the Bank of Canada buys the securities directly from the chartered banks or from other sellers; in either case the additional cash ultimately gets into the banking system.

The instruments of monetary policy are therefore the so-called rediscount rate, at which the Bank of Canada is prepared to lend to the chartered banks, and the buying and selling of government bonds. Negligible use has been made of rediscounting facilities, so that for all practical purposes monetary policy finds its expression in open market operations.

Inflation is always accompanied by, and is sometimes caused by, an increase either in the supply of money or in the rate at which the existing supply of money is being spent. Through monetary action, the monetary authorities can operate on the banks to restrain an increase in the supply of money, if not the rate of spending, either by withdrawing cash from the system through selling government bonds or by refusing to buy bonds when attempts are made to sell them on the market. The effect of either action when the public does not desire to increase its holdings of government bonds is a drop in the price of government bonds and, in due course, of other forms of interest-paying securities or, as it is usually expressed, a rise in the rate of interest.

With these few words of explanation, we turn to the history of fiscal and monetary policy during the period under review.

Pre-War Position

Gradual recovery from the great depression was accompanied and assisted in Canada, as in many other countries, by monetary measures in the form of low interest rates and a rising money supply. This constituted the traditional approach of many years standing to the problems of depression, but as the Minister of Finance said in April, 1939:

> "While we have been endeavouring to use monetary policy to the fullest possible extent as an instrument of economic recovery, we have always realized that monetary policy alone was not sufficient to solve our problems under present world conditions—that it is a tonic but not a cure-all."

Additional measures were considered necessary to restore a high level of capital investment and employment, and with these in mind, there was a growing consciousness of the influence of tax measures on business conditions. Income tax exemptions were given for new metalliferous mines, and there was a temporary extension of the principle to all industry by which it was provided that 10 per cent of the expenditures on new plant and equipment during the following fiscal year might be used as a credit against income tax over the following three years.

With the outbreak of war it became the judgment of the government that the primary problem would before long become a shortage rather than a surplus of manpower and productive facilities. Concern with the difficulty of maintaining a high level of employment did not re-emerge in official statements until towards the end of the war. When it did, as in the White Paper on Employment and Income of April, 1945, and the federal proposals to the provinces in August, 1945, it was apparent that wartime developments had strengthened the government's belief in the usefulness of fiscal policy, if not monetary policy (see below) for dealing with the problems of boom or depression. In addition to the developing body of knowledge on the uses of fiscal action, however, experience had shown that the new fiscal tools had themselves important limitations and required to be supplemented in certain circumstances by more direct measures.

Wartime Developments in General

Tracing the development of the war economy in physical terms, it is evident that initially there was great dependence on fiscal and monetary measures operating within the framework of the price system. While it would have been theoretically possible to use taxation alone to reduce personal incomes to the level which corresponds to the supply of consumer goods available, it was pointed out in the budget speech of September 12, 1939, that there were practical objections:

> "Diversion . . . by a 100 per cent taxation or pay-as-you-go policy would seem at first sight to represent the ideal policy of war finance; in principle it would appear to be the most logical, the most equitable . . . But, in the first place, this takes no account of the desire, indeed the necessity, of individuals making some savings to provide for a rainy day, and an effort to take so much in taxation that individual savings would be practically wiped out, would produce disorganization and public discontent. In the second place, realism compels us to admit that a pay-as-you-go policy has to take account of the psychological reactions to taxation. In other words, we must recognize that when diversion by means of taxation rather than borrowing is carried too far the average citizen begins to feel that there is no use in his working for any additional income and therefore he does not put his best effort into his work with the result that efficiency and production fall off. If we cannot maintain our production at maximum efficiency we may lose the war, and at least the real cost of the war will increase. It is by a reasonable balancing of these various considerations that we have to decide how much to tax and how much to borrow . . .
>
> "It is with these fundamental considerations in mind that we have decided upon our policy of war finance. Because we believe it is the part of wisdom, we shall follow as far as may be practicable a pay-as-you-go policy."

The remaining funds required, after raising as much as was considered practicable through taxation, had to be obtained by borrowing in one form or another. Here the stated objective was to secure the largest possible amount through sales of securities to the public at large, leaving only the residual requirements to be obtained through borrowing from the banks.

War expenditure grew rapidly year by year up to 1944, (see Table 36) but fortunately it proved possible to uncover additional resources

TABLE 36
DOMINION GOVERNMENT: CASH REQUIREMENTS AND SOURCES OF FINANCING.[a]

(millions of dollars)

Cash Requirements	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949[b]
War and Demobilization Cash Expenditure	118	752	1,340	3,724	4,574	4,158	3,623	1,249	634	522
War and Demobilization Advances and Domestic Investments	9	120	244	129	143	− 2	− 22	− 25	—	—
Foreign Governments	1	40	43	884	190	− 38	−429	−261	−117	*
Other War Requirements	8	− 3	—	2	− 44	−19	29	− 21	− 2	—
Total War Requirements	136	909	1,627	4,739	4,863	4,099	3,201	941	516	*
Non-War Cash Expenditure	534	447	490	589	661	750	1,056	1,270	1,451	1,670
Export Credits and Loan to U. K.	—	—	—	—	—	—	67	908	499	*
Loans to Foreign Exchange Control Board	—	325	400	−325	185	265	700	−680	−220	*
Other Non-War Advances and Investments	90	43	60	99	−129	233	116	96	116	*
Total Requirements	760	1,724	2,577	5,102	5,580	5,347	5,140	2,535	2,362	*
Sources of Financing										
Personal Income Tax	45	104	296	534	813	768	692	695	660	671
Corporation Income and Excess Profits Taxes	78	156	321	803	780	742	712	687	591	580
Other Direct Taxes	11	13	35	41	42	46	50	54	67	66
Indirect Taxes	334	506	709	759	956	818	822	1,022	1,134	1,064
Other Ordinary Revenue	67	77	93	118	136	147	161	161	174	193
Gross Ordinary Revenue in Cash	536	855	1,454	2,254	2,728	2,521	2,436	2,619	2,626	2,57[illegible]
Less Refundable Portion of Personal Income and E. P. Taxes	—	—	—	− 70	−155	−219	− 72	− 30	—	[illegible]
Net Ordinary Revenue in Cash	536	855	1,454	2,184	2,573	2,302	2,363	2,589	2,626	2,5[illegible]
Special Receipts and Credits	—	3	18	19	101	151	236	320	193	90
Miscellaneous Receipts and Credits	23	29	39	52	118	92	80	− 26	68	*
Receipts (+) or Repayment (−) of Refundable Taxes	—	—	—	70	155	219	72	28	− 84	−297
Increase (+) or Decrease (−) in Other Debt	323	742	1,559	2,082	2,769	2,886	2,755	−302	−468	*
Decrease (+) or Increase (−) in Securities Investment a/c	—	− 12	− 30	8	−150	−151	184	−125	−410	*
Decrease (+) or Increase (−) in Can. Cash Balances	−122	107	−463	687	14	−152	−550	52	437	*
Total Sources of Financing	760	1,724	2,577	5,102	5,580	5,347	5,140	2,535	2,362	*

a) Compiled from the "Sources and Requirements for Cash" table given each year in the introductory section of the Dominion Public Accounts with the following adjustments:—
(a) Reduction of sterling indebtedness is shown as a "decrease in other debt" rather than as a "net outlay on war assets."
(b) Reduction of New York Indebtedness is shown as a "decrease in other debt" rather than as a "net outlay on non-war assets."
(c) Changes in the Securities Investment Account are shown under "Sources of Financing" rather than under non-war advances and investments.

b) Budget estimates. No official estimates or only incomplete estimates are available for the items marked with an asterisk. However, it seems likely that "other debt" will show a net increase in the 1948-1949 fiscal year.

of manpower and industrial potential each year and thus moderate the inflationary effects of the war and ease the strain on the civilian economy. In the early years of the war especially, the relative stability of United States prices and the availability of new raw materials and components from the United States were important.

The greatest additions to productive capacity came from absorption of large numbers of fully and partly unemployed workers and from additions to the labour force in response to patriotic appeals and rising wage rates. Credit expansion in the autumn of 1939, while at first sight inconsistent with accepted principles of war finance, did help to absorb unused capacity in the form of idle manpower and plant.

As wartime pressures and scarcities developed, it became necessary, in the government's judgment, to supplement fiscal and monetary measures, which operate within the framework of the market, by direct controls which regulated the production and allocation of certain goods and assisted in preserving stability of prices and costs.

Table 36 shows the year-by-year financial requirements of the government. Both requirements and sources of funds include important amounts which cannot be described as expenditures or revenue in the ordinary budget sense. Funds were required not only to provide for government cash expenditures for current war and non-war purposes but also for loans to crown companies, foreign governments, etc., which were being financed by the federal government. For the most part the use of these funds constituted a demand for goods and services, just as "expenditures" did, the principal difference being that there was an obligation to refund them to the federal treasury at some future time. The total of cash outlays as shown had to be matched by the withdrawal of purchasing power from the private sector of the economy by taxation and borrowing. However, because of the increase in production which took place, this process did not involve any appreciable net reduction in the use of resources by the civilian sector of the economy as a whole; it simply meant the foregoing of a possible increase.

It will be seen from the table that about half of the government's total requirements during wartime was met from taxation. This was as high a ratio as any other major belligerent managed to achieve.

Wartime Tax Policy in Broad Outline

The tax policy which took form in the first two war budgets of September, 1939, and June, 1940, was pursued throughout the war with little deviation in principle. Most tax changes took the form either of the intensification of taxation to obtain more revenue, or of refinements designed to preserve equity as between taxpayers and to avoid impairment of the will to work. The stabilization program of the autumn of 1941, with the ceiling on prices and restrictions on salary and wage increases, altered to some extent the framework within which tax policy operated. The price ceiling, particularly as it applied in the unrationed sector, removed the restraint on demand which rising prices otherwise would have provided and placed on taxation (and borrowing) more responsibility for restraining expenditure and protecting supplies. At the same time wage and salary control was linked to the cost-of-living index, and made it very difficult for the government to raise taxes such as the general sales tax, which would have increased the cost-of-living index. As an alternative it was decided to tax "luxury goods", which did not enter into the index, and to increase direct taxes. In turn, higher direct taxes, particularly as they affected corporate profits and larger personal incomes, were designed to help gain public support for the wage and salary restriction program.

The first wartime budget of September 12, 1939, outlined the general economic philosophy of the government, especially as regards taxation. The main feature of the tax program was the excess profits tax which indicated to the business community and to the public the lines of government thinking in respect of taxes on corporate profits. The general corporate income tax was raised from 15 per cent to 18 per cent, and a 20 per cent surtax was added to the personal income tax. Excise taxes were raised or imposed on tobacco and a variety of beverages. These tax increases, while important in principle, did not at the time have much restraining effect since the increases in the corporation and personal taxes on income were not payable until after the end of the fiscal year. Furthermore, deflationary tendencies were partly offset in the short run by the deliberately expansionist monetary policy already referred to.

By the time the second war budget was presented in June, 1940, sufficient time had elapsed to permit reconsideration and refinement of the tax structure of the previous September. Especially after the fall of France it was evident that defence expenditures were going to be very large. The excess profits tax was established on a basis which, apart from changes in rates, persisted throughout the war. Personal income taxes were raised sharply and exemptions lowered. A start was made in the taxation of consumers' durable goods with a 10 per cent tax on radios, radio tubes, phonographs and cameras. As an exchange conservation measure heavy progressive taxes were placed on automobiles and the war exchange tax of 10 per cent was imposed on all imports from non-Empire countries.

With these two budgets the general pattern of wartime taxation was established and we now examine separately the development of the various types of tax.

The Personal Income Tax

The tax on personal incomes ranked about equally with combined corporation income and excess profits taxes as a source of revenue, and it would seem to have played a more significant role than any other tax in drawing off surplus purchasing power and thus in creating a favourable background for the whole stabilization program. At the outbreak of war the income tax structure of the country consisted of a federal tax, provincial taxes in most provinces and municipal taxes in several provinces.

The income tax increases in 1939 and 1940 brought about very large proportionate increases in the tax level, but this was still not high compared with the maximum reached in the calendar year 1943. An important restraining factor apparently was the variation in income and corporation tax levels in the different provinces as a result of which the Dominion, in fixing its schedule of rates, had to take cognizance of the highest schedule of rates effective in any province. In 1941, however, this problem was met by a series of wartime tax agreements with all of the provinces by which the latter temporarily vacated the personal income and corporation profits tax fields in exchange for a fixed annual payment. With this change in prospect, the government was free in 1941 to undertake increases in the income tax which approximately doubled the federal tax collected on moderate incomes, although elimination of the provincial taxes moderated this slightly. The government's policy was expressed by the Minister:

> "As I have already indicated, and with the object of keeping our entire tax structure as equitable as possible at a time when rates are being increased very greatly, and even minor inequities become serious, we have decided to place our main reliance for increased revenue on direct taxes levied on the income and property of individuals. These are the fairest taxes, for their amount depends upon the best measures that can be found for ability to pay, and their burden is not shifted on to other shoulders as may be the case with other taxes. Consequently, I have endeavoured to raise the rates of direct taxation to the highest level which I think the Canadian people can be asked to bear in this historic year. No longer do we need delay at all for fear of diminishing purchasing power. We must still have some regard for incentive and efficiency, but I think we can certainly assume that other motives than those of personal gain are dominant in the minds of Canadians today, whatever their incomes or positions."[1]

A further increase in 1942 raised rates to the wartime peak which lasted until June 30, 1944. These high levels led to the adoption of a "pay-as-you-earn" system of collection and the high rates were also tempered by making a part of the tax refundable after the war. The compulsory savings portion of the tax was reduced to the extent that the taxpayer had offsets in the form of life insurance premiums, mortgage principal payments and pension fund contributions.

[1] House of Commons Debates, April 29, 1941.

TABLE 37

A. PERSONAL INCOME TAXES AS A PERCENTAGE OF INCOME

	Income				
	$1,000	$1,500	$3,000	$5,000	$10,000
Single—No Dependents					
1938[a]	—	1.5	3.5	5.3	9.4
1943 Incl. Refundable Tax	17.2	24.5	35.5	42.6	51.1
1943 Excl. " "	(9.2)	(16.5)	(27.5)	(34.6)	(43.1)
1948	2.9	8.0	14.0	16.7	22.5
Married—No Dependents					
1938[a]	—	—	1.5	3.5	7.8
1943 Incl. Refundable Tax	—	13.3	29.5	37.6	47.6
1943 Excl. " "	—	(6.7)	(19.5)	(27.6)	(37.6)
1948	—	—	9.0	13.4	19.9
Married—Two children[b]					
1938[a]	—	—	.3	2.4	6.6
1943 Incl. Refundable Tax	—	3.3	22.3	33.2	45.5
1943 Excl. " "	—	(1.6)	(11.1)	(21.2)	(33.5)
1948	−14.4[b]	− 9.6[b]	2.9	9.7	17.9

a) Includes Ontario provincial tax in 1938.
b) Children are assumed to be eligible for family allowances. Average family allowances are deducted from tax paid and account for the negative taxes shown in 1948.

B. MARGINAL RATE[a] OF PERSONAL INCOME TAX
(per cent)

	Income				
	$1,001	$1,501	$3,001	$5,001	$10,001
Single—No Dependents					
1938[b]	4.5	4.5	7.5	10.9	18.6
1943 Incl. Refundable Tax	37.0	40.0	50.0	54.0	64.0
1943 Excl. " "	(20.0)	(32.0)	(42.0)	(46.0)	(56.0)
1948	14.0	20.0	20.0	22.0	35.0
Married—No children					
1938[b]	—	—	6.0	9.3	17.1
1943 Incl. Refundable Tax	—	40.0[c]	48.0	52.0	62.0
1943 Excl. " "	—	(20.0[c])	(38.0)	(42.0)	(52.0)
1948	—	10.0	20.0	22.0	35.0
Married—Two children					
1938[b]	—	—	4.5	7.8	15.5
1943 Incl. Refundable Tax	—	7.0	48.0	52.0	62.0
1943 Excl. " "	—	(3.5)	(24.0)	(40.0)	(50.0)
1948	—	—	20.0	20.0	30.0

a) Tax rate on the last dollar of income.
b) Includes Ontario provincial tax rate in 1938.
c) The marginal rates shown are those for an income of $1,566. For incomes from $1,200 to $1,565 the marginal rates were 66 per cent and 33 per cent respectively. These rates were the result of grading down the tax from the amount determined by the tax formula at $1,565 income, to zero tax at $1,200 income.

Corporation Income and Excess Profits Taxes

Corporation income and excess profits taxes were the largest single source of revenue. Although they undoubtedly had certain economic disadvantages they would seem to have helped to establish a feeling of equitable treatment among different groups in the community who were faced with the burdens and sacrifices of wartime. As the Acting Minister of Finance said in 1939:

> "The main feature of this program is an excess profits tax of general application. If we are not to impair the incentive to maximum efficiency or retard the prompt utilization of our entire resources and the achievement of full productivity and employment we must be able to hold out to business men the opportunity of making a reasonable profit and also the chance of securing some compensation for exceptional efficiency and willingness to take the risks inherent in industrial enterprise in wartime. But under wartime conditions when important sacrifices are being asked from the humblest citizen and when human lives are at stake, no government can justify the making of profits that are excessive or unreasonable."[1]

For the first year in which the Excess Profits tax was in effect, namely 1940, the rate on profits in excess of those earned during the pre-war base period (1936-1939 inclusive) was 75 per cent, with a minimum rate (including the corporation income tax) of 30 per cent. In 1941 the minimum rate was raised to 40 per cent. As of July 1, 1942, by which time complete control of prices, salaries and wages was in effect, the rate of "excess" profits was raised to 100 per cent and this rate lasted until the end of 1945. It was provided that part of the tax on excess profits would be refunded after the war. In simplified form the combined effect of corporation income and excess profits taxes during this period was (a) a 40 per cent tax on all profits, plus (b) a 60 per cent tax on profits in excess of 116 2/3 per cent of standard profits, with one-third of this 60 per cent tax refundable.

Commodity and Other Indirect Taxes

The pre-war commodity taxes, such as the sales tax and excises on tobacco and beverages, showed considerable increases in yield with the rise in business activity and prices and also, in the case of excise taxes, as a result of sharply increased rates. As regards the principal levy in this group, namely the sales tax, the Minister said in 1942:

> "Remembering that we already had an eight per cent sales tax at the outbreak of war, we have avoided, since the first war budget, except in last year's increase in the sugar tax, indirect taxes which would raise the cost of the necessaries of life. The imposition of the price ceiling has added conclusively to the weight of argument against general rather than selective increases in consumption taxes. I propose to follow again, therefore, a selective approach and recommend substantial increases in taxes which fall on luxury expenditures."[2]

[1] House of Commons Debates, Sept. 12, 1939.
[2] Ibid., June 23, 1942.

The special wartime commodity taxes included some whose principal purpose was stated to be the absorption of purchasing power, such as the 1941 taxes on transportation fares and moving picture receipts, and the 25 per cent tax on jewellery, watches, ornaments, etc., imposed in 1942. Most new commodity taxes in addition assisted in the conservation of foreign exchange and restrained the use of scarce materials. This was, of course, particularly true of the 10 per cent war exchange tax of 1940 on all imports from non-Empire countries. A graduated excise tax on domestic and imported automobiles was imposed in the same year and increased in December, 1940 and again in April, 1941. In December, 1940 a tax of 25 per cent was placed on a wide variety of electrical and other metal household articles. The last of the important exchange conservation taxes was the three cents per gallon gasoline tax imposed in the spring of 1941.

WARTIME BORROWING AND MONETARY POLICY

Turning now to borrowing we think it is fair to conclude that although fairly substantial resort to the banking system could not be avoided, a very real and, on the whole, successful effort was made to encourage new net saving by the public out of current income. This was highly important because one of the chief purposes of borrowing in a wartime situation is to secure the release of productive resources from civilian to government use.

The encouragement of systematic saving was largely the responsibility of the National War Finance Committee. Savings programs were established through salary deduction plans, sale of war savings certificates and stamps, and by arrangements with the banks for temporarily financing the purchase of bonds on an instalment basis. Thus, while public bond issues took place semi-annually, the savings process became more or less continuous. We believe that the wartime effort to encourage saving and to persuade the public to invest in government securities was at least as intensive in Canada as in any other country and that the results compared favourably with those elsewhere.

Only in the early stage of the war period, when some additional incentive to expand national output seemed desirable, did the government follow an announced policy of deliberately borrowing from banks as a means of meeting its financial requirements. The banks did not participate as subscribers to the public bond issues and their temporary advances to permit the general public to buy bonds on an instalment basis did not give rise to any substantial accumulation of bank credit over the war period as a whole.

However, as the scale of war expenditure and government borrowing needs increased it was found that financing through the medium of security purchases by the general public did not provide the required amount of funds. Consequently the residual portion of the government's needs was met by selling securities to the banking system.

Starting in July, 1942, the government adopted the policy of making direct sales to the chartered banks of short-term securities called "deposit certificates". Normally, these certificates were sold to the banks in the period preceding the semi-annual public bond issues when the government had spent the proceeds of the previous bond issue. After each public issue of bonds it was customary for the government to reduce the outstanding amount of deposit certificates. However, as the amount of money raised through public loan offerings was falling short of the total required, the outstanding volume of deposit certificates continued to increase over the war period. By arrangement with the chartered banks deposit certificates issues were allotted to the individual banks on a pro-rata basis and were not regarded as a type of security in which market transactions would take place. To the extent that monetary expansion took the form of an increase in non-interest bearing demand deposits of the public, the type of security and the low rate of interest, three-quarters of one per cent per annum during the war period, made deposit certificates a suitable and economical means of government bank borrowing.

In order to avoid too many figures in the text, the Table 38 shows the money supply and related bank assets taken from published statement of the Bank of Canada for December 31 in each of the years 1938 to 1947 and for November 30, 1948, which was the latest available to us.

Until 1943 nearly the whole of such monetary expansion as occurred was accounted for through the direct sale to the banking system by the government of short-term special issues of securities such as the deposit certificates referred to above. Monetary expansion during this period took the form of increases in currency circulation and demand deposits; there was no increase in the public's savings deposits with the banks, any tendency for savings deposits to rise having been offset by investment by the public in government bonds.

By 1943, partly as a result of the large scale of the semi-annual bond issues, the public began to sell bonds in the intervals between loan campaigns; that is more bonds were offered than could be absorbed by buyers other than the banks or the government itself. Such net selling by the public necessarily resulted in an equivalent increase in the volume of bank deposits held by the public, and also in the amount of the banks' holdings of government securities. This was bound to occur whether the banks themselves bought the securities sold by the public, or whether these were bought by the government with further residual funds obtained by the sale of other securities to the banks.

It may be noted that during the period after 1942, that is, the period in which economic pressures were greatest, more than half the rise in bank deposits took the form of increased savings deposits which in practice remained idle. There is no difference at the time in real economic effect between public saving through the acquisition and retention of savings deposits, and public saving through the acquisition and retention of government bonds.

TABLE 38
MONEY SUPPLY AND RELATED BANK ASSETS
(as at December 31st in millions of dollars)

MONEY SUPPLY	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	Nov. 30 1948
Currency Outside Banks											
Notes	207	247	341	450	633	794	930	992	1,031	1,046	1,100
Coin	31	34	38	42	49	55	60	63	65	66	69
Total Currency	238	281	379	492	682	849	990	1,055	1,096	1,112	1,169
Bank Deposits											
Chartered Banks											
Demand	734	853	1,031	1,268	1,499	1,697	1,862	2,063	2,291	2,296	2,534
Active Notice[a]	187	197	203	236	238	294	363	474	614	597	651
Other (excl. Dominion Govt.)	42	157	112	97	121	134	153	172	229	233	271
Total	963	1,207	1,346	1,601	1,858	2,125	2,378	2,709	3,134	3,126	3,456
Less Float	116	136	172	198	210	266	243	280	328	362	362
Net Total	847	1,071	1,174	1,403	1,648	1,859	2,135	2,429	2,806	2,764	3,094
Bank of Canada "Other" Deposits	3	18	10	6	19	18	28	30	94	68	64
Total Bank Deposits	850	1,089	1,184	1,409	1,667	1,877	2,163	2,459	2,900	2,832	3,158
Money Supply	1,088	1,370	1,563	1,901	2,349	2,726	3,153	3,514	3,996	3,944	4,327
RELATED BANK OF CANADA AND CHARTERED BANK ASSETS											
Dominion Government Securities, Gold & Exchange											
Bank of Canada, Gold & Exchange	214	290	38	210		1					
Banking Securities[b]	196	425	743	973	1,614	2,093	2,321	1,696	1,476	811	1,145
Other Dominion Government Securities[c]	753	752	737	798	1,180	1,671	2,277	3,652	3,745	3,718	3,788
Total Dom. Govt. Securities, Gold and Exch.	1,163	1,467	1,518	1,972	2,794	3,765	4,598	5,348	5,221	4,529	4,933
Less Dom. Govt. Deposits[d]	79	145	32	148	366	597	720	1,002	366	272	266
Net Total	1,084	1,322	1,486	1,824	2,428	3,168	3,878	4,346	4,855	4,257	4,647
All other Loans and Investments	1,628	1,767	1,720	1,719	1,570	1,459	1,593	1,827	2,297	3,084	3,375
Less Inactive Notice Deposits[e]	1,472	1,544	1,438	1,433	1,436	1,654	2,060	2,391	2,856	3,143	3,435
Total Related Bank Assets	1,240	1,545	1,768	2,110	2,562	2,973	3,411	3,782	4,296	4,198	4,587

a) Chartered banks' public notice deposits in Canada other than estimated aggregate quarterly minimum balances in personal savings accounts and non-personal notice deposits.
b) Bank of Canada and chartered bank holdings of Dominion Government Treasury Bills, Deposit Certificates, Treasury Notes and any other short term issues sold direct to Bank of Canada and chartered banks.
c) Bank of Canada and chartered bank holdings of Dominion Government direct and guaranteed securities other than those shown as banking issues plus chartered banks' temporary advances to the public in connection with the purchase of Victory Loan bonds at time of issue.
d) Canadian dollar deposits of the Dominion Government at chartered banks and Banks of Canada.
e) Estimated aggregate minimum quarterly balances in chartered banks' personal savings deposits in Canada plus non-personal notice deposits in Canada.
Source: Bank of Canada, Ottawa.

In the one case, the money saved by the public is placed directly at the disposal of the government and in the other the government has to borrow an amount from the banks equivalent to the increase in their savings deposits. Whichever form the financing takes, it is the decision to save rather than to spend that releases the resources to government. Presumably, however, the retention of savings unspent is more likely if they are held in the form of securities rather than deposits, and in any case, the campaigns to sell securities to the public had as their chief objective and result, the encouragement of greater total savings, in whatever form.

The government's fiscal requirement during the war period brought about an increase in the money supply, that is, currency circulation and demand or active bank deposits. In fact between the end of 1938 and the end of 1945 the total money supply as estimated by the Bank of Canada increased three-fold. What the economic effects were is difficult to assess in any precise manner. It is to be borne in mind that the increase in money supply accompanied a great increase in employment and volume of production and, therefore, coincided with some greater need on the part of the public for currency and working balances. To the degree that the increase in money supply exceeded what was necessary in view of the economic expansion taking place, it was, over the period as a whole, the residual result of the scale of war expenditures.

Financial Policy in the Transition Period

In tracing government financial measures from the end of 1943, when post-war policy began to develop, certain influences are evident. The first, in point of time, was concern, voiced in the 1944 budget, that the difficulties of reconversion and the disruption of our export markets might cause substantial unemployment. It is fair to say, however, that in no budget was unemployment considered to be so imminent that the stabilization program could be lightly dismantled or that tax reductions should be made for the sole purpose of countering deflationary tendencies. All the evidence seems to suggest that the strongest reasons for tax reduction were non-economic, arising from public disinclination to support the high taxes which had been willingly accepted in wartime.

Transitional Tax Measures

The budget of June, 1944, introduced three measures designed to assist business through the transition. The first permitted corporations to charge any losses suffered in the first post-war year against the profits of the last war year and forward against profits of the three succeeding years. The second was a plan, of limited scope in practice, for charging part of post-war repair and maintenance expenditures against profits of war years. The final and most important proposal as worked out in practice, provided that depreciation might be charged at rates up to double normal rates on 80 per cent of the cost of acquisition of approved industrial plant, providing that the project was approved by March 31, 1947, and completed or acquired before March 31, 1949. The scheme was widely used and covered expenditure of roughly $1.4 billion.[1] About two-fifths of all business investment and four-fifths of total manufacturing investment undertaken in the transition period have used these special depreciation provisions.

In approaching the resumption of manufacture of many consumer durable goods towards the end of the war, producers found themselves handicapped by increases in the costs of domestic production and of imported components which, owing to the existence of the price ceiling, they could not pass on to consumers. In May, 1945, in a general statement on decontrol policy, the government announced the removal of the 25 per cent tax on household electric and gas appliances and the reduction of the automibile excise tax to 10 per cent. It was suggested that, since these taxes were included in ceiling prices, the changes would be effective in encouraging production. Resumption of building was assisted by removal of the sales tax on building materials and the 10 per cent war exchange tax was taken off imported building materials and producers' machinery and equipment. Later in the year, in the October, 1945 budget, the same purpose apparently motivated the full removal of the war exchange tax on all imports and the lifting of the sales tax on machinery and apparatus to be used directly in the manufacture or production of goods.

In the budget of October, 1945, the excess profits tax, which had remained unchanged since 1942, was also modified as from January 1, 1946, in the belief, as the Minister said, that it "seriously weakens the stimulus toward investment of capital and the efficient operation of enterprises. In this period of reconstruction it is becoming a barrier to expanding employment." Amendments affecting small businesses had the result of releasing about 12,000 firms entirely from excess profits tax and reducing the tax of many others. The 20 per cent refundable portion was abolished and the rate of tax on excess profits reduced to 60 per cent. In terms of the simplified formula this meant that in addition to the flat 40 per cent tax on all profits, the tax on profits in excess of 116 2/3 per cent of standard was now 20 per cent.

Long-Run Fiscal Policy

Concurrent with these transitional measures, and of growing importance in the formulation of year-by-year budget policy, was the development and enunciation of basic long-run fiscal principles. Before tracing fiscal practice beyond the early transition period it is therefore desirable to pause briefly to look at this aspect of government policy.

It was in April, 1945, with the end of the European war in sight, that the government issued its White Paper, which set out the objectives of economic policy. Reference was made to the willing acceptance of deficits in times of depression, offset by surpluses in periods of high employment,

[1]See Chapter 5, The Investment Boom.

with a basic program of encouragement to private investment by fiscal measures. This program was worked out in more detail in the "Proposals of the Government of Canada" to the Dominion-Provincial Conference on Reconstruction of August, 1945, which said in part:

> "The Government is not only prepared to accept . . . (deficits) . . . but will deliberately plan for them in periods of threatened depression in order to give the economy a stimulus and relieve unemployment. As a corollary the Government will also plan for substantial . . . debt retirement in periods of high business activity. This is simply saying that the Government will budget for a cycle rather than for any one fiscal year . . . The modern governmental budget must be the balance wheel of the economy."

It will be clear from the next section that the practical application of these principles was tempered by other important influences.

Post-War Tax Changes

Certain measures of tax reduction up to 1946 were referred to above as being among the steps adopted to deal with specific problems of the transition period. We continue here with the more general measures which accompanied them, and with subsequent developments.

The first major tax reduction occurred as early as mid-1944, when the refundable or savings portion of the personal income tax was dropped, with evident reluctance on the part of the Minister of Finance. In May, 1945, when some of the excise taxes were lifted or reduced in order to facilitate production at ceiling prices, the Minister clearly felt that price stability was still in danger, and said:

> "The Government is determined to safeguard the stabilization program until its full benefits can be repaid in a smoother, more rapid transition to a prosperous peacetime economy."

The "White Paper" already referred to and issued at about the same time contained similar warnings on the inflationary dangers of the immediate post-war period.

The Budget of October 12, 1945, modified the Excess Profits Tax as described above, and, pending fundamental changes in the personal income tax law, provided for a reduction of 16 per cent in this tax, effective from October 1, 1945. In introducing this change the Minister said:

> "We must maintain for some months yet the economic stabilization policy . . . Our tax changes must be such as to contribute to employment and income . . ."

Additional tax reductions were made in the budget of June, 1946, but the most important of these did not come into effect until 1947 and hence did not greatly reduce 1946-1947 revenues. As shown in Table 36, war requirements dropped very sharply in 1946-1947 resulting in an over-all cash surplus, and a reduction in debt of about $300 millions.

The income and corporate tax reductions which came into force in 1947 had been decided upon in June, 1946, despite the Minister's opinion that "The current economic situation . . . is not such as to provide an economic justification for reducing taxes at the present time."[1] The structure of the income tax, which contained complications attributable to war finance and the introduction of family allowances, was greatly simplified, and higher exemptions and new provisions regarding dependents removed from the income tax roll about one-quarter of the number of taxpayers. Exemptions were raised from $660 and $1,200 for single and married persons respectively, to $750 and $1,500. Aside from those persons who were dropped from the tax roll altogether and those at the lower end of the taxation scale, reductions were of the order of 10 to 15 per cent for most taxpayers. Under the Dominion-Provincial tax agreements of 1941 the Dominion was obligated within one complete fiscal year after the termination of the war to reduce its rate of tax on corporate incomes by at least 10 per cent of such incomes. The flat rate tax as from January 1, 1947, was accordingly reduced from 40 per cent to 30 per cent on all profits, and was to be defined henceforth as corporate profits tax rather than partly as excess profits tax. The excess profits tax was retained but reduced from 20 per cent of profits in excess of 116-2/3 per cent of standard, to 15 per cent.

Added to the reduction in the personal income tax which had become effective in January, 1947, another cut was introduced in the budget speech of April, 1947, to take effect July 1. The combined result of these in the calendar year 1948, in which both were fully effective, was a tax reduction of about 40 per cent for persons in the medium income brackets. It was subsequently estimated that the income tax is now producing less than half the amount of revenue which would have been collected on present personal incomes had wartime peak tax rates been retained.[2]

The 1947 budget also announced that the government had decided to retain the excess profits tax at a reduced rate of 10 per cent until the end of 1947. In November, 1947, as part of the emergency exchange conservation program, a number of excise tax increases or imposts were made on goods imported from the United States or domestic goods having a higher proportion of components which must be paid for in United States dollars. Automobiles, cameras and electrical equipment were subject to taxes of 25 per cent and up, based on the manufacurer's price. At the same time taxes on sugar, tea and coffee were eliminated and sales taxes were removed from electricity and gas used in dwellings. It may be mentioned, too, that federal taxes of an excise type were removed at about this time in fields of particular provincial interest. This included withdrawal of the three cents per gallon gasoline tax in March, 1947, and the 20 to 25 per cent amusement taxes in May, 1948. At the end of July, 1948, the tax increases or imposts of November, 1947, were rescinded.

[1] House of Commons Debates, April 29, 1947.
[2] Address by Hon. Douglas Abbott, Minister of Finance, to Canadian Tax Foundation, November 23, 1948.

The fiscal year 1947-1948 saw a repetition of the experience of the previous fiscal year, with a reduction in cash requirements, buoyant revenues and a $468 million reduction in debt. In line with the principles which had been laid down earlier, the Minister had "come to the conclusion that the budget this year (1948) should contain no general tax changes", since "there will never be a better time to reduce the burden of our national debt." He reviewed government fiscal policy since the war:

> "Our budget policy has been clear and explicit. We have striven to bring expenditures down and to keep them down. War activities have been curtailed as rapidly as possible. Economy has been observed in the expenditures we have had to make. We have deferred wherever possible expenditures on construction, new equipment and new projects in general . . .
>
> "On the taxation side, our policy has been to reduce our taxes where they were impeding work and production, but otherwise to keep them as high as is reasonably practicable in the circumstances in order to produce a surplus that could be used to make the loans and investments we are required to make and to reduce the huge debt that we necessarily accumulated during the war. Some tax reductions have been made, of course, to encourage the expansion of production, and some because the burden of income tax on individuals which had to be imposed in wartime was greater than that which could reasonably be borne in peacetime, however urgent the financial or economic necessity. At the termination of our wartime tax agreements with the provinces, we were obligated to reduce our rate of corporation tax, and consideration for the revenue requirements of the provinces led us also to give up some of our wartime taxes. By and large, however, the taxation aspects of our budget policy, as well as the expenditure aspects, have been primarily directed to countering the inflationary pressures threatening Canada in recent years."[1]

The Minister pointed out that it was not sufficient to have a moderate budgetary surplus to obtain an anti-inflationary effect. Part of such surplus would be needed to finance the government's normal investments, for example, housing. Additional funds would be required to finance the excess of exports over imports, part of which would take the form of loans to foreign countries and part of which would be needed to finance additions to our reserve of United States dollars. Thus any substantial anti-inflationary effect would require a surplus greater than the total of these special cash requirements.

As we write this report the situation seems to be that the over-all cash surplus for the fiscal year 1948-1949, will not be sufficient to cover repayments of refundable income and excess profits taxes coming due

[1]House of Commons Debates, May 18, 1948.

in the year, still less to reduce the volume of debt outstanding in the form of government securities.

Developments in Money Supply

Since there was on balance no increase in the chartered bank's loans and non-government security holdings during the war, the whole of the monetary expansion which took place during that period may be attributed to the government's war expenditures. War expenditures declined only gradually following the end of hostilities and the deficit on cash account continued to swell money supply until October, 1946. The increase in money supply between December 31, 1938, and December 31, 1946, was $2,900 million of which loans and investments other than in Dominion government securities accounted for only $670 million.[1]

As conditions returned to a peacetime basis, it appeared to the financial authorities that there was every reason to believe there would be many demands on the chartered banks for larger industrial and commercial credits. During the war government had been the biggest buyer of goods and services and business had not found it necessary to finance normal inventory and trade credit requirements. At the same time it was to be expected that capital funds required for reconversion and deferred maintenance and improvement would be substantial and that sales of government securities by the general public would take place on a considerable scale as opportunities to make deferred expenditures appeared.

All these factors pointed to a further upward influence on money supply. In view of this and the increase which had already taken place for different reasons during the war, it was stated to be undesirable to provide any incentive which might have resulted in unnecessary monetary expansion.

In January, 1946, the government and the Bank of Canada entered into discussions with the chartered banks which culminated in March, 1946, in a voluntary arrangement known as the Savings Agreement, certain aspects of which, were intended to have some restraining effect on credit expansion. Under this arrangement the banks agreed not to hold more than 90 per cent of their Canadian personal savings deposits in government bonds. They also agreed that their rate of earnings on such investments would not exceed their average cost of operating personal savings accounts plus a moderate profit margin. One of the effects of the Savings Agreement was to prevent the banks from being aggressive buyers of government bonds in the market which might perhaps have encouraged the general public to sell bonds on a greater scale than would otherwise have been the case. Another result was to make it impractical for banks to sell only their low yield short-term government bonds in order to obtain funds to expand their loans and non-government investments. In order to keep their average rate of earnings on government bonds down to the agreed maximum it became necessary for banks to sell

[1]See Table 38.

on the average a medium term bond which would have a yield much closer to the returns obtainable from expanding loans and other investments.

Late in 1946 the rate of government expenditures had declined to the point where government began to have an over-all cash surplus available for debt retirement. This was an important development so far as effective monetary policy was concerned. In the first place, the accumulation of such an over-all cash surplus had the initial effect of transferring funds from deposits of the general public to government deposits, and since a large part, though not all, of the increase in government deposits was used to redeem bank-held debt, rather than government securities held by the general public, the effect of the whole operation was to reduce the money supply of the general public. Secondly, to the extent that the surplus resulted in a transfer of funds from deposits of the general public to the government deposit account at the Bank of Canada (rather than at chartered banks) it had the same effect on chartered bank cash reserves as "open market" security sales by the central bank. The average cash ratio of the banks gradually declined during 1947 from the previous level of about 11½ per cent of Canadian deposits to about 10½ per cent by the middle of 1947, and the chartered banks on balance sold appreciable amounts of government bonds in order to maintain cash reserves.

In the final quarter of 1947 a somewhat nervous feeling developed in the bond market. There was a good deal of anticipation in the United States that the Federal Reserve System was going to reduce the support prices for government bonds, and selling of such securities became quite heavy. Some of this feeling was communicated to the Canadian market. Under such conditions, maintaining the earlier pressure on the banks by keeping down their cash reserves might have aggravated the situation and led to more nervousness, a higher rate of selling bonds by the general public, and consequently a sharp increase in interest rates. As we shall see the monetary authorities did not believe such an increase was desirable, banks' cash reserves were permitted to rise somewhat in the final quarter of 1947, and the banks again became net buyers of government bonds in the market.

Over the whole year 1947, as a result of the substantial government over-all cash surplus, before debt retirement, there was a slight drop in money supply despite an unprecedented increase in chartered bank loans and holdings of non-government investments such as corporate debentures.[1]

Interest Rates

During the war period when public bond issues were taking place at six month intervals the government evidently considered it desirable that the extent of public participation in new loan offerings should not be reduced by reason of uncertainty regarding the course of bond prices or unfavourable comparisons between the terms of new issues and

[1]See Table 38.

securities already in the market. Broadly speaking, yields on long-term government bonds during the war period were approximately the same as had become established in the immediate pre-war years.

As the tide of war began to turn in favour of the Allies the public began to give more thought to the period after the war. One question was would there be higher interest rates on government bonds? At the same time the scale of the war program reached its peak and it was evidently considered important to maintain the effectiveness of the saving program. In view of this situation and apparently to give some assurance of continuity of policy for those contemplating the problems of large scale reconversion expenditures after the war, the Governor of the Bank of Canada in his annual report for the year 1943 which became public in February, 1944, made the statement that:

> "The utmost effort to maintain and increase our saving is still necessary, and the first and foremost concern of financial policy must be with winning the war. The stage has now come, however, when many are also having to give thought to the economic problems which will arise after the war.
>
> "One factor which will affect decisions is the prospective cost of borrowing. It therefore seems appropriate that the Bank should, by reducing its rate, signify its intention to continue the kind of monetary policy which has brought about the current level of interest rates. A policy aimed at higher interest rates would only become intelligible if, after war shortages are over, consumers' expenditures and capital development were to proceed at a rate which would overstrain our productive capacity. I see no prospect of such a situation arising in a form which would call for a policy of raising interest rates."

Strong public buying developed in the bond market after the Ninth Victory Loan in the fall of 1945. A similar trend was evident in the United States market. Yields on long-term government issues in Canada declined nearly one half of one per cent. This was followed by a period of relative stability. In fact selling had declined to negligible proportions by mid-1947.

In the final quarter of 1947 when the nervousness previously described appeared in the United States bond market, and particularly as United States long-term government bond yields increased, the rate of general public selling of government bonds in Canada rose considerably. In January and February, 1948, the Bank of Canada altered its market supporting policy and permitted longer term Government of Canada bonds to decline to prices slightly above par, representing yields just under three per cent per annum, at which level they offered approximately the same yield as during the war and immediate pre-war years. At this time the Bank of Canada issued a press release stating that:

"Changes in market prices for Canadian Government bonds during the past few months have brought the yield on the longest-dated issues to slightly less than 3 per cent per annum, the rate of interest at which Canadian Government bonds were issued during the war years.

Interest rates on other high-grade securities have also risen, and to a somewhat greater degree. This has occurred during a period of very large capital investment and a correspondingly large demand for money which has been borrowed in this connection. The degree of the change in interest rates does not appear inappropriate in the circumstances.

On the other hand, the Bank of Canada does not regard the increase in rates of interest which has taken place as one of the most important factors in combating a general rise in price levels. The Bank is not in favour of a drastic increase in interest rates which would be likely to create a situation that might hamper, and might even prevent, essential forms of capital investment which Canada needs and which it is desirable should be proceeded with."

The same point of view was expressed in the Budget Speech of May 18, 1948, when the Minister of Finance said,

"I do not believe that any reasonable increase in interest rates would act as a serious brake upon business expenditures under the circumstances today, nor would it serve effectively to persuade consumers to spend less and save more of their income."

In a speech on April 1, 1948, before the Academy of Political and Social Science the Minister amplified the government's views:

"On the supply side, it is difficult to believe that any reasonable increase in interest rates would persuade the general public to save more and increase on balance its holdings of government bonds, thus making possible effective open market operations by the central bank. During the war the public in all democratic countries was persuaded to increase its holdings of government bonds on a scale far beyond anything previously dreamed of. A rise in interest rates likely to be sufficient to induce the public to increase its savings materially under present conditions would cause so drastic a fall in the prices of such bonds and so chaotic a condition in the money market and among institutional as well as individual investors that I doubt whether any responsible person would recommend it as deliberate policy. Even if the public should increase its purchases of government bonds, this would not be anti-inflationary unless the purchasers, in doing so, increased their current savings. A switch from idle savings deposits to bonds would not be enough, and it is difficult to believe that most of the small savers are likely to reduce their living expenditures under current conditions merely because they can obtain a slightly higher interest rate on the money they save.

"Analysis of the demand side of the market leads to a similar conclusion. From the point of view of the industrial borrower, demand is so intense that it would take a really substantial change in interest rates to dampen his enthusiasm and make him defer his capital project. Difficulty in obtaining loans or in floating securities would be a much more effective deterrent than higher rates. It would, of course, be comparatively easy for the central bank to produce such chaotic conditions in the money market that even the largest and strongest corporations would have difficulty in raising money. But as I have already indicated, what we need is a slowing down, not a sudden cessation, of capital development."

In his evidence before the Special Committee on Prices on May 27, 1948, the Governor of the Bank of Canada expressed similar views. At the same time the Governor of the Bank pointed out that when the general public was not a net buyer of government bonds it was not feasible for the Bank of Canada to increase "open market" security sales with a view to restraining the increases in chartered banks of loans and non-government investments.

SUBSEQUENT MONETARY DEVELOPMENTS

Also in his evidence before the Special Committee the Governor of the Bank referred to the fact that "open market" operations had been supplemented by advice from the Bank to the chartered banks in the matter of lending policy. During the second half of 1947 the Bank had referred to "the desirability of scrutinizing very carefully loans against inventories and receivables, to try to avoid a situation where inventories or receivables were excessively high." The Governor said that in February, 1948, the Bank had also suggested to the chartered banks that under existing conditions the financing of capital development by the expansion of bank credit was undesirable and the banks had expressed thoughts along the same lines.

During 1948 the increase in chartered bank loans and holdings of non-government securities has been appreciably less than half the rate of expansion in 1947.[1] On the other hand the government's budgetary surplus of current revenues over ordinary expenditures has been required to finance other government outlays not included under the heading of expenditure and the accumulation of foreign exchange reserves. Unlike 1947, there has been no net flow of funds to the government from the public to offset the increase in money supply. Therefore, a considerable increase in money supply will be shown on the year, although the 1948 expansion in bank loans is much less than last year.

[1]See Table 38.

Appraisal

As we have emphasized throughout, the primary purpose of taxation, borrowing, etc., is to raise revenues to meet government expenditures. But this process has important subsidiary effects on the economy and thus is one of the instruments at the disposal of the government to influence economic activity generally. These two aspects of public finance are not in conflict. They lead to the same conclusion. For example, budgeting for a surplus in an inflationary period is sound policy, not only because it tends to reduce the volume of public spending, but because there is no better period in which to reduce the public debt.

In theory, fiscal and monetary action alone can prevent a general rise in prices. All that is required is a policy which takes money out of circulation and otherwise restricts expansion in the money supply and the rate of spending to the point where money demand is equal to the available supply of goods and services at the existing level of prices. If such a policy is carried through, so the theory runs, even a rising level of external prices can be neutralized by allowing the domestic currency to appreciate in terms of other currencies.

In practice, however, there are some very real limitations on the extent to which fiscal and monetary measures can be used to restrain the kind of inflationary pressures that have existed in Canada since the outbreak of World War II.

One such limitation lies in the reaction of taxpayers to tax rates which they regard as unduly high. Personal income taxes which are regarded as too high may, under certain circumstances, lead to slackening of personal effort, or to demands for higher wages. Unduly high taxes on corporate profits may, under certain circumstances, interfere with maximum output and may increase costs and prices through lowering the penalties on waste and inefficiency in business. Unduly high indirect taxes are less likely to impinge on incentives, but may cut across accepted standards of equity in taxation, and there is danger that because of their effect on the cost of living they too may lead to higher wage demands. In other words, if the remedy is administered in too large doses, it may produce reactions opposite to those intended.

Apart from the limiting factor of incentive, experience has confirmed that neither fiscal nor monetary measures can be sufficiently selective and flexible to relieve the bottlenecks in particular commodities which arise in an acutely inflationary situation. Such measures may be able to control the situation ultimately but the over-all results may be much too drastic. To use them for such a purpose is like using a butcher knife to perform a delicate surgical operation. The cause of the trouble may be removed but a good deal of unnecessary damage may have been inflicted in other parts of the system.

More important perhaps than any of these limitations is that imposed by the degree to which the public is willing to give support to a government which attempts to put into effect the kind of fiscal and monetary policies required to prevent rising prices. Inflation is undesirable and unpopular in many ways, but full employment and prosperity also have a very wide popularity.

Our appraisal must therefore be made with these economic and public limitations held clearly in view. The test we shall apply is whether or not under all the circumstances the policies followed made as much of a contribution to stability as reasonably could have been expected.

Without necessarily concurring in all the views expressed by the government, we would commend the efforts that have been made, through the budget speeches of the Minister of Finance and elsewhere, to clarify the purposes of fiscal and monetary measures in an inflationary situation. As we have already said, government cannot move beyond the point of public acceptance in these matters but, thanks to the growing sense of public understanding of economic issues, that point is now well beyond what any one would have thought possible 10 years ago.

Reviewing the period as a whole, it is clear that little use was made of monetary policy in the orthodox sense, that is, the general restriction on the supply of money, leading to higher interest rates. It appears that fiscal measures, supplemented by direct controls, were depended upon almost entirely to reduce the excess of demand over supply. Various official explanations were offered from time to time for the decision not to follow a more rigorous monetary policy, not all of which appear to us to be entirely consistent. When during the war the prospect of higher interest rates might have interfered with the current sale and retention of Victory Bonds, it was suggested that higher rates would "only become intelligible if, after war shortages are over, consumers' expenditure and capital development were to proceed at a rate which would overstrain our productive capacity".

In 1948, following a limited decline in the price of long-term government bonds, we find the Bank of Canada saying that it "does not regard the increase in rates of interest which has taken place as one of the most important factors in combating a general rise in price levels. The Bank is not in favour of a drastic increase in interest rates which would be likely to create a situation that might hamper, and might even prevent, essential forms of capital investment which Canada needs and which it is desirable should be proceeded with". The Budget Speech of May 18, 1948, puts emphasis on the relatively small effect that any "reasonable" increase in interest rates would have on business expenditures or on consumer spending or saving.

The argument that in the circumstances of the post-war period most consumers and business men would not have been deterred from proceeding with their spending plans by a moderate rise in the rate of interest is very similar to the argument, sometimes advanced in the pre-war depression, that a reduction in interest rates would have an insignificant effect in stimulating spending. In both depression and boom and, for that matter, at all times, economic forces are at work far more powerful than the possible effects of a change in the cost of borrowing money or in the rate of return on savings. To conclude, however, that the change should not be made because the probable effects would be small is quite a different matter. The easy money policy adopted by the Canadian government in the early thirties did not cure the depression, but it was generally acknowledged to be a step in the right direction and that higher interest rates would have caused an even greater curtailment of spending in individual cases.

In appraising monetary policy since the beginning of World War II it therefore seems fair to say that it was largely passive and deliberately so. Whether it should have been more positively anti-inflationary is a matter of judgment. A tighter rein would have involved a drop in the market price of Victory Bonds and other longer term government securities. Since the Canadian government debt has now grown until it forms a very large part of the total debt held by Canadians and a similarly large part of the total assets of institutions like banks and insurance companies, we can understand the reluctance of the monetary authorities to create unsettlement in the financial markets. We can understand, too, their reluctance even to appear to break faith with individual holders of Victory Bonds who may have purchased such bonds in the expectation that they would always be able to sell them, if need arose, at around par.

Nevertheless, it is our view that monetary measures could have been used to a greater extent than they were during the recent inflationary period. We hold this view even though we are aware that Canadian policy was similar to that followed in the United States and the United Kingdom. The policies followed probably reflected public thinking and discussion which seemed, on the whole, to be more concerned about the dangers of a post-war recession than of a post-war inflation.

On the other hand the government did not hesitate to pursue a vigorous fiscal policy. It made a determined effort to pay for a high proportion of the costs of the war out of taxes and to finance the remaining deficit by methods calculated to reduce the volume of spending. There are no absolute standards against which to measure achievements; we can only record our view that the policies followed by the government indicated a true appreciation of the principles of war finance and that more was done than most people thought possible, to translate those principles into practice. Even so, there remained in the hands of the public at the end of the war a large volume of liquid savings held in banks or government bonds ready to be spent which has added to the difficulty of keeping the post-war inflation in check.

To some extent at least the Canadian government shared the widely-held view that the problem in the post-war period was more likely to be a deficiency than an excess of demand; hence, its special tax concessions to business, already outlined, to encourage capital expenditures. In the light of subsequent events it is possible that these concessions gave a greater stimulus to spending than was needed to keep the economy operating at full capacity.

We must observe, however, that the spending stimulated by these concessions and by a continuation of low interest rates may have been wholly desirable since it increased the productive capacity of the country. It can be argued that spending for consumption purposes should have been curtailed either by higher taxes or increased voluntary saving in order to make the additional capital investment possible without inflation. The trouble has not necessarily been an excessive rate of capital investment. But the combination of a high rate of spending on capital investment and the maintenance of a high rate of spending on current consumption made some inflation inevitable.

The purpose of fiscal policy in wartime was relatively simple. Apart from avoiding an unnecessary increase in the public debt, it was to curtail civilian spending so that it did not compete with the government's spending purposes. Government spending generated the excess income that threatened to raise prices and efforts were concentrated on trying to get the excess income back into the hands of the government through taxes or the sale of government bonds or on trying to "sterilize" it in the form of other kinds of savings.

At the end of the war this simple pattern disappeared. Government spending was no longer the main generator of inflation. It became clear that total spending would exceed total available supplies of goods and services even if the government took back in taxes as much as it spent. The situation called for a budget surplus, that is, for a reduction in the public debt.

How far did the policies followed meet this requirement? As to expenditure, we are not in a position to comment other than to say that most of the increases in spending on current account compared with pre-war are to be found in the expansion of the social services, the payments to provinces under the tax agreements and the greatly enlarged scale of defence and veterans' expenditure, all of which are presumably part of the accepted pattern. Capital expenditures by various governments are dealt with in Chapter 5. For present purposes it is sufficient to say that the federal government seems to have adhered in large measure to its professed policy of postponing major public works to a more propitious time. Most of the limited post-war increase in the government sector of capital investment is accounted for by provincial and municipal expenditure and by Dominion government housing expenditure.

In assessing post-war tax policy it is necessary to take account of public acceptability as well as economic desirability. Looking at the matter only in the light of what was economically desirable, and leaving out of account the question of acceptability, we are inclined to think that taxes might have been maintained at a somewhat higher rate. No doubt prices would still have risen, but the rate of the increase would probably have been smaller, and the resulting pressure on those with relatively fixed incomes, less severe.

When account is taken of over-all government spending and investment, rather than merely those particular forms of expenditure that happen to be included in the budget, the surplus of government intake over government outgo in the past few years has not been large.