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POST-WAR TRENDS IN THE CANADIAN BUSINESS CYCLE

1946-1960



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University of Manitoba

April 1, 1963

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Thesis Abstract:

The purpose of this study is to analyse Canadian economic fluctuations between 1946 and 1960 in order to account for their major features and to appraise the importance of forces helping to shape that experience. Concomitant with this objective, this study proposes to examine the question of a possible future deflation of the proportions of the 1930's. In the light of these two objectives this study endeavours to analyse certain structural and autonomous forces as they promote stability or instability in the economy. The Caves and Holton theory of Canadian economic growth proves to be useful in providing some insight into this subject.

This study accepted completely the dating of cyclical turning points in economic activity as presented by Professor W. C. Hood to the Senate Hearing on Manpower and Employment. Subsequently this study analyses specific time phases of the cycles delineated by Professor Hood. Involved in this analysis are such variables as monetary and fiscal policy, automatic income stabilizers, and the effects produced by relative changes in aggregate demand. One question arising out of this analysis concerns the incompleteness of the expansion phase 1958 to 1960, and in part perverse monetary and fiscal policies are mentioned as pertinent variables. Although this study was not able to arrive at a positive conclusion concerning the possibilities of a future major deflation, a tentative conclusion was advanced that a severe deflation is rather more unlikely now than it was in the 1930's.

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ABBREVIATIONS EMPLOYED

- C.J.E.P.S. - Canadian Journal Of Economics And Political Science
G.N.E. - Gross National Expenditure
G.N.P. - Gross National Product

CHAPTER I

INTRODUCTION TO THESIS

The purpose of this study is to examine the nature of the Canadian business cycle between 1946 and 1960, in an attempt to appraise the importance of the major forces which shaped that experience and to account for its principal features. The analysis undertaken will be in terms of aggregate demand and shifts in composition of aggregate demand. Since the time period under analysis will be relatively short, i.e. 14 years, it will be difficult to isolate a cyclical approach from a secular one, the difference in approach depending entirely upon the type of cycle or growth analysis undertaken.

In a study of this nature, one of the first priorities to attend to is the dating of turning points in general economic activity. Of course the dating of turning points is necessarily arbitrary to some degree, for the peaks and troughs of specific cycles rarely coincide with those of general economic activity. The problems involved in choosing turning points cannot be underemphasized. Actually R. A. Gordon implies that it may be more realistic to think in terms of turning zones than turning points, because of the overlapping in the expansion and contraction phases of various series¹. Professor W. Hood, in his submission to the Canadian Senate Hearing on Manpower and Employment chose his turning points on the basis of examining many specific series². In order to simplify this study I have accepted in entirety his dating of the turning points.

TABLE I

POST-WAR TURNING POINTS IN CANADIAN ECONOMIC ACTIVITY*

<u>Year</u>	<u>Quarter</u>	<u>Month</u>	<u>Character of Turning Point</u>
1946	1	February	T
1948	4	October	P
1949	3	September	T
1953	2	April	P
1954	2	June	T
1957	2	April	P
1958	2	April	T
1960	2	April	P

* W. C. Hood, The Demand For Labour,
A Report To The Special Committee of
The Senate On Manpower and Employment -
(Ottawa, December 8, 1960, No. 2) p.93.

Utilizing the above turning points we have isolated these fourteen years into three and one-half short cycles. As may be understood from the previous table, we have chosen our cycles in such a manner that we will be examining three complete cycles running from peak to peak. Our reasoning is both logical and pragmatic, since this framework leads to a more ordered analyses.

Although the post-war cycles will be described in more detail in the following chapters, three main characteristics stand out, the results of which are summarized at this point. By historical standards a good, but not unusual rate of growth of real income per capita was

exhibited during these post-war years. A corollary of satisfactory growth and stability of production was the generally low average level of unemployment. Finally, the economy escaped the major price deflation which was the case during the 1930's.

The theory that great economic upheavals of past experience are no longer likely is quite popular. This popularity is based partly on recent historical evidence, which is in turn reinforced by changes in the institutional structure of the economy. The adoption of full-employment as a goal, the acceptance of the countercyclical efficacy of the unbalanced budget, the free floating Canadian dollar, the flexibility of monetary policy, the relative growth of government activity and the increased progression of the over-all tax structure are examples of institutional changes. There is another institutional change that is stressed by many who feel that future cycles in economic activity will not be too severe. These arguments depend on the efficacy of built-in stabilizers³.

An appraisal of these and other major forces affecting the post-war business cycle will be dealt with in the following chapters. In part this analyses will revolve around three major questions:

1. Does the nature of the evidence indicate a change in the character of the post-war cycle?
2. To what extent were post-war developments affected by structural changes which might be expected to endure and to alter permanently the character of the Canadian cycle?
3. Was there an appropriate blend of monetary, debt management, fiscal and foreign exchange policies in this period?

As Bert G. Hickman has noted, there are three broad attitudes regarding the possibility of post-war economic stability⁴. It may be argued that structural changes have so altered the response mechanism of the economy that wide swings are a thing of the past. Another argument often put forward explains this period of prosperity as being due to war or cold war influences, which are not only autonomous, but abnormal in their persistence for over two decades. A third explanation claims that the post-war period differs from its predecessors in details of structure and the mixture of causes in business fluctuations. It is towards this third alternative that Hickman leans.

In the following chapter I outline the conceptual framework for this study, and within this framework examine certain key variables influencing the Canadian economy. Consequently an exploration of various stabilizing and destabilizing forces in the economy is undertaken, in addition to an evaluation of the Caves and Holton theory of Canadian economic growth and stability. Chapter 3 outlines the three cycles in broad detail, concentrating mainly upon a graphical analysis - Chapters 4 through 6 deals with specific time phases of the cycles, and outlines cyclical movements and background influences which have operated upon these cycles. Chapter 7, the concluding chapter, attempts a blending of theoretical concepts and empirical evidence to arrive at a conclusion concerning post-war Canadian economic stability.

CHAPTER 2

THE CONCEPTUAL FRAMEWORK

Introduction

The object of this chapter is to outline the conceptual framework of this study. In order to more fully understand the forces shaping the character of the Canadian business cycle, it is beneficial to examine certain basic concepts and criteria as they pertain to our analysis, and included among these are major and minor cycles, automatic stabilizers, and the Caves and Holton theory of Canadian economic growth. The exploration of these factors and certain other variables, both stabilizing and destabilizing, will help us arrive at a judgement as to whether a business contraction such as that of the 1930's is possible again in the light of contracyclical tools that have become available and structural changes that have taken place since the 1930's¹.

Minor and Major Cycles

As generally defined, the business cycle consists of fluctuations in output, prices and employment. As changes in output and employment deviate from the equilibrium path, prices will in varying degree change in response to changes in aggregate demand and conditions of supply. Therefore, cyclically, these three indicators move more or less in unison, particularly employment and output. Generally the distinction between major and minor cycles is one of degree and of duration. The major cycle typically has a duration of seven to twelve years, while the minor cycle runs about forty months². Thus minor cycles are thought to be interwoven into the major or longer cyclical trend³. Another distinction often made

between minor and major cycles runs in terms of causation. The former is usually associated with inventory re-adjustments and the latter with fluctuations in the producer durable goods industries and in construction.

R. A. Gordon, who offers such a differentiation assumes that different sets of causal factors are at play in minor and major cycles.

"These differences in cyclical behaviour reflect the changing character of destabilizing forces which create business cycles. Major downswings usually follow periods of excessive investment in capital goods, substantial security speculation, and weakening of the banking system through the expansion of credit based on inflated security values. The resulting temporary saturation of investment opportunities and weakening of the banking system lead to contractions which are not easy to reverse. On the other hand minor cycles tend to be associated with less important and more short-run maladjustments which the economy can more easily overcome."⁴

The above differentiation of the minor cycle from the major cycle is useful to our analysis because of our historical experience with this cycle. Throughout our economic history mild fluctuations have been with us, whereas since 1867, we have had only two long periods of economic contraction, 1873-1895 and 1929-1937⁵. Edward J. Chambers has estimated that between April 1919 and October 1938 cycles on the Canadian economy have varied in length from a minimum of 29 months to a maximum of 103 months.

TABLE 2

**TENTATIVE REFERENCE DATES AND DURATIONS OF BUSINESS CYCLES
IN CANADA, 1919-38***

<u>Monthly Reference Date</u>		<u>Duration in Months</u>		
<u>Peak</u>	<u>Trough</u>	<u>Expansion</u>	<u>Contraction</u>	<u>Full Cycle</u>
-	April, 1919	-	-	-
June, 1920	Sept., 1921	14	15	29
June, 1923	Aug., 1924	21	14	35
April, 1929	March, 1933	56	47	103
July, 1937	Oct., 1938	52	15	67

* E. J. Chambers, "Canadian Business Cycles since 1919,"
C.J.E.P.S. Vol. 24, No. 2 (May 1958) p. 180

Also there is no doubt that minor cycles since 1945 have mainly involved inventory adjustments. An examination of post-war quarterly national accounts data indicates that the largest percentage changes between cyclical turning points among the major components of aggregate demand always were in the inventory component.

TABLE 3

**ABSOLUTE AND PERCENTAGE CHANGES IN INVENTORIES BETWEEN
CYCLICAL TURNING POINTS, 1946-1960 (a)**

	<u>Change in Inventories</u>		<u>Non-Farm</u>		<u>Farm</u>	
	<u>Absolute</u> \$millions	<u>Percentage</u>	<u>Absolute</u> \$millions	<u>Percentage</u>	<u>Absolute</u> \$millions	<u>Percentage</u>
Recessions						
4Q48-3Q49	+188	+294%	+48	+19%	+104	+90%
2Q53-2Q54	-912	-154%	-728	+128%	-200	-294%
2Q57-2Q58	-592	-190%	-460	+158%	-132	-660%
Expansions						
1Q46-4Q48(b)	-282	-81%	-233	-47%	-216	-216%
3Q49-2Q53	+340	+135%	+272	+92%	+80	+667%
2Q54-2Q57	+632	+197%	+452	+282%	+152	+115%
2Q58-2Q60	+744	+266%	+540	+321%	+204	+182%

(a) Absolute figures are in millions of 1957 constant dollars, seasonally adjusted at an annual rate. D. B. S. National Accounts, Income and Expenditures, by Quarters, 1947-1961.

(b) In order to compare changes between turning points, it was necessary to estimate gross national expenditure for the first quarter of 1946 in 1957 constant dollars, since that quarter was dated as a trough period by Prof. Hood. This estimate was prepared by converting the available 1949 constant dollar figure into 1957 dollar terms. Seasonally adjusted components were arrived at by employing the 1947 first quarter relationship to the annual figure which existed in 1947. The 1946 first quarter consumption estimate was dissected into durables, non-durables and services by applying the first quarter average proportions that these components occupied in total consumption between 1947 and 1949.

Table 3 illustrates that in absolute and relative terms, inventory fluctuations between cyclical turning points has been quite extensive. Also it is evident that inventory adjustments did not always follow the phase of the cycle in which they happened to occur. This situation existed during the first post-war expansion and contraction when inventories declined during the expansion and accumulated during the contraction. I would assume that these circumstances reflected the proximity of the war years and the strong influence such a period had on inventory stocks.

The distinction between minor and major cycles is not as complete as economic theory implies. R. A. Gordon, who has devoted a good deal of attention to this study of business cycles finds it necessary to speak of "hybrid" cycles, with characteristics common to minor and major cycles, and also of incomplete major cycles with expansion phases that do not have a chance to culminate in major contraction⁶. Despite the ambiguities involved in this differentiation, the process of binding several succeeding minor cycles as a unit of the expansion phase of the major cycle followed by a severe and long contractual phase during which minor cycles are absent is a fruitful operational procedure.

The Construction Cycle

There is a large measure of agreement among investigators of cyclical fluctuations that the construction industry is a key variable in the economy. The building industry in Canada and the United States has been historically characterized with long cycles, with wide amplitudes and with a duration of about fifteen or twenty years. In Canada the

severe depression of the thirties and the following war years were accompanied by a decline in total construction expenditures relative to gross national expenditure, while the post-war years exhibited a marked rise in this proportion. These changing proportions offer partial explanations of pre-war stagnation and post-war growth.

TABLE 4

NEW RESIDENTIAL AND NEW NON-RESIDENTIAL CONSTRUCTION
AS AN AVERAGE PERCENTAGE OF GROSS NATIONAL PRODUCT,
1926-30, 1931-45, and 1946-60 (*)

1926-1930	10.0 %
1931-1945	5.7 %
1946-1960	11.1 %

(*) D. B. S. National Accounts, Income and Expenditure, 1926-56, 1961

A priori it may be assumed that the demand for new residential construction is a function of population growth, the level and distribution of national income, the present stock of residential dwellings, and changes in real income. The market for new housing falls within the middle and upper ranges of income levels. A destabilizing influence in the construction industry is its historically speculative nature and the fact that the industry is very dependent on outside sources to finance its operation, viz., the mortgage and money market.

Also, economists have observed that the 'acceleration principle' is at work in the building construction cycle. The volume of building tends to fluctuate not with movements in total income, or total consumption demand, but rather with movements in the increase of these factors⁷.

Wars, of course, have also greatly stimulated post-war housing booms by introducing lengthy periods of time where, though the consuming public were building up liquid asset hoards, they were unable to spend out of these savings due to shortages of strategic factors of production, i.e. labour and materials⁸.

Residential construction is further influenced by urbanization and by interregional population drifts, which generate demand for housing in new locations. Associated with this demand is a demand for new social-capital facilities and a demand for new consumer durables, together with a related demand for new investment goods in the construction industries and in the consumer durables industries. Though farm families and families in poorer regions do own consumer durables, they generally hold smaller stocks of these than do city dwellers. Therefore, urbanization and inter-regional movement are likely to raise demand for consumer durables as well as for houses, streets, and sewers.

The termination of a construction boom is not as easily explained as its upswing. Although there has been a saturation of the market, and it takes a long time for the industry to recover, this explanation alone is still not capable of explaining the deep and lengthy slump in building which usually follows. According to Achenstein a more realistic account of the durations of the slump is the painful and long drawn-out process of downward revision of the over-capitalized properties and the other adjustments necessary to correct the excesses of a speculative estate boom⁹. Financial institutions which are at the center of this prolonged struggle for recapitalization, become pre-occupied with defaulted

mortgages and the taking over of foreclosed properties and have no incentive to supply funds for new construction that is in direct competition with the large number of existing dwellings whose capital values have meanwhile, been dropping to depression levels.

Whether or not one accepts the explanation of past housing booms as based on income changes, speculative activity and monetary influences, and of prolonged periods of residential building slumps in terms of a struggle for liquidity, there is little doubt that a major business contraction is more likely in a period of declining construction activity.

The Role of Exports and Foreign Capital in the Growth and Stability of the Canadian Economy - The Caves & Holton Thesis

The growth and cyclical pattern of the Canadian economy does not easily fit into the various theoretical models on cycles and growth, even though certain economists have integrated the cyclical process with the growth process¹⁰. The main reason is that the assumptions of these growth models are very rigid and usually cannot accommodate to the special influence of international trade and finance on the growth pattern of the Canadian economy. Caves and Holton seemed to have achieved such an accommodation in their theory on Canadian economic growth¹¹.

In a very thorough examination of the Canadian economy they outlined a convincing thesis that the mainspring of Canadian economic growth has been the demand for her staple exports¹². As a concomitant proposition to this thesis they argue that changes in technology and in domestic demand have been mainly a consequence of the development of these staple industries¹³. Their thesis is very convincing and is widely held -

however for the purpose of analysing the economic stability of the Canadian economy, their theory of short-run income determination proves to be of even more value.

They base their theory of economic fluctuations on their staple theory of development. In their words, "the argument breaks logically into two steps. First we argue that the short-period mechanism adjustment has been unchanged for five decades, except for explainable special features. Second, we argue that this short-period mechanism is consistent with the long-run staple theory, in that when the short-run forces work themselves out the results will mirror the prediction of the long-run theory. Thus long-run forces steer the economy in the short-run subject to the jars and jolts of random, transitional factors."¹⁴

Their short-run theory of income determination runs as follows¹⁵. Gross domestic investment in plant and equipment is largely a function of Canada's exports - with a one year lag. The level of gross national product normally moves at the same pace as personal disposable income, which in turn determines Canadian consumer expenditures, with an approximate one-year lag. Current consumer expenditures are also dependent on past habits of consumption. The relation of imports to personal disposable income was difficult to determine, since imports are generally for both consumption and investment purposes. In their empirical studies they found that total imports did not correlate closely with either income, consumption, or investment, however changes in consumption and investment jointly explain the demand for imports.

Empirical evidence further complicated their thesis. Inventory accumulation usually adjusted to changes in income with an approximate one-year lag. Thus when national income is rising rapidly inventory accumulation usually falls behind, and when income growth suddenly slackens off, inventory accumulation usually continues on for at least one year. Other factors affecting investment arises out of the current rate of population growth and changes in the age composition of the population. Both these factors affect businessmen's expectations and consequently investment prospects, but Caves and Holton could not offer any statistical evidence to support these relationships.

The Caves and Holton theory of economic growth and stability is valuable because it so clearly outlines the various strategic factors affecting the Canadian economy. I will not attempt to argue the merits of the staple theory of economic development, but certain important conclusions should be mentioned.

On the basis of analysing three periods of rapid Canadian economic growth - 1900-1913, 1920-1929, and 1946-1956, they conclude that Canada's foreign trade balance on current account depends on the difference between United States and Canadian income growth rates¹⁶. This conclusion is relevant when supplemented with additional information, i.e., that in the last forty years an increasing amount of our imports have been purchased from the United States. On the basis of this thesis, when the Canadian economy is growing more slowly than the American economy, as was the situation between 1946 and the 1948-49 recession, one would expect

a surplus on the current international account, and when the Canadian economy is growing more rapidly than that of the United States, such as in the years 1954-1956, one would expect a current account deficit. However, this thesis is not a complete explanation, for there are conflicting effects reported in the years 1952-1954, and 1957-1960, as illustrated in the following table.

TABLE 5

CANADA'S CURRENT ACCOUNT BALANCE AND COMPARATIVE CANADIAN-
AMERICAN RATES OF ECONOMIC GROWTH, 1949-1960

	Canadian Annual Rate of Growth in G.N.P. (Constant 1949 Dollars) (a)		American Annual Rate of Growth in G.N.P. (Constant 1961 Dollars) (b)		Canadian Current Account Balance (Millions of Current Dollars) (c)	Canadian Current Account Balance with the United States (Millions of Current Dollars) (c)
1949-1950	6.9	%	8.3	%	-334	-400
1951	6.2		8.3		-517	-951
1952	8.0		1.3		+164	-849
1953	3.8		4.6		-443	-904
1954	-2.9		-2.0		-432	-807
1955	8.6		5.7		-698	-1035
1956	8.6		2.1		-1369	-1639
1957	0.0		1.9		-1458	-1579
1958	1.1		-1.6		-1134	-1176
1959	3.2		6.7		-1504	-1230
1960	2.1		2.7		-1243	-1361

- (a) D.B.S., National Accounts, Income & Expenditure, 1926-56, 1962.
 (b) Economic Indicators, December 1962, Prepared for the Joint Economic Committee by the Council of Economic Advisors.
 (c) D.B.S., Canadian Balance of International Payments, Various Issues.

However the staple theory does emphasize the connection between export based rapid growth and the inflow of foreign capital. The persistence of extremely large current account deficits with the United States are evident in Table 5. To a considerable extent these deficits reflect the magnitude of domestic and United States investment in Canada. Table 6 illustrates the degree of foreign resources employed in Canada's post-war accumulation of capital.

TABLE 6

NET USE OF FOREIGN RESOURCES AS A PERCENTAGE
OF GROSS CAPITAL FORMATION IN CANADA

	Rates of Canadian Economic Growth (1949 Dollars) (a)	Net Use of Foreign Resources as a Percentage of Gross Capital Formation in Canada (b)
1946		-10.0 %
1947	1.3	7.1
1948	1.9	-3.1
1949	3.9	2.8
1950	6.9	13.3
1951	6.2	15.8
1952	8.0	6.7
1953	3.8	18.2
1954	-2.9	21.4
1955	8.6	25.8
1956	8.6	26.4
1957	0.0	29.2
1958	1.1	25.0
1959	3.2	29.9
1960	2.1	25.9

(a) D.B.S., National Accounts, Income & Expenditure, 1926-56, 1961.

(b) D.B.S., The Canadian Balance of International Payments and
International Investment, 1960, Table 20

Canada's heavy dependence on international trade and foreign capital has led to an almost synchronization of the Canadian business cycle with the American. Table 7 compares Canadian post-war cyclical turning points, dated by Professor Hood, with American cyclical turning points, dated by the National Bureau of Economic Research.

TABLE 7

CANADIAN AND AMERICAN CYCLICAL EXPANSIONS 1945-60*

<u>Canada</u>	<u>Duration (Months)</u>	<u>United States</u>	<u>Duration (Months)</u>
Feb. 1946 to Oct. 1948	21	Oct. 1945 to Nov. 1948	37
Sept. 1949 to Apr. 1953	44	Oct. 1949 to July 1953	45
June 1954 to Apr. 1957	34	Aug. 1954 to July 1957	35
Apr. 1958 to Apr. 1960	24	Apr. 1958 to May 1960	25

*Hood, loc.cit and G. H. Moore, Business Cycles Indicators, Princeton, University Press for the National Bureau of Economical Research, 1961

From this table it becomes evident that with the exception of the first American post-war expansion, Canadian and American experiences have been nearly identical. Another difference which may be noted is that Canada's last three expansions measured one to two months shorter than the United States, and consequently the downward movement in Canada started one month earlier than in the United States.

Whatever the disadvantages, it must be recognized that heavy United States investment has greatly accelerated Canadian economic growth. In the post-war period American investment has been of overriding importance in the growth of the oil and gas industry, certain sections of the mining, smelting and refining industries, including nickel, aluminum,

iron ore and asbestos. In addition to this there has been heavy American investment in the pulp and paper industry, chemical industry, together with a number of secondary manufacturing industries including automobiles, electrical apparatus and supplies, and rubber products. A side effect of the importation of American capital has been the important influx of managerial and technological knowledge, and assured markets. None the less the rapidity of its growth and its concentration in particular areas of the economy have led to misgivings among certain segments of Canadian opinion.

Autonomous Factors Operating In The Minor Cycle

Economists generally agree that severe business contractions result from substantial declines in fixed investment. These declines may occur because the stock of investment opportunities become temporarily insufficient to maintain an adequate level of expenditure or because the desire to exploit the existing opportunities is impaired for a time by adverse price or sale expectations, liquidity considerations, deterioration of business confidence or monetary or real capital shortages. Similarly, fixed investment opportunities are created by replacement requirements, demand for additional capacity induced by income growth, the developments of new products, changing tastes, divergent income elasticities, etc.

High on this list of autonomous factors must be placed war and cold war influences. The second world war left as part of its heritage an abundance of investment opportunities and the psychological and financial conditions favorable to their implementation.

TABLE 8

THE ROLE OF DEFENCE EXPENDITURES IN THE CANADIAN ECONOMY*

Defence Expenditures as a Percentage of Federal Government Expenditure		% All Government Expense	% G.N.P.
1947		14.73 %	1.72 %
1948		13.13	1.56
1949		16.97	2.21
1950	49.45 %	21.03	2.74
1951	67.98	35.37	5.46
1952	72.32	42.06	7.50
1953	74.52	43.03	7.62
1954	70.52	38.71	6.94
1955	70.12	36.73	6.49
1956	67.16	33.46	5.89
1957	64.70	30.84	5.53
1958	58.20	26.88	5.05
1959	55.22	24.22	4.48
1960	56.74	23.16	4.31

*D.B.S., National Accounts, Income and Expenditure,
Various Issues.

To some extent the importance of federal government expenditures in the present day economy springs largely from security needs, and to the formerly paramount destabilizing potential of private investment must now be added that of government spending. If government is to be regarded as a structural feature of the economy, the fact that a large percentage of federal purchases of goods and services is for national security, and

may shift up or down with the changes in the international or military situation, can be destabilizing. Table 8 illustrates the role of defence expenditures relative to gross national expenditure, all government expenditures, and federal government expenditures. Although defence expenditures are a low percentage of gross national expenditure, its magnitude in the federal budget certainly limits that government's scope for action. Also, one could assume that most defence expenditures take place in those sectors or industries where output has a relatively low employment content. On the basis of this discussion one could argue that a certain proportion of government expenditures cannot be countercyclically planned, and also that they are not in the main employment oriented.

If government has placed a high floor on aggregate economic activity, it is not because of an inherent stability of federal expenditure or because it has displaced what were previously the least stable elements of effective demand. Rather the stability introduced seems to develop out of the structural changes which have accompanied the growth of government expenditures, financial reforms, tax and transfer payments, and the assumption of federal responsibility for full employment.

Built in stabilizers are usually singled out for special significance as mitigating factors in a serious downswing. These automatic stabilizers are generally defined as devices which possess predictability of action, initiate response without the need for policy decisions, and have the proper effect on the government's budget and on the supply and demand for money.⁽¹⁷⁾ Two major sources of federal and provincial revenues, personal income and corporate income taxes, clearly

follow such procedures, while the unemployment insurance program is probably the most direct and automatic of the various built-in devices. The countercyclical effect of the unemployment insurance fund is two-fold: a drop in the level of activity tends to lower employers' and employees' aggregate contributions and increase the amount of benefit payments from the insurance fund; an increase in economic activity tends to raise the aggregate amount of contributions and to lower the total value of benefit payments.

The countercyclical operation of corporation taxes, personal taxes and transfer payments may be noted in the following table - Table 9 designates movements in the ratio of direct corporation taxes to gross national product, personal direct taxes to personal disposable income, and government transfer payments to personal disposable income. In all three series these relationships are as one might expect. For direct corporation taxes and personal direct taxes, the ratios decline from peak to trough and increase from trough to peak, while the ratio of government transfer payments to personal disposable income follows a diametrically opposed pattern.

TABLE 9

**PERSONAL DIRECT TAXES, DIRECT CORPORATION TAXES,
AND TRANSFER PAYMENTS AT CYCLICAL TURNING POINTS(a)**

Turning Points	Ratio of Direct Corporation Taxes to Gross National Product(b)	Ratio of Personal Direct Taxes to Personal Disposable Income(b)	Ratio of Government Transfer Payments to Personal Disposable Income(b)
4Q48P	9.36 %	6.57 %	6.99 %
3Q49T	7.90	4.90	7.63
2Q53P	10.10	8.48	8.41
2Q54T	9.16	7.91	8.72
2Q57P	10.02	8.33	8.15
2Q58T	8.76	6.60	10.30
2Q60P	9.08	8.64	13.25

(a) D.B.S., National Accounts, Income & Expenditure, By Quarters, 1947-1961

(b) Calculations are based on seasonally adjusted, 1957 constant dollar quarterly data.

Technological Change

The role of technological change and other factors in the creation of investment opportunities should also be stressed. The industrialization of the nineteenth century was characterized by the use of coal as a basic source of energy, the use of iron and steel as a basic construction material, and the use of the steam engine as a basic form of motive power.⁽¹⁸⁾ In the twentieth century, technological change, which manifested itself in such innovations as electrical power, the internal combustion engine, the automobile, the aircraft, atomic energy, space research, etc., is offering to provide a new framework for growth. New industries are developing as old industries

fall away. Cost-reducing innovations or factor substitutions alter relative prices and outputs even with a given change in demand. Excess capacity might not be a barrier to private investment when technological factors are a considered influence. Improvements in methods of agricultural production have paralleled development in manufacturing, mining, transportation and communication. These and countless other technological developments operate to create both long and short-term changes in particular industries and in measures of aggregate economic activity.

"The initial effects of important innovations are usually spurts of expansion, followed by competitive tensions and structural and financial maladjustments that create temporary lulls. The additional expansion ensues, and further changes follow the earlier ones. Gradually there emerges the secular growth patterns in both particular industries and total activity. The long-run course of total production may even give evidence of gradual wavelike movements around an underlying trend, reflecting the changing nature and intensity of technological change in different periods."(19)

Changing Tastes

Changes in consumers' tastes perhaps belongs in the list of autonomous factors, but R. A. Gordon feels this is a rather passive variable. Tastes change as new products become available, as old products grow cheaper, or as the selling activities of businessmen influence consumers' buying habits. "In short, shifts in consumers' tastes are, for the most part, not an independent force creating change in the economy but rather a product of other dynamic forces."(20)

Monetary and Fiscal Policy

Monetary and fiscal policy are the most significant devices the public authorities have for promoting growth and stability in the economy. The most important instruments of monetary and fiscal policy will not be evaluated in this study, however in the analysis of phases of the various cycles policy measures will be examined as factors promoting change in the cycle pattern.

It should be mentioned at this point that the main objectives of monetary and fiscal policy, viz. high levels of employment, price and exchange stability, and the encouragement of an adequate rate of growth, are likely to be contradictory at times. Rapid growth and high levels of employment are likely to create strong pressures on the price level, while a monetary policy that is designed to decrease inflationary pressures may as a by-product increase the level of unemployment and decrease the rate of growth of the economy. Thus suitable goals and priorities must be decided upon before policy proposals are undertaken.

Population Growth

Among the many factors which shape the long-run pattern of the aggregate economy, population has always been viewed as occupying a leading place. The ways in which population growth influences the course of economic activity are themselves a major subject of investigation. From 1950 to 1960 a million and a quarter people were added to the working population, and in the decade of the 1950's more than a million and a half people came to Canada as immigrants. Even if the additions to population do not immediately enter the labour force, or even if they do, or are rendered unemployed, they may be expected to

maintain a certain minimum amount of consumption 'whether through dis-saving, borrowing, charity or public dole'. As an autonomous factor, population growth changes the total level and composition of effective demand in the following ways: (22)

- (1) The growth of population gives an upward trend to total production, through its dual effect on demand and on the labour supply.
- (2) The absolute rate of population increase has an important effect (possibly lagged) upon the volume of investment. The larger the increase, the greater the number of new homes, factories, other productive equipment, and public investment needed to maintain a given per capita production.
- (3) An increasing rate of population growth lowers the average age of the population, and this age distribution results in gradual changes in the pattern of consumer demand. This trend can be offset of course by the increasing life expectancy of the Canadian population.

Various Financial Reforms

Financial reforms, such as larger margin requirements and public surveillance of bank and non-bank financial intermediaries, may be considered measures which mitigate the impact of a downturn. The development of non-bank financial intermediaries may be viewed at from contradictory points of view. On the one hand, in a period of economic contractions, because of their large net receipts, it may be possible for these large institutions to meet their obligations without resorting to asset liquidation. It has been also suggested, following the experience of insurance companies in the thirties, that the large volume of net receipts and financial strength of many of them make it unlikely

that they will do any precautionary and speculative hoarding in periods of contraction.

On the other hand, most of the growth in relative importance of the non-bank financial intermediaries occurred before the thirties, and they did not appear to help much in the liquidity trap the economy was in then. "In part, we still need to know more about the relative importance of financial institutions like insurance companies and pension funds in the loanable funds market before we can determine the importance of their low-liquidity preferences in times of contraction. We also need to know to what extent the change in asset preferences toward more liquidity at such time stops or even reverses the growth in relative importance of the non-bank intermediaries and reduces their net receipts available for new asset acquisition. And how much do they shift the composition of their portfolios in favour of safe and liquid governments at the expense of private securities and loans?"(23)

The Exchange Rate Situation

It is not the purpose of this thesis to analyze in detail historical developments in the Canadian exchange rate, except in instances where such movements in its international value has led to instability in the Canadian growth pattern.⁽²¹⁾ However, to briefly outline the postwar situation, the Canadian dollar was pegged by the Canadian government at a discount of 10% on the American dollar, and held at that value between 1939 and 1946. In July of 1946 the Canadian dollar was returned to parity with the American dollar, and by September of 1949 the Canadian government, following the British example, devalued their currency to 90.9 United States cents. From 1949 on foreign exchange

controls were relaxed and were abolished completely by December 1951. Since Oct. 1950, and over the remaining period of this study, the exchange rate was free to fluctuate between parity with the U.S. dollar and a premium of about 6%, with only minor official interventions in the market. The freely fluctuating exchange rate had repercussions on the whole growth pattern of the economy, and in such a context will be referred to as it has affected employment and stability.

Some Further Stabilizing and Destabilizing Influences on the Cycle

The most obvious stabilizing influence which has been with us in the past and certainly will remain with us in the future is the consumer's resistance to a reduction in living standards in the face of falling incomes. Rather than consumption, it is saving that may be expected to decline most during periods of contraction. Similarly, the implied existence of a high marginal propensity to save during such periods means a comparatively low multiplier, and this of course is stabilizing.

Paralleling the stabilizing behaviour of consumers has been the inclination of corporations to maintain dividend payments in the face of declining, zero, or negative profits. Whether one wishes to treat this behaviour as a factor maintaining personal disposable income, and therefore consumption in the face of declining gross national product, or as a high marginal business propensity to save to be added to the high marginal consumer propensity to save, the result is the same; namely a stabilizing reduction in the value of the multiplier. Another form in which businesses tend to be stabilizing is their well-known inability to disinvest faster than their rate of depreciation.

Another method, often overlooked, stems from the rise in the level of many elements of fixed expenses during periods of expansion and their inability to contract their fixed outlays during ensuing periods of contractions. Hence, although investment may fall during the downswing, one could expect sales and income to fall in a smaller proportion as a result of the maintenance of a higher level of fixed cost outlay.

Although our economy today exhibits many automatic stabilizers, there have been new destabilizing influences developing in the past decade. One of these destabilizers is the apparent long run decline in the proportion of national income spent on services and non durable goods, with a corresponding rise in the share of spending on all durables. This means that our economy is confronted with a rise in the relative importance of spending on goods whose demand is deferrable during downswings, and this is surely destabilizing.

TABLE 10

CONSUMER EXPENDITURES AND ITS COMPONENTS AS A PERCENTAGE
OF GROSS NATIONAL EXPENDITURES, SELECTED YEARS*

	Durables	Non-Durables	Services	Total Consumption
1926-29	6.0 %	38.6 %	26.8 %	71.4 %
1952-54	7.8	33.4	21.9	63.0
1958-60	7.6	32.8	24.5	64.8

*D.B.S., National Accounts, Income & Expenditure, 1926-56, 1961

Associated with the rise in spending on consumer durables has been the rise in consumer credit, with possible destabilizing effects of its own. However, W. C. Hood argues that "one cannot draw any conclusions as to whether the level of consumer debt is 'too high' relative to disposable income without consideration of the concentration of consumer debt and other

consumer assets and obligations by income classes."(18)

TABLE 11

RATIO OF CONSUMER DEBT OUTSTANDING (SELECTED ITEMS)
TO PERSONAL DISPOSABLE INCOME*

Year	Canada	United States
	%	%
1945	3.1	3.1
1946	4.2	4.4
1947	5.9	5.7
1948	6.0	6.5
1949	6.7	8.0
1950	8.1	9.1
1951	6.6	8.7
1952	8.7	10.2
1953	10.2	11.1
1954	11.0	11.3
1955	12.0	12.9
1956	12.4	13.2

*W. C. Hood, Financing Economic Activity In Canada, (Royal Commission
On Canada's Economic Prospects, July 30, 1958)

Concluding Remarks

It would be premature to conclude that structural developments have made major contraction a thing of the past. Forces which are partly independent of aggregate economic activity or its rate of change have also affected post-war business fluctuations. These autonomous forces include war and cold war influences which have both altered the response mechanisms and subjected the economy to short-term disturbances. Also involved are technological change, population growth, and other factors which create investment opportunities in various sectors of the economy.

CHAPTER 3

THE CYCLES IN RETROSPECT

With the termination of the Second World War, there was some immediate reduction in economic activity, as measured by conventional statistical aggregates. However, this contraction was short-lived, and attributable wholly to the temporary dislocation associated with demobilization and conversion to a peace-time economy. A wave of expansion commenced early in 1946, aided by a backlog of consumer and business pent-up demand, and reinforced by contributions Canadians made to the recovery of European countries. These contributions were largely in the form of government loans used to finance the exports of Canadian goods to these countries. Although the transition to a peace-time economy was accomplished with only a moderate fall in real output, the strength of the demand at home and abroad put real pressures on the Canadian price level.

This first wave of expansion continued uninterrupted until the last quarter of 1948, when supply came into better balance with demand, and external pressures on the Canadian price level were weakened by the appearance of recessionary influences in the United States. This brief 'pause for breath' was immediately followed on its heels by a new wave of expansion beginning in the third quarter of 1949. This second wave of expansion was further reinforced in mid-1950 by the outbreak of

hostilities in Korea, which brought with it a new resurgence of inflationary pressure. The decline in defence expenditures after the Korean armistice of mid-1953 helped contribute to a slackening of economic growth at this time. However, this recession was not of major importance, although in some respects, it was more severe than the preceeding one.

The recession reached its lowest point about mid-1954 and was followed by a third major post-war expansion, which certainly was different than the last two expansions. Although growth in capital investment was extremely large, this expansionary wave did not have a backlog of World War II demand nor the impetus of the Korean War to stimulate it. This expansion was rapid, notably shorter in duration, and was to be followed in the second quarter of 1957 by one of the severest post-war recession that Canada had yet experienced .

The recession of 1957-58 was to be a major turning point in Canadian economic affairs. "The recovery from this recession was relatively moderate and conspicuously short-lived. Widely held expectations about the increase in national output soon turned out to be over-optimistic, and the economy proved incapable of providing the number of new jobs necessary simultaneously to absorb the increase in the labour force and to reduce unemployment to pre-recession levels. The volume of immigration had declined sharply from its 1957 peak and the rate of family formation had fallen off. Overcapacity had developed

in many parts of the economy and the situation, which persisted throughout the period of recovery, had a serious effect on investment expenditures. Early in 1960 the economy entered another recession without ever having recovered fully from the preceeding one¹.

Thus the weak recovery of 1957-58 marks a turning point when the rate of growth of the economy, measured in terms of total national output, drops substantially. The following table indicates the yearly growth of gross national product in constant dollars from 1946 - 1960, with the very apparent indication of high growth rate in the years 1954 through to 1956, when the economy grew at an average annual rate of 8.59 and 8.63 per cent respectively.

TABLE 12

GROSS NATIONAL PRODUCT 1946 - 1960 (\$ MILLIONS)*

	Current Dollars	1949 Constant Dollars	Percentage change in 1949 Constant Dollars
1946	11,850	15,251	
1947	13,165	15,446	1.28
1948	15,120	15,735	1.87
1949	10,343	16,343	3.86
1950	18,006	17,471	6.90
1951	21,170	18,547	6.16
1952	23,995	20,027	7.98
1953	25,020	20,794	3.83
1954	24,871	20,186	2.92
1955	27,132	21,920	8.59
1956	30,585	23,811	8.63
1957	31,909	23,833	0.09
1958	32,867	24,102	1.13
1959	34,857	24,864	3.16
1960	35,959	25,379	2.07

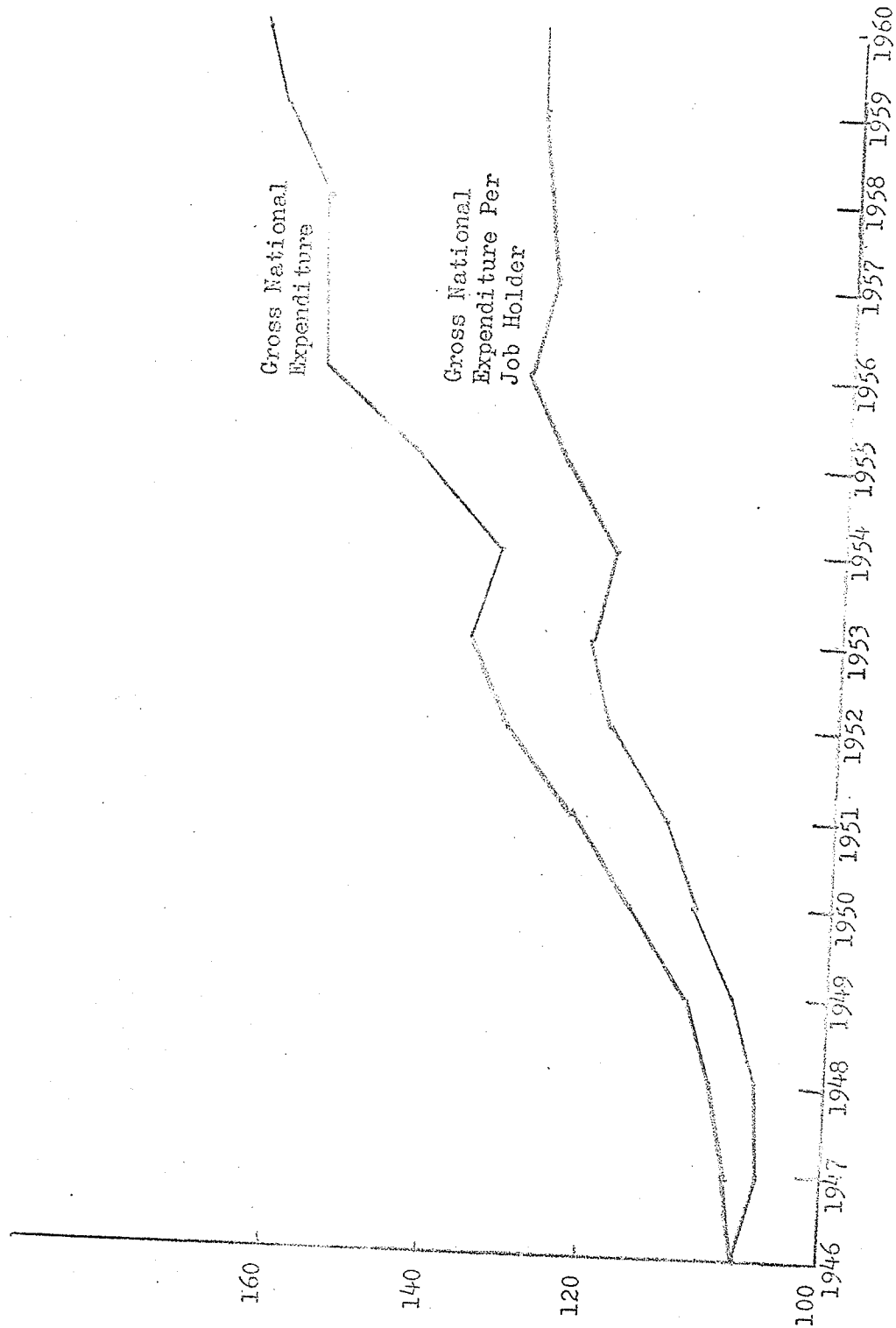
* D.B.S., National Accounts, Income and Expenditure, 1926-56, 1961

Thus 1957 found the Canadian economy entering a period of stagnation which was the culmination of a declining post-war rate of growth. A very important explanation is to be found in the gradual shift in government's monetary and fiscal policy in both Canada and the United States from an anti-recession to an anti-inflation bias. Throughout the early post-war period the weight of monetary policy was applied to accommodating, and even accelerating the rate of economic growth. However, a gradual change in this policy is observable in the rising trend of interest rates² since the war and the pronouncements of former Governor of the Bank of Canada, James E. Coyne, which contained the argument that monetary policy has limited power to control the business cycle.³

Most of the above discussion may be clearly followed by examining charts 1 to 6. Chart 1 illustrates the movement of gross national expenditure and gross national expenditure per job holder over the post-war period and indicates the rapid strides, both economic series exhibited until 1957; while both series exhibited a falling off in growth rates between 1957 and 1960.⁴ As a crude measure of productivity, gross national expenditure and gross national expenditure per job holder in volume terms grew less rapidly than gross national expenditure over this entire period, with the disparity visibly widening after 1957, reflecting the slow down in growth of the economy and the existence of excess capacity in industry.

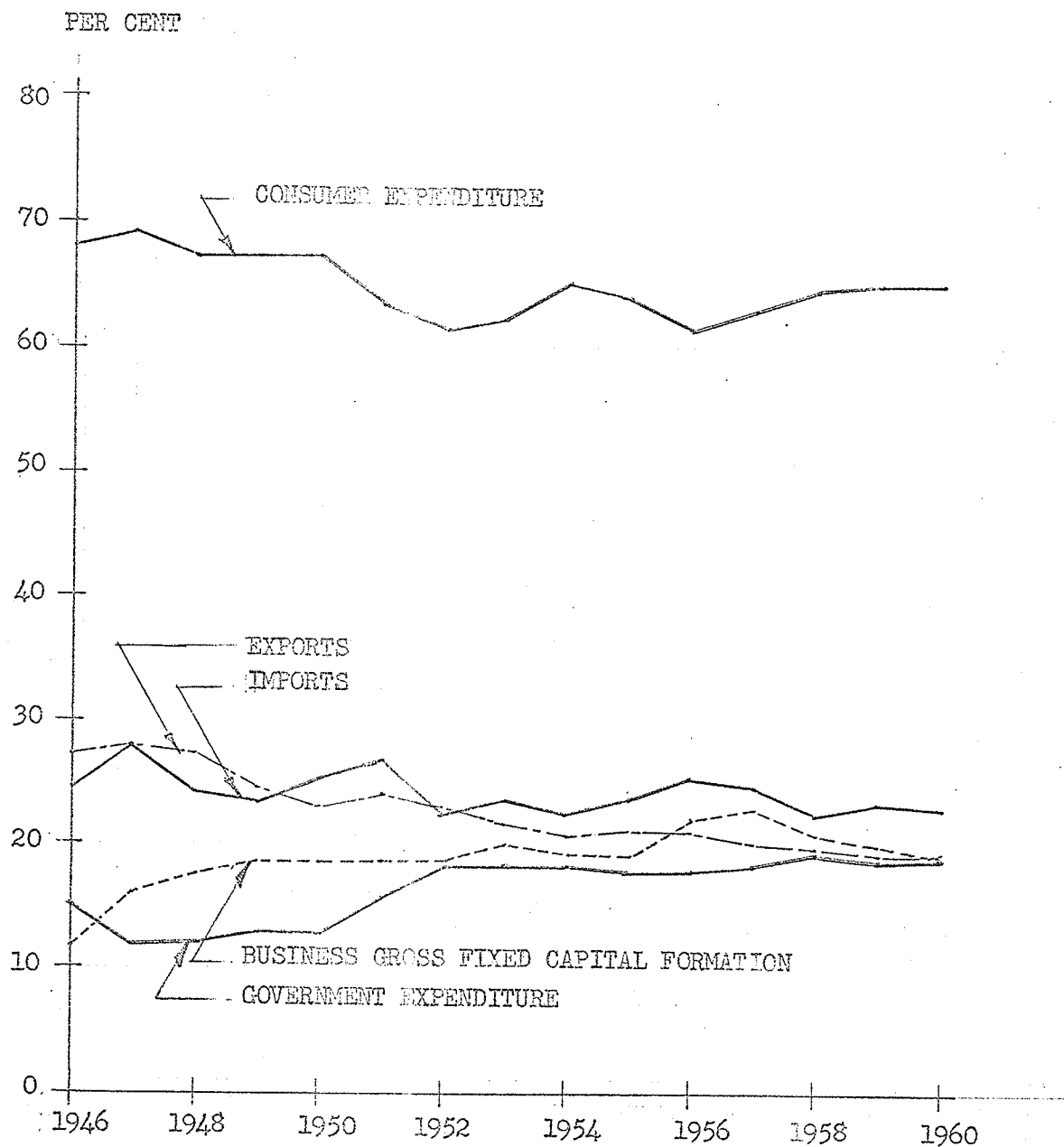
Chart 2, which will be dealt with in more detail later in this chapter, shows that consumer expenditures fell slightly as a proportion of total G.N.E. between 1946 and 1960, that both exports and

CHART 1
GROSS NATIONAL EXPENDITURE AND NATIONAL EXPENDITURE PER JOB HOLDER (CONSTANT DOLLARS)*
INDEX 1946 = 100)



*Source: D.B.S., National Accounts, Income and Expenditure, 1926 - 1956, 1961

CHART 2
COMPONENTS OF GROSS NATIONAL EXPENDITURE AS A % OF TOTAL
(CURRENT DOLLARS)*



*Source: D.B.S., National Accounts, Income and Expenditure,
1926 - 1956, 1961

imports declined, as a proportion of G.N.E., with exports exhibiting the greatest decline, and that both government expenditures and gross fixed capital formation rose substantially as a percentage of G.N.E. over this period.

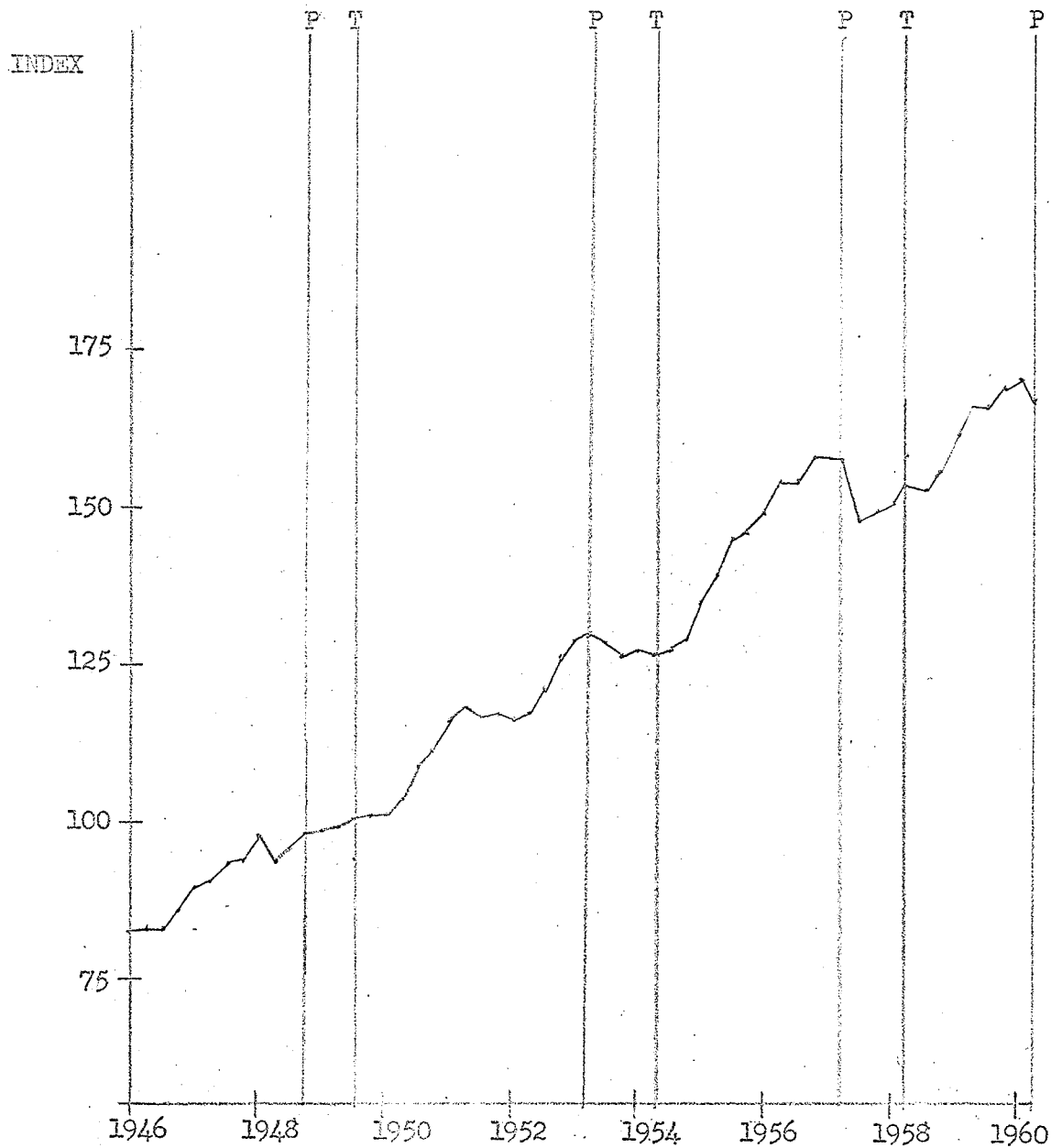
Chart 3, the index of industrial production, indicates a strong upward secular growth rate, and in cyclical pattern follows very closely the peaks and troughs of general economic activity shown superimposed on the chart. It also is clear in this chart that each expansion period is significantly shorter than the previous one.

Chart 4 illustrates the unemployment picture of the economy over the post-war period, unadjusted for seasonal variation, therefore exhibiting very wide swings. However, even with the added complexity of seasonal variation, it becomes clear that unemployment became a very real problem after 1957, reaching the post-war peak of nearly 10 per cent early in 1958.

Chart 5 outlines the movement in three price indexes over this same period, and indicates that inflationary pressures existed throughout most of the post-war period, with some decline in the rates of price increases after the 1957-58 recession.

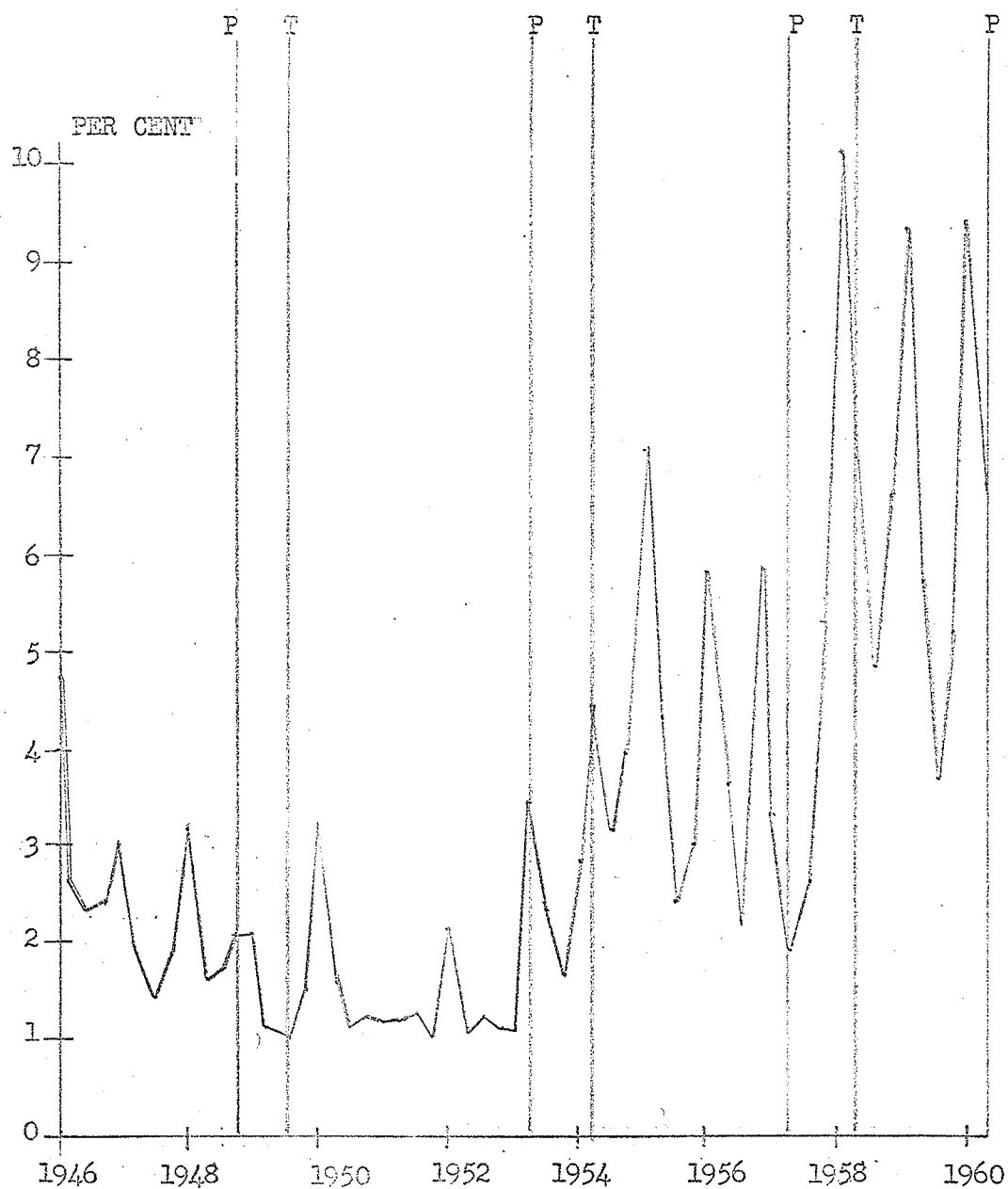
Chart 6, as was the case with chart 3, the index of industrial production very closely follows our cyclical pattern, with the cyclical swing in durables being considerably more volatile than the

CHART 3
INDEX OF INDUSTRIAL PRODUCTION (1949 = 100)
SEASONALLY ADJUSTED*



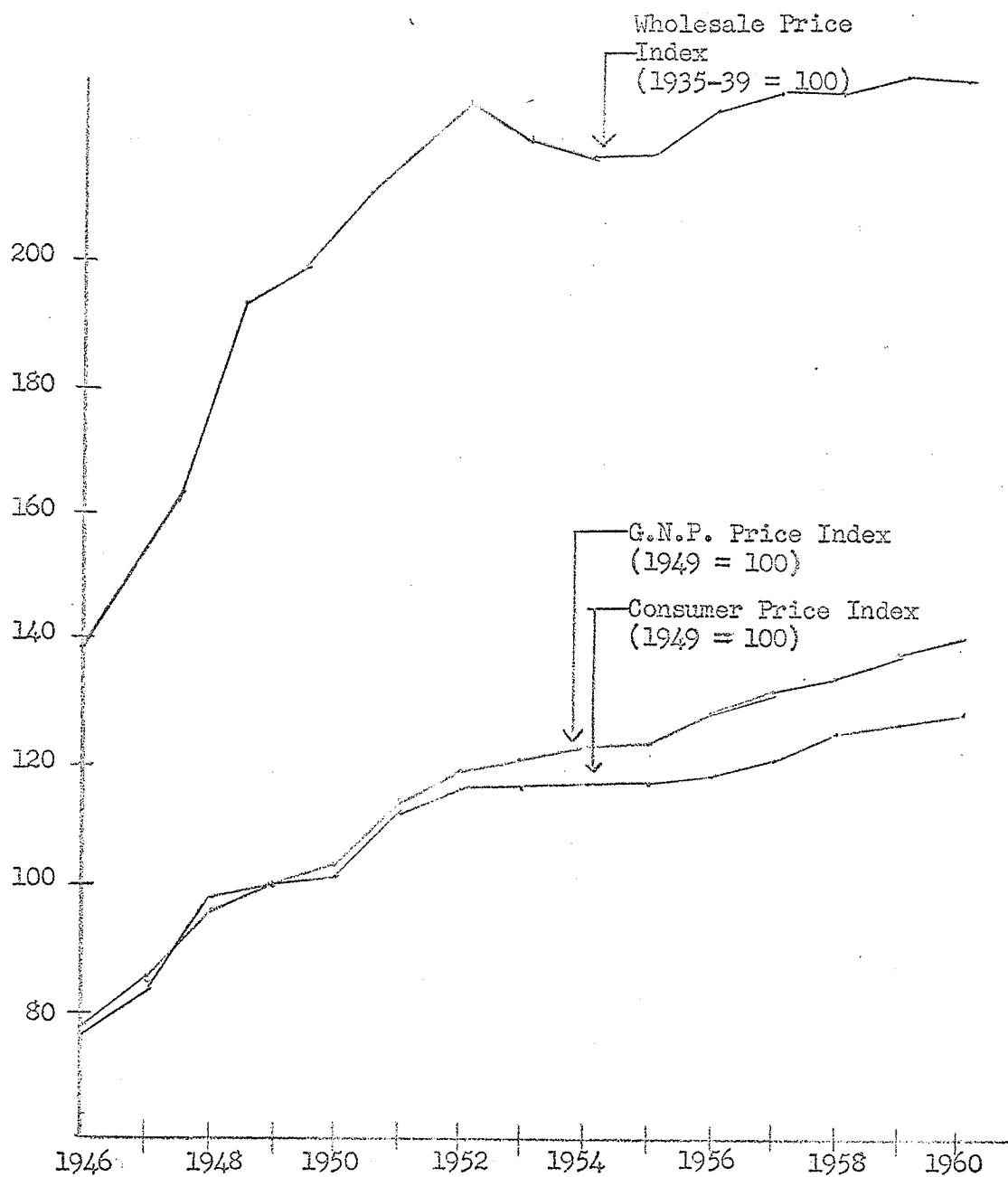
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 4
JOB SEEKERS AS A % OF THE LABOUR FORCE BY QUARTERS*



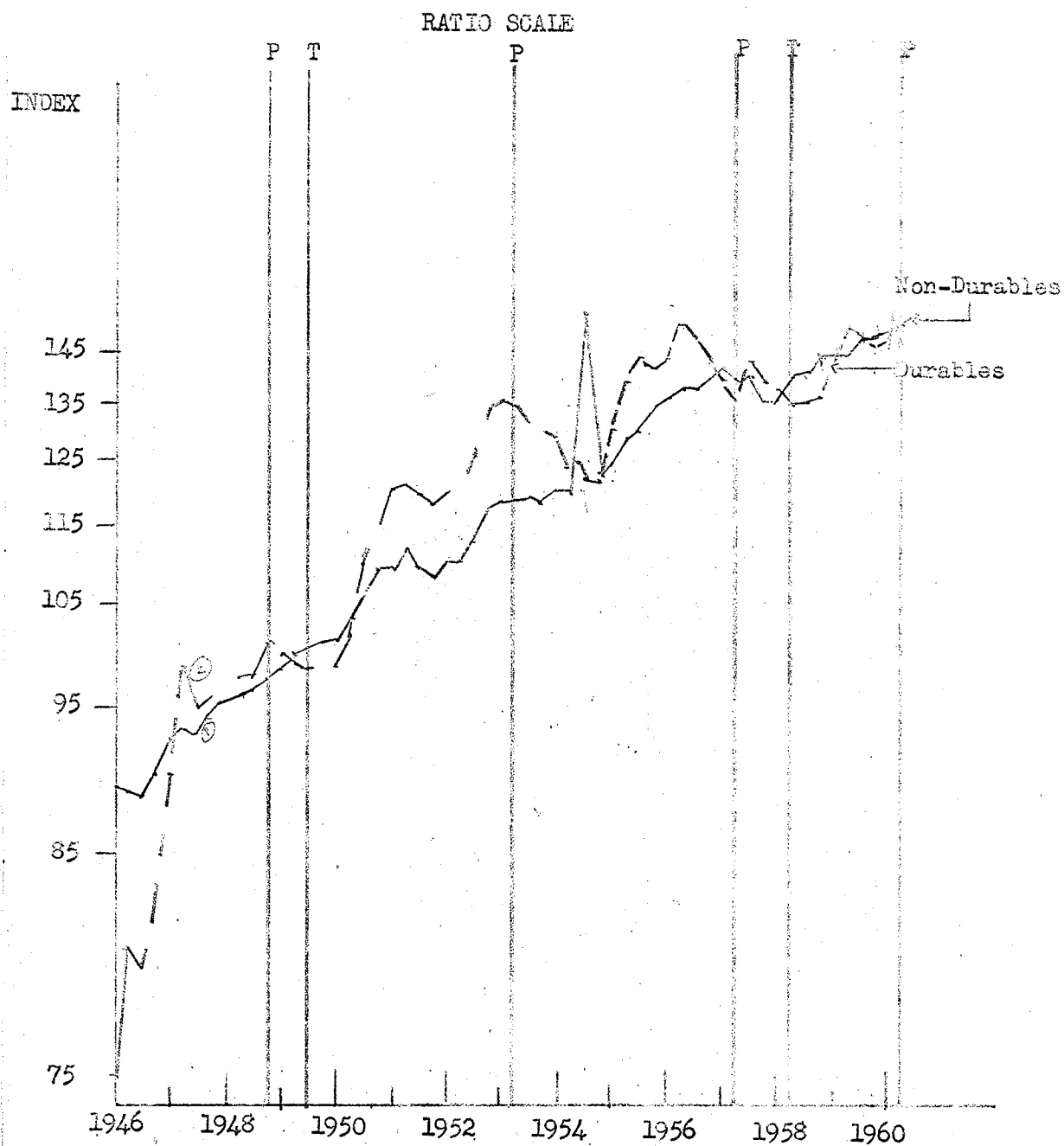
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 5
PRICE INDEXES 1946 - 1960*



*Source: Bank of Canada, Statistical Supplement, 1960

CHART 6
 MANUFACTURING PRODUCTION, DURABLES AND NON-DURABLES,
 VOLUME INDEX, SEASONALLY ADJUSTED* 1946 - 1960



*Source: D.B.S., Annual Supplement to The Canadian Statistical Review, 1961

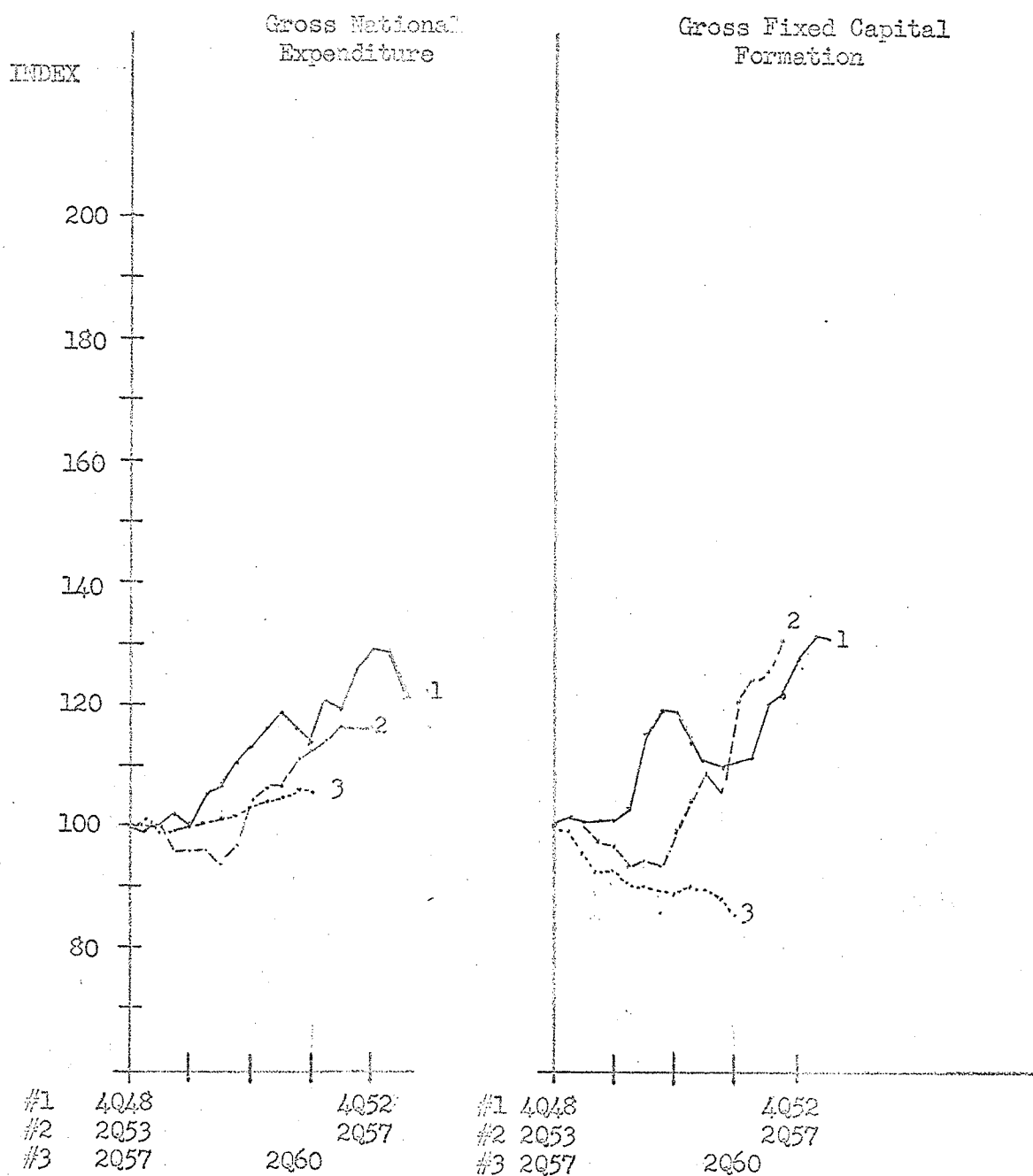
swings in non-durables, exhibiting the fact that purchases of durables are more likely to be postponed in a down-swing than non-durables, and likely to be rapidly made up for in the following expansion. Again, as was the case in the previous charts there was a marked slow-down in growth of these series after the 1957-58 recession.

Analysis of Internal Demand

The share of the five principal components of gross national expenditure between 1946 and 1960 are depicted in chart 2. In this section, I will analyze the cyclical character of these components, in an attempt to ascertain how they have affected the Canadian business cycle. In order to amplify the analysis, the cyclical pattern of these various components are outlined in index form. In all cases cycle 1 runs from the fourth quarter peak of 1948 to the second quarter peak of 1953, cycle 2 runs from the second quarter peak of 1953 to the second quarter peak of 1957, and cycle 3 runs from the second quarter peak of 1957 to the second quarter peak of 1960.

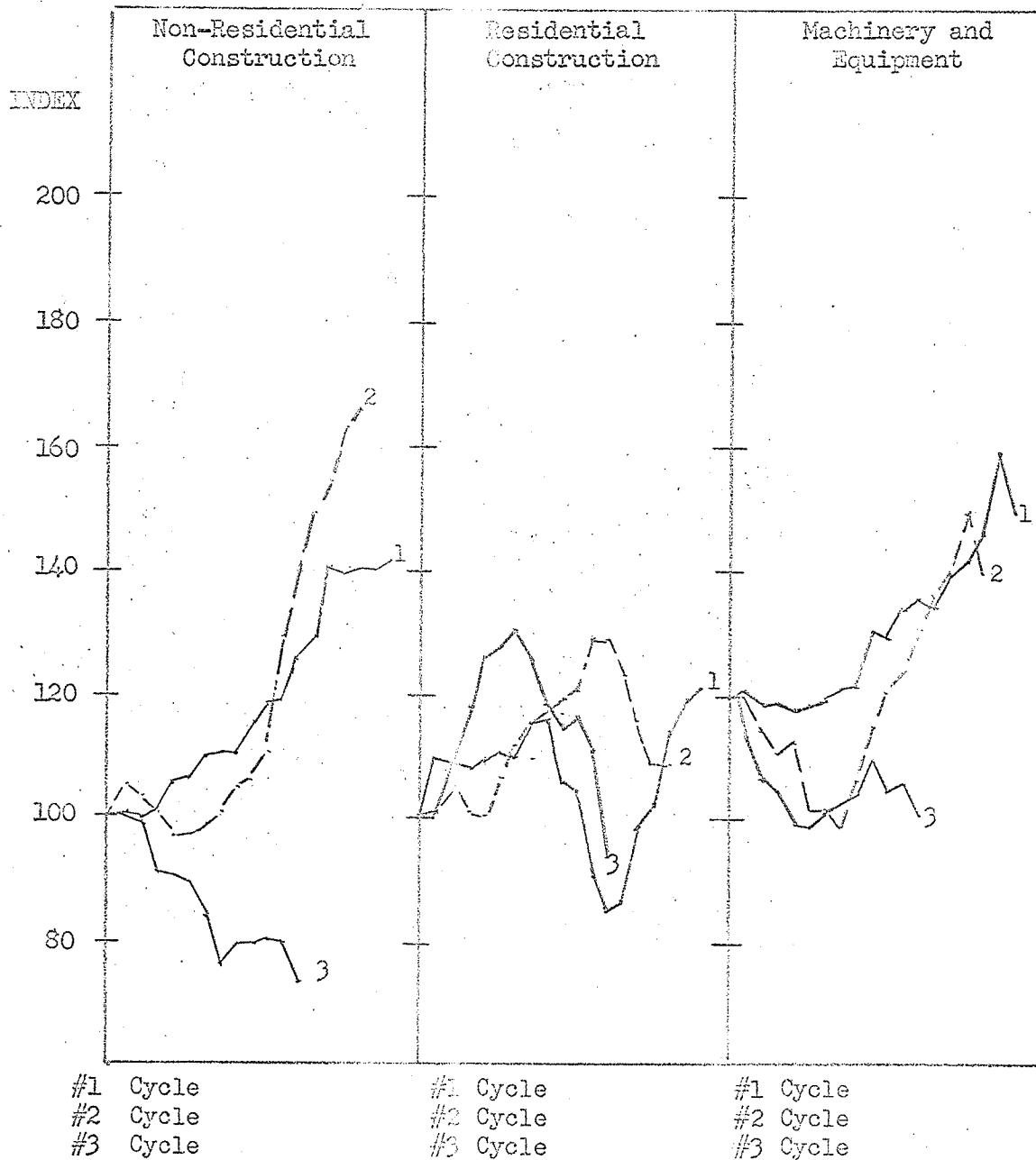
Chart 7 traces the movements of gross national expenditure and business gross fixed capital formation over the three cycles, and indicates that while both series rose about the same proportion in the first cycle, capital formation rose the more markedly in the second cycle, and then fell very drastically in the third cycle, an even more significant decline than that which took place in G.N.E.

CHART 7
COMPONENTS OF GROSS NATIONAL EXPENDITURE OVER 3 CYCLES
CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
First Quarter 1961

CHART 8
 COMPONENTS OF BUSINESS GROSS FIXED CAPITAL FORMATION
 OVER 3 CYCLES,
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
 First Quarter 1961

This decline in investment expenditures must be viewed as an occurrence of utmost importance, and both reflects and contributed to the slowing down of the overall rate of economic growth measured in terms of national output. When one glances at the figures it becomes evident that the weakness in capital investment is observable, not only in the total, but in each of the three major divisions of the total expenditure on new machinery and equipment, expenditure on new residential construction, and expenditure on new non-residential construction.

In studying the components of business gross fixed capital formation following 1948, we may see that residential construction gave the steadiest performance, never falling in a recession below the value attained at a previous peak of economic activity, and rising in periods of expansion, but not as markedly as other categories of capital formation.

Non-residential construction showed the greatest advances in the first two cycles and the greatest decline in the third cycle. Machinery and equipment, which also indicated significant gains in the first two cycles, almost entirely in their expansionary phases, showed decided weakness in the third cycle.

In analyzing capital formation, it must be noted that the recent weakness of investment follows a long period of capital formation, when Canada devoted a very high proportion of its national output to

increasing its productive capacity. "In 1949 public and private investment combined (in current dollars) represented 22 per cent of total gross national expenditure; by 1957 the proportion had risen above 27 per cent (it has since declined noticeably). These ratios are unusually high - higher than those of most other ratios and, in particular, well above the ratios in the United States."⁵

Part of the explanation of this decline in business expenditure may be found in the existence of considerable excess capacity in various sectors of the Canadian economy. Table 13 is reproduced from the Report of the Special Committee of the Senate on Manpower and Employment, and indicates approximately in percentage terms the extent of new capacity which was created in selected areas of the economy in 1957-58.

TABLE 13

APPROXIMATE PERCENTAGE INCREASE IN CAPACITY
IN TWO-YEAR PERIOD 1957 and 1958*

Commodity	Increase	Commodity	Increase
Newsprint	15	Iron ore	26
Woodpulp	15	Petroleum, crude	60
Aluminum	16	Petroleum, refined	22
Nickel	9	Cement	25
Copper	15	Iron and Steel	15
Asbestos	13	Electric Power	05

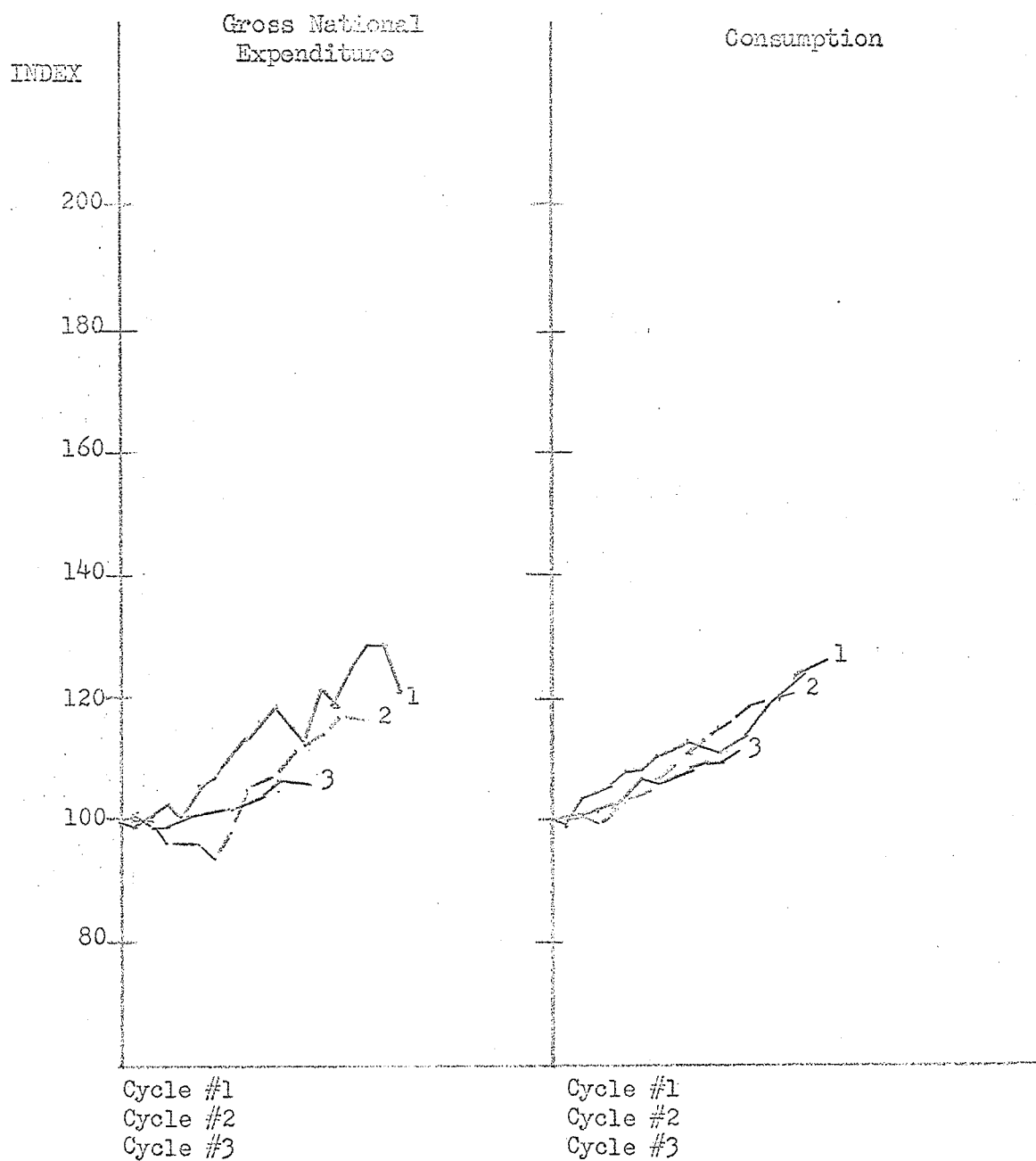
*W. C. Hood, The Demand for Labour, A Report to the Special Committee of the Senate on Manpower and Employment. (Ottawa, Dec. 8, 1960, No. 2.) p.154.

These increases in industrial capacity came at the end of a long period of growth in the private sector of the economy, and it is therefore not surprising that aggregate industrial investment failed to recover in the third cycle, let alone to increase beyond the previous peak, as it would have had to do if full employment were to be maintained.

Secondly, partly as a reflection of the changing relative importance of capital formation, expenditures on consumer goods have been a lower proportion of G.N.E. throughout the fifties than they were in 1949 and 1950. By examining chart 2 it may be seen that the ratio of consumer expenditures to G.N.E. typically moves in counter-cyclical fashion, being high in periods of recession and low in periods of expansion. As consumer expenditure represents some 60 or 65 percent of the total product, it is evident that this relative stability of growth has had an important stabilizing influence over the course of the business cycle.

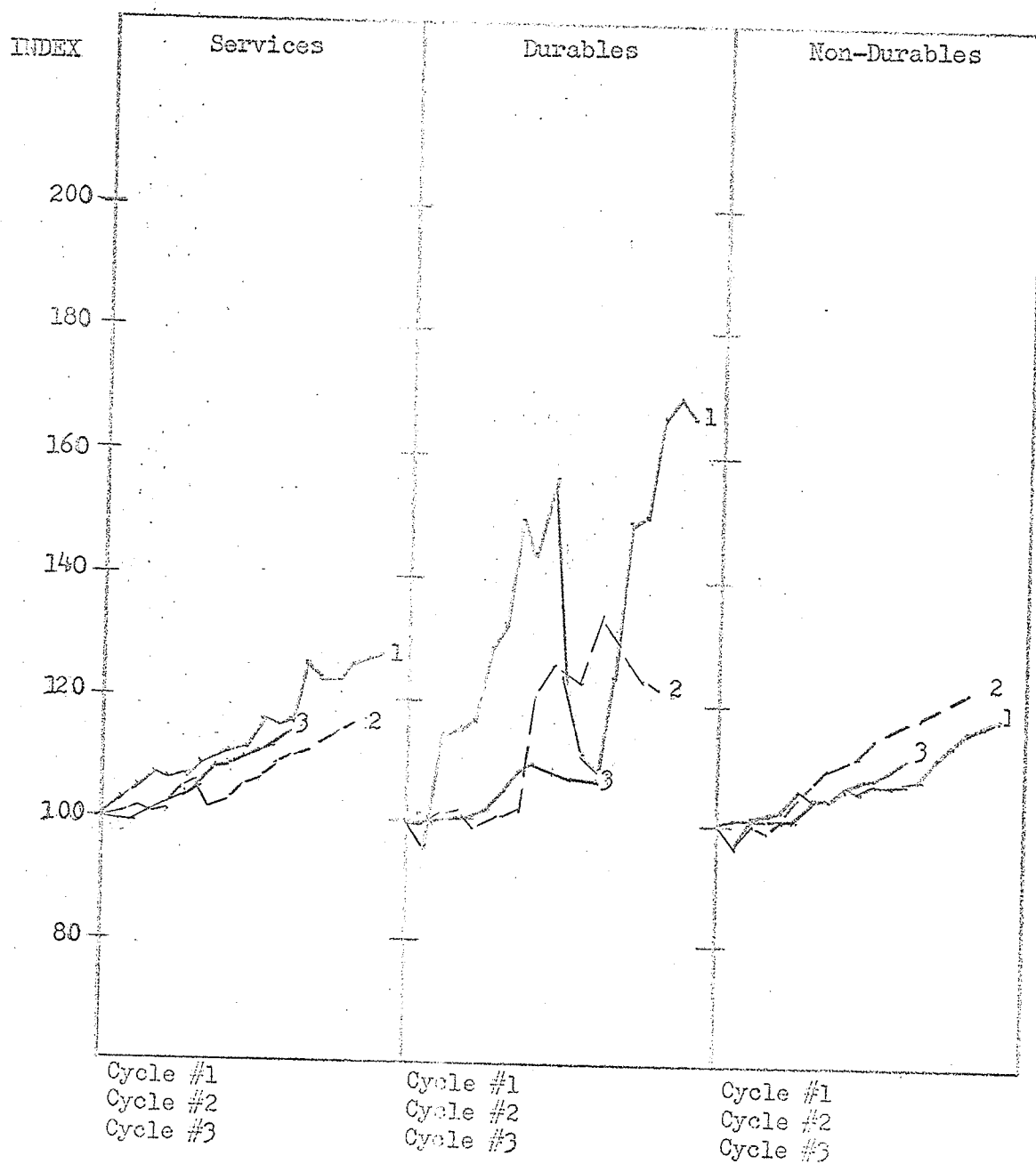
However, the overall stability of consumer expenditures, obscures the less stable behaviour of its components. Consumer expenditures may be conveniently divided up into expenditures on durable goods, non-durable goods and services. In real terms expenditures on non-durable goods and on services were the most stable items of consumer expenditures, with expenditures in both these categories not falling significantly in the third cycle behind the previous cyclical expansions.

CHART 9
 COMPONENTS OF GROSS NATIONAL EXPENDITURE OVER 3 CYCLES
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
 First Quarter 1961

CHART 10
 COMPONENTS OF CONSUMER EXPENDITURE OVER 3 CYCLES
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*

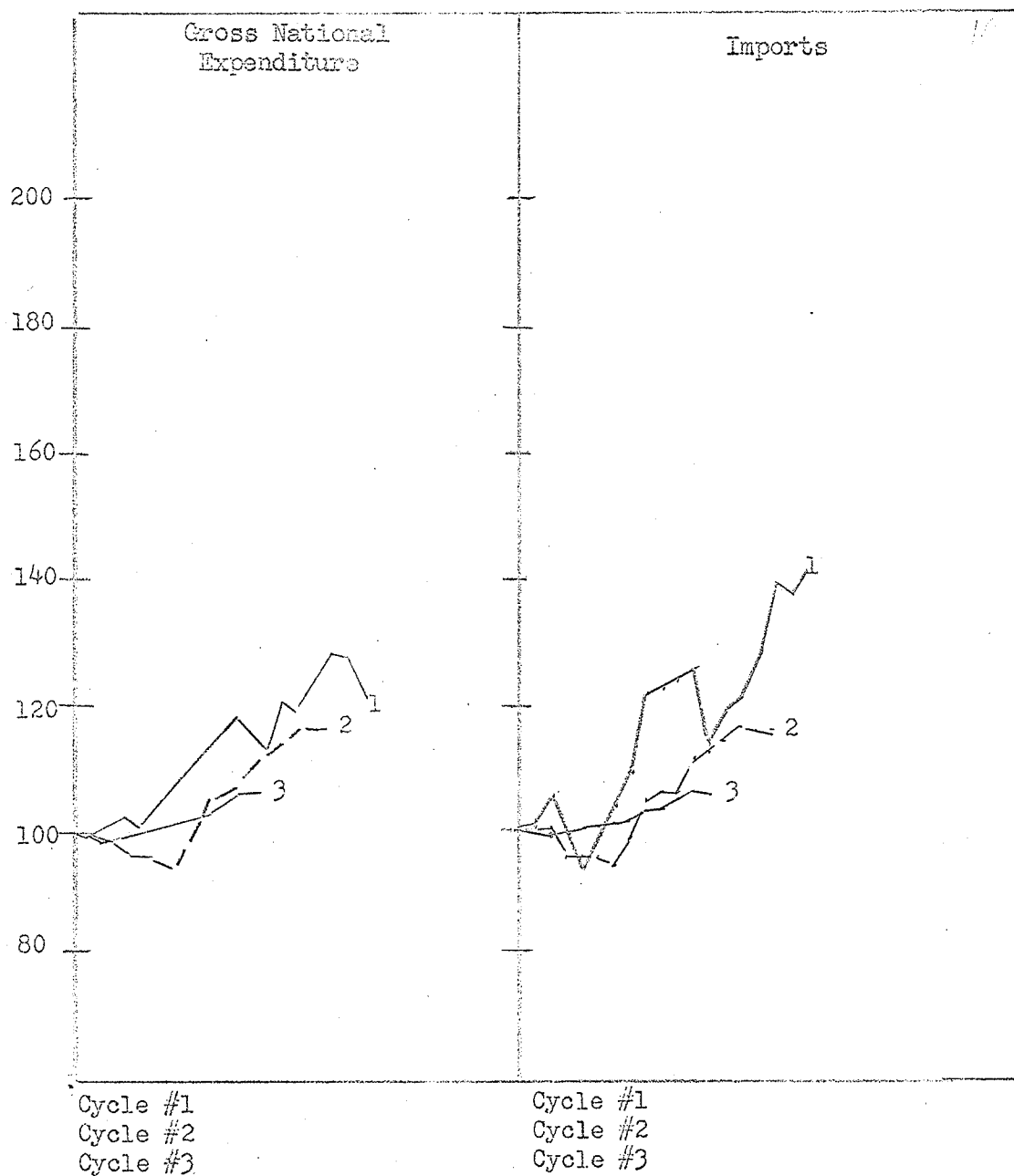


*Source: D.B.S., National Accounts, Income and Expenditure, First Quarter 1961

In the case of services, cycle 3 rose higher than cycle 2 and in the case of non-durables, cycle 3 rose above cycle 1, but below cycle 2. Expenditures on durables proved to be the most volatile component of consumer expenditure, with a very strong expansion in the first cycle, while in the latter two cycles durable expenditures weakened considerably, scarcely showing a gain in the last cycle. These volatile fluctuations reflect the fact that purchases of this type are more severely affected by the variations of personal income over the course of the business cycle, and it reflects also the natural tendency for sales of durable goods (i.e. goods which by their nature do not have to be replaced at frequent intervals) to exhibit a cyclical pattern, with a higher sales volume in one period being compensated by a lower volume in the next period because consumers who had made purchases find it unnecessary to repeat them.

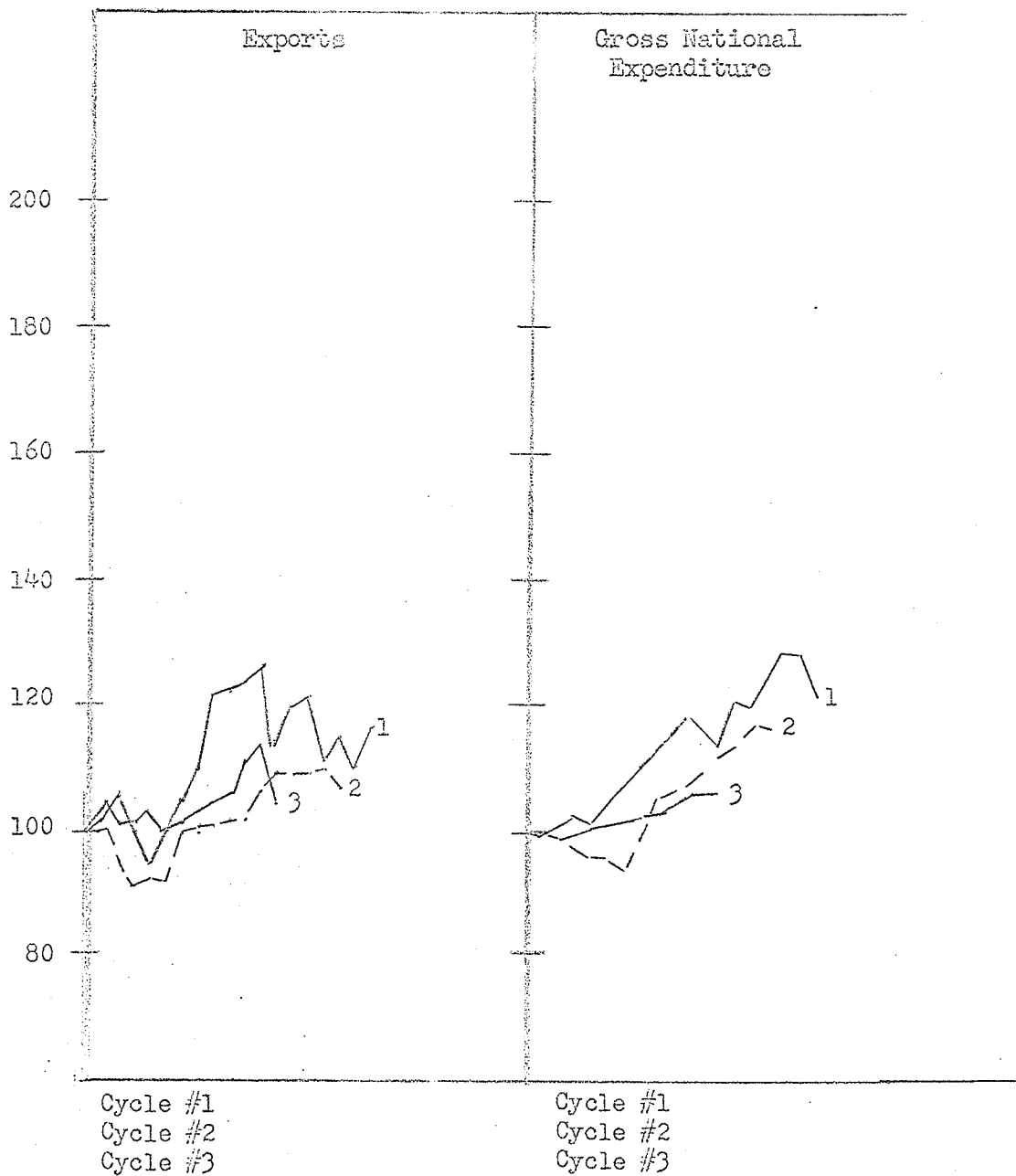
A third significant factor arising out of an analysis of internal demand is the difference in behaviour of exports and imports. The share of exports in G.N.E. has exhibited a marked downward trend throughout the post-war period. The share of imports in G.N.E., on the other hand has declined, but exhibiting a more modest trend. The shares of exports and imports were roughly equal in 1952; since that date the export share has fallen and the import share has risen. This difference in the trends in the shares of exports and imports to G.N.E. reveals the increasing deficit in the current account of the international balance of payments.

CHART 11
 COMPONENTS OF GROSS NATIONAL EXPENDITURE OVER 3 CYCLES
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
 First Quarter 1961

CHART 12
 COMPONENTS OF GROSS NATIONAL EXPENDITURE OVER 3 CYCLES
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
 First Quarter 1961

This increase in the deficit is not to be attributed as much to the increase in the ratio of imports to G.N.E. as to a decline in the ratio of exports to G.N.E.

An important fact which emerges from a study of Canada's current account deficit, is that total trade, both exports and imports, has been concentrated more upon the United States in the post-war period than before the war. In a sense this increasing dependence has been detrimental, when viewed from the point of view of the current account deficit.

TABLE 14

DEFICIT ON SURPLUS ON CURRENT ACCOUNT OF THE
BALANCE OF PAYMENTS 1946 - 1960
(MILLIONS OF CURRENT DOLLARS)*

	With the United States	With Other Countries	Total
1946	--607	970	363
1947	-1134	1183	49
1948	- 393	844	451
1949	- 601	778	177
1950	- 400	66	- 334
1951	- 951	434	- 517
1952	- 849	1013	164
1953	- 904	461	- 443
1954	- 807	375	- 432
1955	-1035	337	- 698
1956	-1639	273	-1366
1957	-1579	124	-1455
1958	-1176	45	-1131
1959	-1241	-253	-1494
1960	-1377	107	-1270

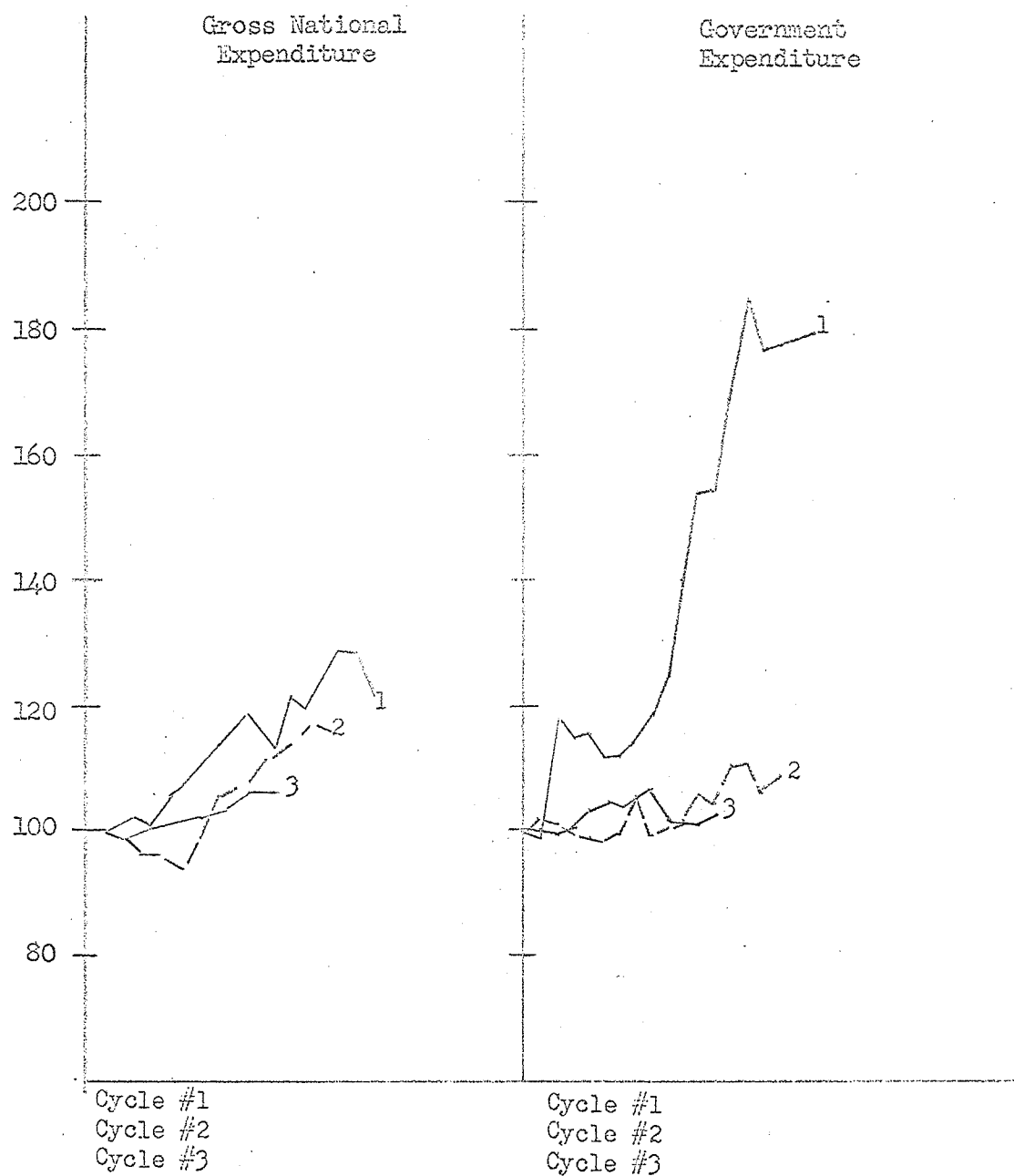
* D.B.S. The Canadian Balance of International Payments, 1946-52, 1961

Finally, it is evident from the charts, that government expenditure (federal, provincial, and municipal) has increased over the years, and increased markedly. From 1949 to 1960 government expenditures in goods and services in real terms rose by 90 percent (this does not include so-called transfer payments, which are discussed below, or subsidies, which represent only a small portion of total government spendings). This increase compares with a rise of 55 percent in the "real" volume of gross national produce. However, it must be realized that the rate of increase in government purchases of goods and services was far from uniform throughout this period. Government expenditures on goods and services showed enormous increases relative to the G.N.E. in the first cycle. The Korean war, of course, had much to do with this expansion. However, the expansion lead to a permanently higher proportion of government expenditures to total G.N.E. In the second cycle government expenditures rose above their previous peak by a lesser ratio than did either G.N.E. in that cycle or government expenditures in the first cycle; and in the third cycle the relative advance of government expenditures was slightly smaller than that of G.N.E. (Chart 13).

The main point which can be gathered from an analysis of government spending over the three cycles is that although government spending was a much more important factor in the expansion of the early 1950's than in later expansions, other types of payments,

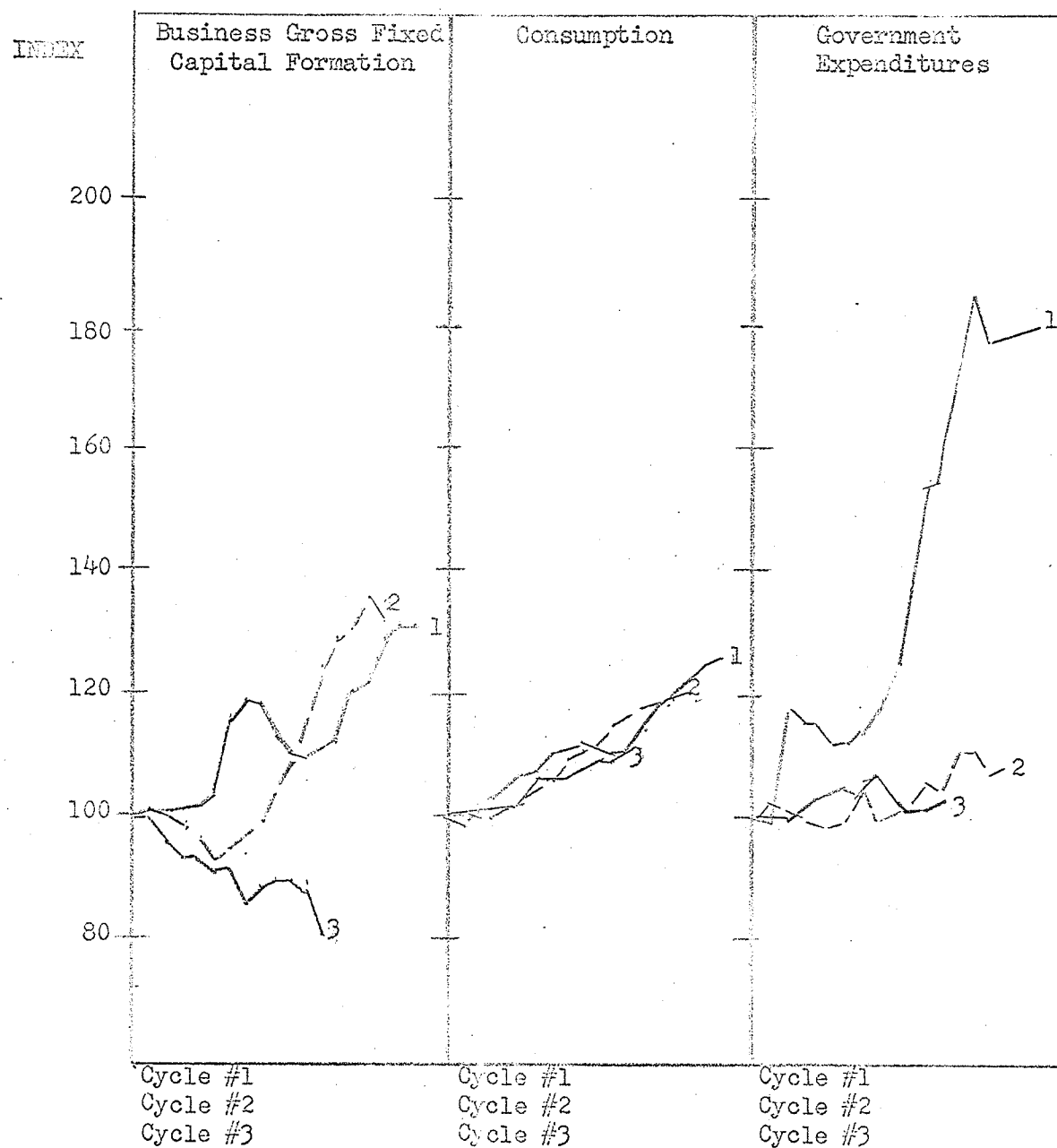


CHART 13
 COMPONENTS OF GROSS NATIONAL EXPENDITURE OVER 3 CYCLES
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
 First Quarter 1961

CHART 14
 COMPONENTS OF GROSS NATIONAL EXPENDITURE OVER 3 CYCLES
 CONSTANT 1957 DOLLARS, SEASONALLY ADJUSTED*



*Source: D.B.S., National Accounts, Income and Expenditure,
 First Quarter 1961

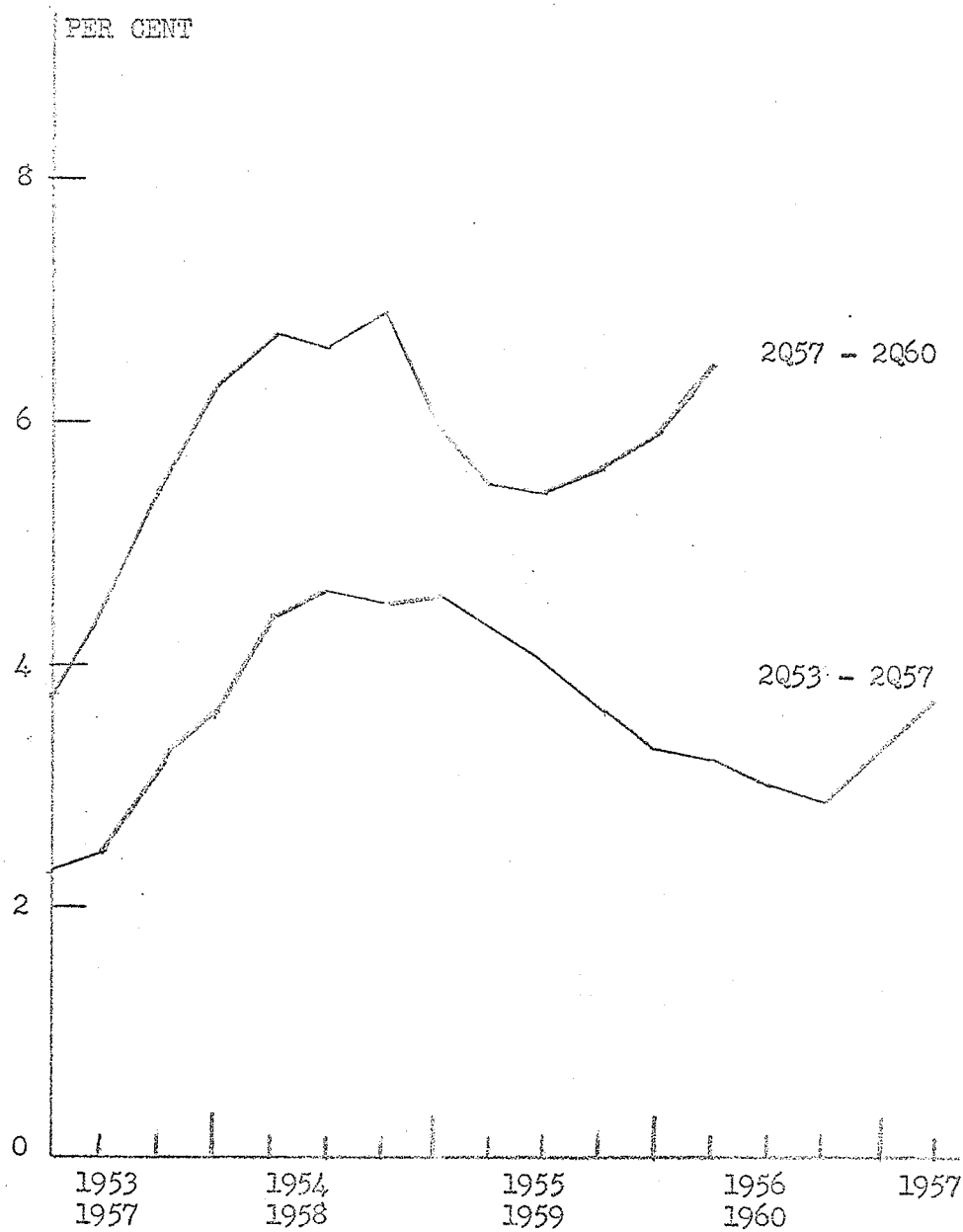
which are not associated with the purchase of goods and services, have advanced more rapidly in recent years. This situation will be brought out in more detail in subsequent chapters. "In as much as these increases have been accompanied by substantial overall government deficits since the calendar year 1958, the net effect has been a not inconsiderable injection of 'spending power' into the economy, and particularly the consumer section of the economy."⁶

The Cyclical Pattern of Unemployment

Unemployment is the product of the divergence between the demand for labour and its supply, and a rigorous analysis of this phenomenon involves a study of both sides of the market. However, because of the nature of this study, I shall concern myself only with the demand side.

Canada's creeping unemployment problem was mentioned earlier in this chapter, and indicated in chart 4. From that chart we may see that unemployment had general peaks occurring in the years 1950, 1954, and 1958 and troughs occurring in the years 1951, 1956 and 1959. When seasonally adjusted, unemployment data is analyzed, as shown in chart 15, the stark reality of Canada's dilemma stands out. Two features become immediately obvious from the chart. In each successive recession, the percentage of people out of work has been higher than in the preceding recession, and in each period of recovery the maximum level

CHART 15
JOB SEEKERS AS A % OF THE LABOUR FORCE
SEASONALLY ADJUSTED*



*Source: Various Issues of the Canadian Statistical Review

attained has been higher than the preceeding minimum. Secondly, the period of expansion of economic activity in which the unemployment ratio was either comparatively steady or falling, was very much shorter in the more recent cycle than in the previous one.

Of course some unemployment occurs even in the most prosperous years, as is evident from chart 4. But the explanations of higher unemployment rates prevailing since mid-1957 have revolved around two major theoretical approaches, which, for simplicity of exposition, may be referred to as aggregate demand and structural transformation theories.

The aggregate demand theory maintains that recent unemployment rates are explainable by traditional supply and demand analyses. In a dynamic economy, the population of working age, the stock of capital, the technical efficiency of production, all show year-to-year increments. Hence, the economy's full employment and full capacity output rises from year to year. At times, aggregate demand may not grow as rapidly as the economy's output. Then demand may not be large enough to provide jobs for the annual increment in labour resources. Inadequate demand for labour is most apparent during recessions, when employment actually declines. It also characterizes those recovery and expansion periods during which the rate of growth in demand does not keep pace with potential supply. The unemployment rate has been quite high since mid-1957 because

the rate of growth in final demand has been low relative to the actual and normal rates of growth in potential supply made possible by increases in capital stock, labour force, and productivity.

The structural transformation theory maintains, to the contrary, that higher unemployment has been due, not to inadequate final demand - and its concomitant in the labour market, an insufficient number of job opportunities - but, rather, to technological changes which are currently reshaping the Canadian economy at an unusually rapid pace. The crux of the transformation is the continued rise in importance of white-collar occupations and service-rendering industries, and the decline in importance of the blue-collar occupations and goods - producing industries as sources of job opportunities. In capsulized form, the explanation of higher unemployment since 1957 is as follows:

- (1) A faster rate of technological change has led to a higher rate of displacement of labour;
- (2) The average worker, once displaced, experiences a number of weeks of unemployment while hunting for a new job;
- (3) Most of the displaced labour finds a need developing for different skills and responsibilities than previous experience and training allows for.

The structural transformation theory should not be confused with the concept of structural unemployment. The unemployment of workers

displaced from particular jobs by technological changes or the geographic migration of industry, or by some other long-run influence is sometimes referred to as structural unemployment to distinguish it from other types of frictional unemployment. However, this definition is very difficult to work with. There is no way to determine whether a particular worker has lost a specific job because of technological change, or the shift of demands away from the product his industry produces, or inadequate aggregate demand, or some other cause.

The structural transformation and the aggregate demand hypotheses will result in somewhat different policy recommendations for periods of declining economic activity, and in a certain extent both have relevance on the Canadian scene. However, it would seem that the major cause of the economy's inability to provide enough new job opportunities has been the slowdown in economic growth. A contributing factor has been technological change and rapidly rising productivity, particularly in the goods producing industries.⁷

Concluding Remarks

The spurt of rapid growth that characterized the Canadian economy during the period 1946 - 1956 was not untypical of the way Canada has historically grown. Since the turn of the century, two

periods may be singled out - 1904 to 1909 and 1924 to 1928 - in which Canada's real output expanded at average rates of 6% and 7½% a year respectively.⁸ History does not necessarily repeat itself but each of these former expansions was followed by quite different conditions and it may well be that the years following 1956 were such a period of reaction. Generally the North American experience, and the Canadian in particular, can be summed up in terms of three analyses. The first approach would argue that we were undergoing an expansionary phase of a long cycle between 1946 and 1956, such as the arguments of K. A. H. Buckley⁹ and D. J. Daly.¹⁰ An alternative view on growth and severe depressions is the one taken by Milton Friedman in his 'Program for Monetary Stability.'¹¹ A third interpretation (and probably most widely held) puts more emphasis on accidental and special factors in current trends and puts less emphasis on historical similarities and analogies. In explaining the earlier high rates of growth the group would emphasize the Second World War and the Korean War, the backlog of demand and the excessive post-war liquidity. The shortness and mildness of the recent expansion would be attributed to a rapid decline in the federal budget stimulus in Canada, and excessive monetary restraint.

My own assessment of these views would be fairly eclectic and pragmatic, and would imply that the third interpretation is the proper one, with special attention paid to monetary factors and capital inflows, because of the apparent sensitivity which the Canadian economy exhibits to the international situation.

CHAPTER 4

JANUARY 1946 to APRIL 1953 - GROWTH WITH RISING PRICES

BACKGROUND TO EARLY POST-WAR ECONOMIC POLICY

The period of January 1946 to October 1948 was one of peacetime reconversion for the Canadian economy. Canadian economic policy in this early period was influenced by considerations which found their origins in the war and the depression before it.

In the first place, Canada, like most other Western nations announced plans of pursuing a high employment policy. The 1945 White Paper on employment and income, though primarily concerned with initial reconversion problems, set out a basic objective of high employment, including an emphasis on low rates of interest for development and housing, the promise of tax policies designed to facilitate private investment, expanded welfare payments, price supports for the products of the farm and fisheries, cyclical budgeting, plans for a shelf of public works, and development and conservation outlays in co-operation with the provinces. "Though this approach had many of the formal ingredients of a 'full-employment policy' it did not envisage the continuance of direct controls and significantly enough, its first section was concerned with export trade and its profound influence on the economy."¹

In the second place Canadian policy was strongly influenced by the desire to prevent inflation or at least keep it in hand. The wartime anti-inflation policy had been remarkably successful - more so than that of the United States, with the result that Canada's price system remained in substantial eclipse. However, the sudden abandonment by the United States of its price control system in mid-1946 gave a powerful injection of inflationary pressure to the Canadian economy, and at the same time weakened price controls in Canada. Taking June, 1946 as a reference point, the cost of living index which, had risen 4.3% in the preceeding 18 months, rose to 18.1% in the ensuing 18 months to December, 1947. Wholesale prices over the same two periods, rose 7.3% and 28.4% respectively.²

In the third place, but not least important, Canadian policy was profoundly influenced by concern born of long and sometimes difficult experience about trading and balance of payments difficulties.

Thus Canada emerged from the Second World War with a legacy of disrupted patterns of production and trade, high taxes, a domestic price level which had risen less than that of most other countries, relative high liquidity of most groups, and a structure of low interest rates, which the monetary authorities extended into the early post-war period. In order to meet this challenge, a host of acts were passed by the Federal Government

in 1944, among them the National Housing Act, the Industrial Development Bank Act, the Farm Improvement Loans Act, the Agricultural and Fisheries Price Support Act, the Family Allowances Act, the Export Credit Insurance Act, and the Unemployment Insurance Act (passed in 1940).³

Expansion 1946 - 1948

The first post-war expansion began in February 1946 and reached a peak by the fourth quarter of 1948. This expansion differed from most expansions chiefly because of its pronounced inflationary characteristics and the belief by government that a serious recession might accompany the decline in war expenditures. Thus in 1949 constant dollars real G.N.P. increased from \$15,251 to \$15,446 millions between 1946 and 1948, rather than the apparent increase of \$11,850 to \$15,128 millions. In market terms the annual G.N.P. increase was rather impressive, and obscured the underlying demand inflation forces that were operating in the economy. Thus this first post-war inflationary period occurred at a time when the economy was operating at near capacity in employment and output, and when the economy was undergoing the difficult conversion to peacetime operations.

Job seekers as a per cent of the labour force fell sharply from 4.7 to 2.6% in the first to the second quarter of 1946, and by the fourth quarter 1948 had reached a low of 2.1%. In this same

period the money supply (defined as total currency and chartered bank deposits) increased from \$6752 millions to \$7898 millions from the fourth quarter 1946 to the fourth quarter 1948, while total industrial production increased 16.1%, with iron and steel production rising 24.1%, electricity and gas production rising 17.7% and mining production rising 19.5%.

During this reconversion period the price indicators of the economy exhibited the relaxing of federal control. The consumer price index rose 25.2%, the wholesale price index 39.2% and the Gross National Product price index 23.7%. These price rises were spread more or less evenly between capital goods and consumer goods and services, as an examination of the price deflation for these components of gross national expenditure bear out. The increase in the prices of total consumption in Canada was about 24%, while in the capital goods sector of the economy, prices rose about 26%.

The basic and understandable miscalculation in this early post-war period was the delayed recognition of inflationary forces - a hangover from depression days. Throughout this period the monetary authorities supported bond prices with a consequent loose monetary policy and inflationary pressures. Professor C. L. Barber has argued that a policy of freeing interest rates and maintaining tight monetary control would have substantially lessened the post-war rise in price without any adverse affect on employment and national income.⁴

The booming, full employment economy, characterized by rapidly rising prices, continued without interruption until the end of 1948. By then the price rises were so marked that the government was induced to place the major emphasis in its budgetary policy on the control of inflation. Thus the major factors effecting the first post-war inflation may be summed up as follows:

1. The long pent-up demand for goods and the sudden increase in the money available to make it effective;
2. government policies that led to tax reductions, return of compulsory savings and veterans gratuities; and
3. a belief that government could finance reconstruction on cheap money as they had done during the war.

Whatever the desire to curb a potential rise in prices, monetary policy was largely rejected as an instrument of control, and fiscal policy was left to bear the main brunt of price stability. The federal government carried through a programme of large budgetary surpluses starting in the fiscal year 1947, 1948 and 1949, while the money supply as a percentage of G.N.P. was still relatively high compared to the lower levels in the late 1950's.

TABLE 15

**MONEY SUPPLY STATISTICS AND FEDERAL GOVERNMENT
BUDGETARY POSITION (AS OF DECEMBER 31)***

	Total Currency and Chartered Bank Deposits (Millions of Dollars)	G.N.P. (Market Prices)	Money Supply as a % of G.N.P.	All Govern- ments Deficits or Surplus 1946-60 (Millions of Dollars)
1946	6752	11850	57%	- 154
1947	7236	13165	55%	753
1948	7898	15120	52%	708
1949	8210	16343	50%	373
1950	8763	18006	49%	585
1951	8759	21170	42%	985
1952	9307	23995	39%	253
1953	9789	25020	39%	175
1954	10314	24871	41%	- 131
1955	11397	27132	42%	106
1956	11438	30585	38%	350
1957	11923	31909	37%	100
1958	13247	32867	40%	-1007
1959	13193	34857	38%	- 520
1960	13914	35959	39%	- 648

*Bank of Canada Statistical Review; Public Accounts;

Budget Papers; and Estimates. Note: Deficit or Surplus positions derived from National Accounts.

Canada's early post-war growth had its roots in a sharp upsurge of capital investment and a sustained high rate of consumer expenditures. In spite of a slight fall in National Income in 1946, personal disposable income at \$9719 million was 6½% higher than the previous year. This pronounced divergence is largely accounted for by an increase in transfer payments from \$546 million to \$1106 million, mainly in the form of veteran benefits. Some reduction

in personal income taxes contributed to raising disposable income somewhat more than personal income. From the first quarter of 1947 to the fourth quarter of 1948 personal disposable income (seasonally adjusted at annual rates) rose from \$9,292 million to \$11,436 million, a rise of \$1144 million while personal consumption of goods and services rose from \$8684 million to \$10,500 million, a rise of \$1,816 million, reflecting in part the tremendous pent-up demand on the part of consumers and their very liquid position in this period.⁵

Total retail trade, farm cash income, department store sales, corporation profits and other economic indicators showed significant strength. Further advances in private domestic demand occurred in 1947, the expansion in business gross fixed capital formation being particularly noteworthy.

Although exports rose considerably, the rise in imports was even more pronounced and the surplus on the current international account all but disappeared. As a consequence of the rise in imports, in particular, the rise in imports from the United States, Canada's reserves of gold and foreign exchange were rapidly depleted in 1947. The fact that a large part of Canadian overseas exports were financed by credit while imports were paid for in cash, created the exchange problem. Accordingly, late in 1947, measures were taken to restrict expenditure in Canadian dollars.

The Balance of Payments Crisis of 1947

When the decision was taken to return the Canadian dollar to parity with the U.S. dollar in 1946, a considerable decline in the official holdings of gold and U.S. dollars took place. This return to parity, while desirable as a measure to cushion the Canadian economy against the impact of rising prices in the United States, had an adverse effect of cutting down the flow of portfolio investment capital from the United States to Canada. At the same time, although Canada had a considerable surplus in its balance of payments on current account, there was a large deficit with the United States. This deficit with the United States had to be met by cash payments whereas, the surplus with overseas countries was financed to a large degree by loans to aid war impoverished Europe and to establish good trading relations. There followed a decline in exchange reserves - from about \$1600 million in mid-1948 to slightly under \$500 million in November, 1947.⁶

In the first place the job of reconstruction in Europe turned out to be much greater than was expected, and the substantial Canadian loans to Britain and other European countries were used more rapidly than was anticipated. Secondly, as a result of a full employment economy, imports from the United States rose, for that country was the only available source of many goods which were in

demand. Thirdly, a glance at chart 17 will indicate that the budget surpluses of 1946-47 and 1947-48, did little to check the progress of inflation. They were in fact, a reflection of the strong inflationary pressures, for a deficit was actually budgeted for in these years.⁷ Finally as a result of a large and insistent demand for United States goods, and a shortage of convertible exchange, capital flowed back out of Canada. These difficulties culminated in the exchange crisis of 1947 when further losses were avoided only by the application of additional and stricter controls over foreign exchange transactions, by emergency import restrictions and, in the following year, by recourse to official borrowing in the United States. In the ensuing months there was a dramatic improvement in the Canadian foreign exchange situation, and official holdings of gold and U.S. dollars, which had dropped to \$461 million in December 1947, had recovered to almost \$1,000 million by the end of 1948.⁸

The Mildness of the 1949 Recession

Canada did not follow the United States in the severity of its 1949 recession. The American G.N.P. (at seasonally adjusted annual rates) dropped only \$10.2 billion, or 3.8% between its fourth quarter peak and trough in 1948 and 1949 respectively, the relative (peak-trough) declines shown by other important economic indicators were by no means insubstantial: industrial production 10.5%,

durable goods production 13.1%, manufacturers inventories of durable goods 14.2%, corporate profits before tax 29%, and gross private domestic investment 32.2%.⁹ In the face of this curtailment of American economic activity, Canada experienced only a slowing down of its previous annual rate of expansion. The dominant impression created by an examination of key time series - including gross national product, business gross fixed capital formation, consumer spending, industrial production and unemployment, is one of economic buoyancy and expansion in 1949, though somewhat less marked and widespread than in previous years.

There was virtually no transmission of the United States downswing to Canada in 1948-9. Part of the reason may be traced to Canadian exports. Between 1948 and 1949 total merchandise exports only declined by 1%, reflecting in part a slight increase in exports to the United States and sterling area countries, and a reduction in exports to the rest of the world. Total exports of goods and services actually increased between the first and fourth quarters of 1949, while the only quarterly contraction of the year (during the third quarter) amounted to 4%. Canada's total receipts from the United States rose progressively during each quarter of 1949.¹⁰

W. C. Hood attributes the strengthening of capital inflows into Canada for direct investment as another stimulating factor.

While most investing countries shared in this increase, by far the greatest expansion was recorded by the United States. "In 1948 that country accounted for 81% of total direct-investment inflows into Canada. Between 1948 and 1949, inflows of United States capital rose by 38%, as compared with a 5% increase between 1947 and 1948."¹¹

A third factor which helped buoy up the Canadian decline in 1949 was that the build up of business inventories continued throughout 1949, but at a more moderate rate in the second half of that year. Moreover, the value of consumer purchases in Canada, after allowing for seasonal factors, rose very sharply between the first and second quarters and remained at that high level for the remainder of the year. Investment in plant and equipment made a further advance in real as well as value terms, but at an appreciably lower rate than in the previous year, while residential construction made decidedly large gains.

A fourth factor which retarded the decline in 1949 was an increase in consumer expenditures. Consumption, stimulated by the repayment of the refundable portion of income tax (In the budget introduced in June 1942, part of the increase in taxation was made refundable within a specified period after the end of the war.) rose about 8 per cent in value, of which about half represents a gain in real consumption.

The Second Post-War Inflation - June 1950 - December 1951

Between the first quarter 1949 and the second quarter 1950 Canada passed through a period of relative price stability. During this period the consumer price index rose from 99.6 to 101.4, less than 1 full point, while the wholesale price index rose only from 185.4 to 205.5, 15.1 points. However, between June 1950 and December 1951 followed a second post-war inflationary period. In the first inflationary period the immediate stimulus was the abrupt abandonment of wartime price controls by the United States and Canada in mid-1946, while in this second inflationary period the precipitating factor was the outbreak of the Korean War in 1950.

The outbreak of the Korean War gave impetus to investment, emphasizing the importance of major resource development projects, and stimulated capacity in steel production and various defence industries. Between the second quarter 1950 and the fourth quarter 1951 the consumer price index rose from 101.4 to 117.7 and the wholesale price index rose from 205.5 to 235.5. The inflationary forces were largely concentrated in the strategic materials industries. For example, from June 1950 to April 1951, a period of 10 months, the wholesale price of rubber and its products rose 57.6%. During the same period, fibres, textiles, and textile products rose 41.4%. From April 1950 to May 1951, a period of 13 months, scrap iron and steel

rose 49.1%. Between April 1950, and December 1951, lead, zinc, and their products went up 61.1 and 72.9% respectively. These figures emphasize the fact that the inflation was largely concentrated in strategic raw materials.¹²

Also this period typifies the classical demand type of inflation, for unemployment between the second quarter 1950 and the fourth quarter 1951, fluctuated between 1.0 and 1.5% of the labour force. With the outbreak of the Korean War, there was a revival of restrictive monetary policy to curb inflationary excesses. The reasons were two-fold. There was a huge speculative capital inflow from the United States and there was the need to reach a decision with regard to an appropriate level for the exchange rate. As a consequence of these above events the government applied its so-called 'credit ceiling' in February 1951, an event unprecedented in Canadian banking history.¹³

By early 1952 evidence of downward movements in prices was indicated and anti-inflationary measures were removed and relaxed. During 1952 there was a substantial rise in personal income, and with restrictions removed or relaxed there was a resurgence of consumer expenditures and outlays for housing. Government expenditures made substantial gains, along with investment in plant and equipment.

The Exchange Rate Situation

The speed with which the United States recovered from the recession in 1949 was not foreseen, nor was the outbreak of the Korean War, and the fear that exports and capital imports might decline proved quite unfounded. The sharp increase in exports which followed the outbreak of hostilities was accompanied by a heavy capital inflow, especially from the United States, much of it of a speculative nature in anticipation of the Canadian dollar appreciating once more. In purchasing these foreign exchange assets the federal government exhausted its own cash resources in addition to a sum borrowed from the Chartered banks, and was obliged to turn to the Bank of Canada for assistance. The inflow of capital was a source of embarrassment, tending to reduce interest rates and adding, as it did, to the task of controlling the domestic rise in prices. In an effort to counteract the inflationary effect, the Bank pursued a more stringent open market policy, and to put to an end the extraordinary rate of involuntary borrowing from the United States, amounting to nearly \$600 million in the summer of 1950 alone, the government announced on September 30, 1950 the adoption of a floating dollar policy. At the same time, steps were taken to remove the emergency import restrictions introduced in 1947 and 1948. A rapid appreciation of the Canadian dollar followed the establishment of the free rate and by 1952, it was at a premium, notwithstanding the elimination of all exchange controls of the previous year.

The Two Early Post-War Expansions

Table 16 and its subsequent analyses is based upon relative changes between cyclical turning points in economic activity. An examination of these changes indicate the different relative strengths of these expansions.

TABLE 16

SELECTED INDICATORS, 1946-48 AND 1949-53
EXPANSIONS IN CANADA-CHANGE FROM QUARTERLY TROUGH TO PEAK*

	Absolute Change Millions of Dollars 1946-1948	Percentage Change	Absolute Change Millions of Dollars 3Q49-2Q53	Percentage Change
Consumption	312	2.41	2792	20.18
Non Durables	119	1.65	1568	21.47
Durables	10	.85	600	43.85
Services	199	4.38	712	13.46
Government Expenditure	- 787	- 21.29	1868	55.66
Business Gross Fixed Capital Formation	1878	79.10	1256	28.99
New Residential Construc- tion	388	60.24	148	13.30
New Non-Residential Construction	563	74.37	524	38.69
New Machinery & Equipment	904	91.86	592	31.96
Change in Inventories	- 282	- 81.50	340	134.92
Non-Farm	- 223	- 47.34	272	91.89
Farm	- 2216	- 216.00	80	666.66
Exports	101	2.04	1144	24.27
Imports	- 254	- 5.26	1926	42.38
Gross National Expendi- ture	1147	5.72	5700	25.96
Index of Industrial Pro- duction	9.2	10.29	29.3	29.15
Non-Farm G.N.P. (Market Price)	1392	10.69	7884	51.20

* 1957 Constant Dollars, Seasonally Adjusted at Annual Rates.

Source: National Accounts, Income and Expenditure by Quarters, 1947-1961, and Various Issues of the Canadian Statistical Review.*

* Note: First quarter, constant dollar, seasonally adjusted data for gross national expenditure and components were calculated as explained in footnote, Table 3.

During the 1949-53 expansion, consumer expenditures leading by a 43-85% increase on durables, was one of the leading components, while in the 1946-48 expansion, consumer expenditures rose only 2-11%, reflecting early post-war shortages of consumer goods.

Government expenditures moved in opposite directions in these expansions, functioning as a braking force in the early expansion and as a source of strength in the latter expansion. Capital expenditures increased positively in both expansions, however its stimulative effects were different. In the first expansion capital expenditures grew 79.10% compared to a milder 28.99 per cent increase in the latter expansion. Also new machinery and equipment was the leading components in the earlier expansion, while new non-residential construction was the leading component in the latter expansion.

The divergent characteristics of these expansions are also evident in the inventory component. In the earlier expansion

total inventories declined \$282 million, while in the latter expansion inventories accumulated by \$340 million. In both expansions non-farm and farm inventories moved in the same directions, i.e. declining between 1946 and 1948 and accumulating between 1949 and 1953.

Changes in exports and imports were not very marked between turning points in the first upswing, although exports rose 2.04 per cent and imports declined 5.26 per cent. In the second expansion exports and imports both rose substantially, with imports rising 42.38 per cent compared to a 24.27 per cent increase in exports.

As could be expected, both of these expansion periods registered positive gains in gross national product, industrial production, and non-farm G.N.P., with the latter upswing leading in all three indicators.

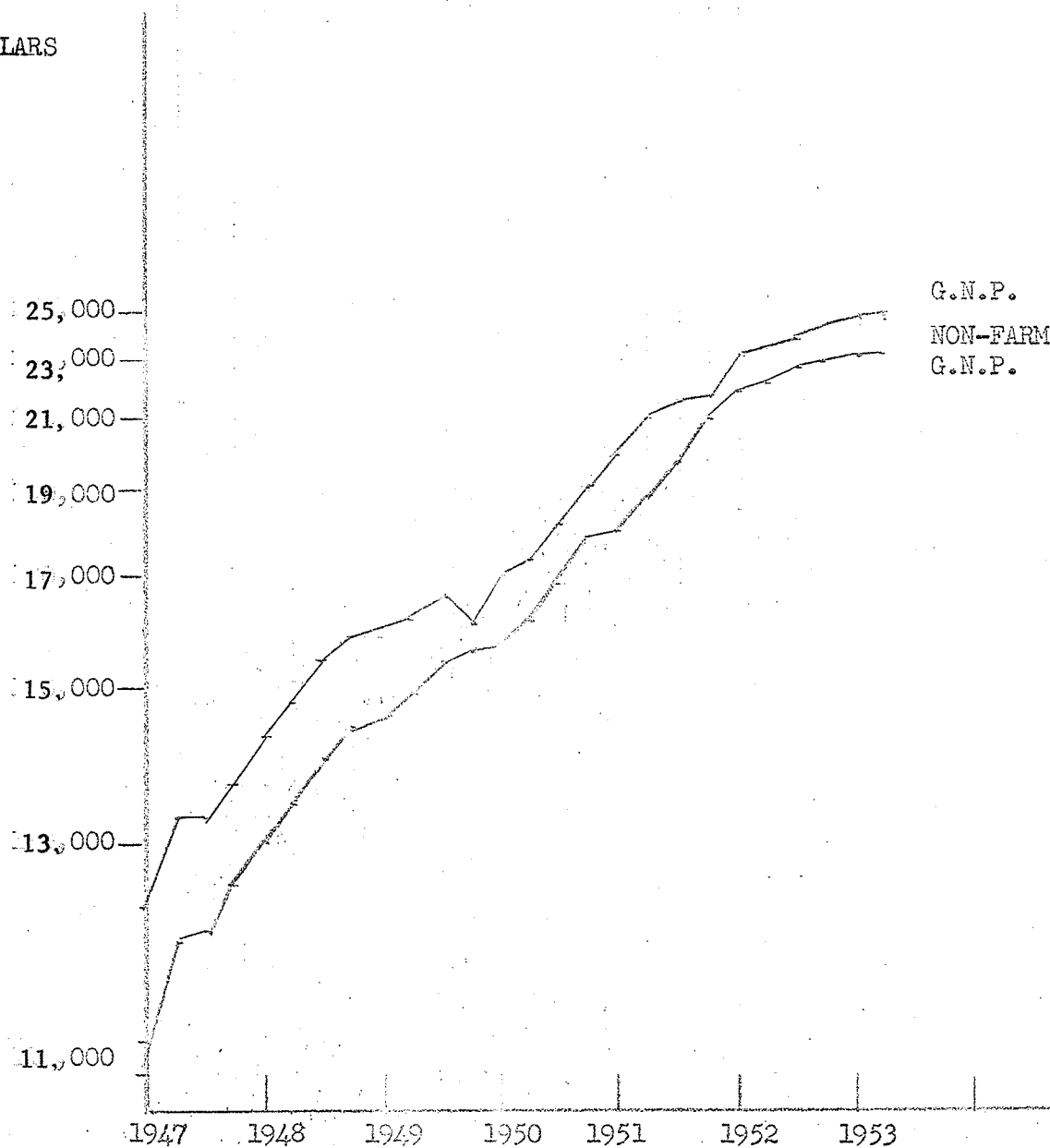
Selected Economic Indicators - 1946 - 1953

The buoyancy of these seven years are very observable in charts 16-23. Chart 16, which illustrates the growth path of G.N.P. and non-farm G.N.P., indicates a decline in the G.N.P. series during the 1948-49 recession, while a decline is not visible in the non-farm G.N.P. series, pointing out the primarily agricultural basis of this recession and its mildness. Chart 17 illustrates rather

CHART 16
 G.N.P. AND NON-FARM G.N.P. AT MARKET PRICES
 SEASONALLY ADJUSTED AT ANNUAL RATES (MILLIONS)*
 1947 - 1953

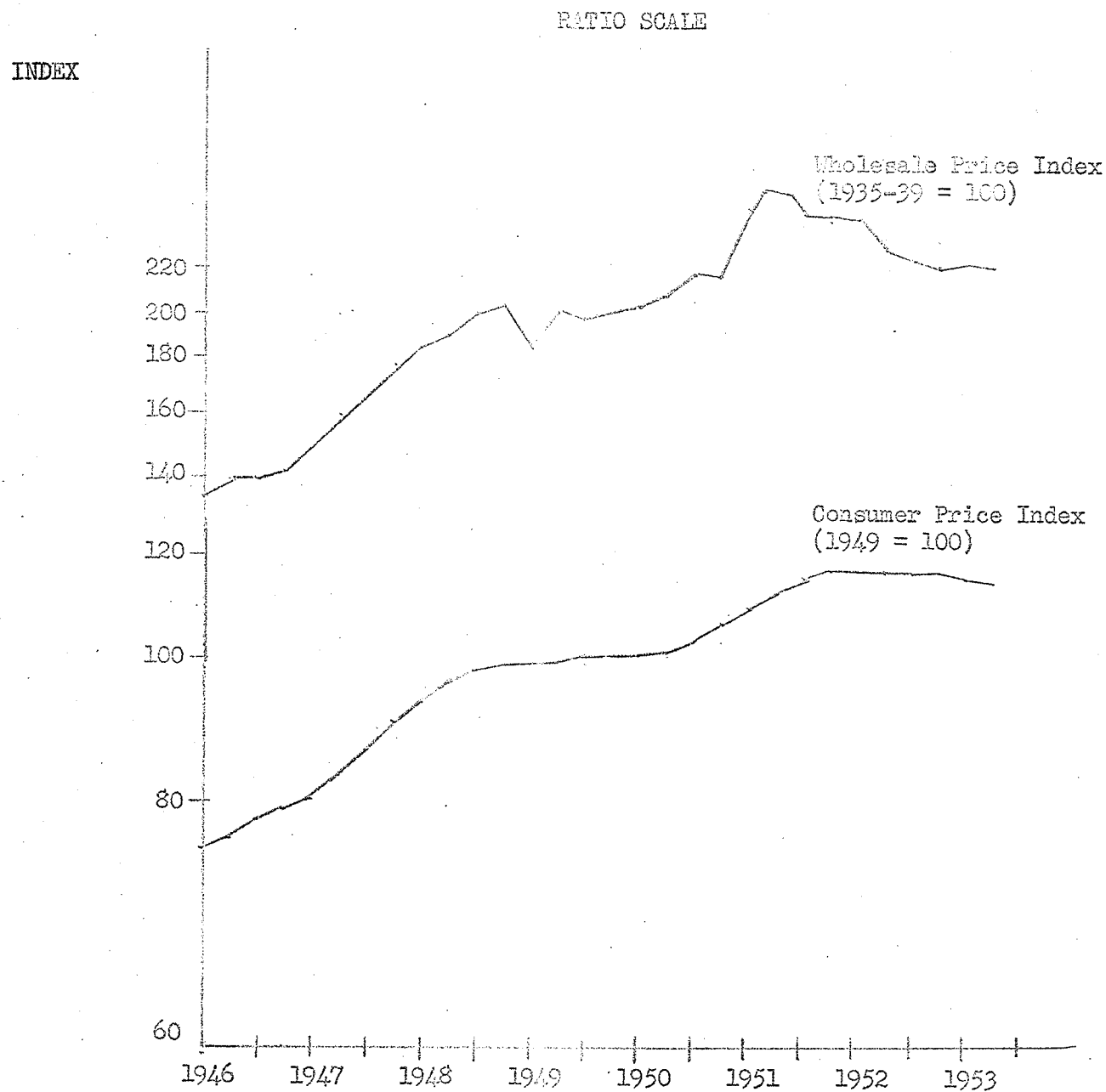
RATIO SCALE

IONS OF DOLLARS



*Source: D.B.S., Annual Supplement to The Canadian Statistical Review, 1961

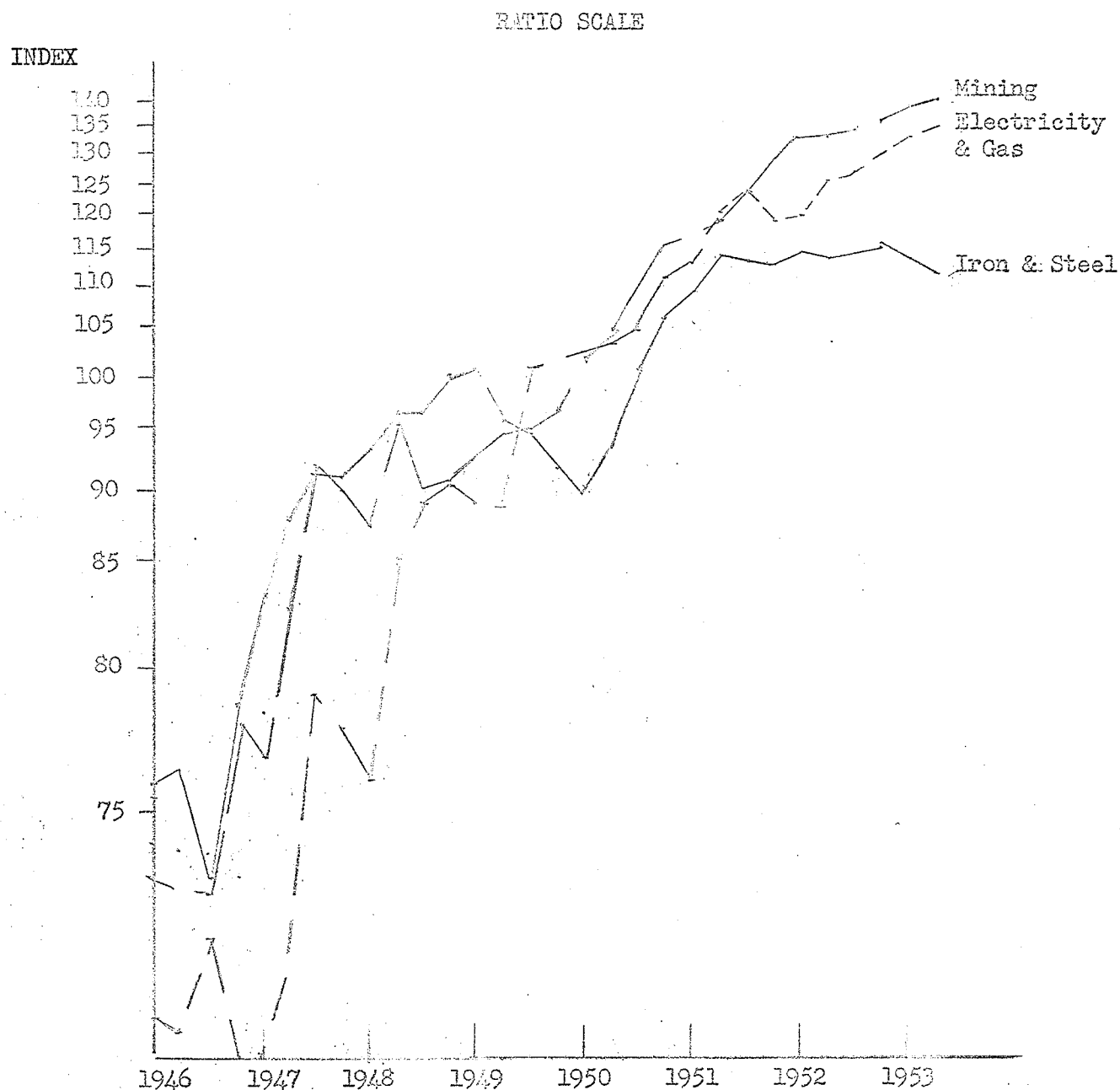
CHART 17
WHOLESALE AND CONSUMER PRICE INDEXES* 1946 - 1953



*Source: D.B.S., Canadian Statistical Review, Various Issues

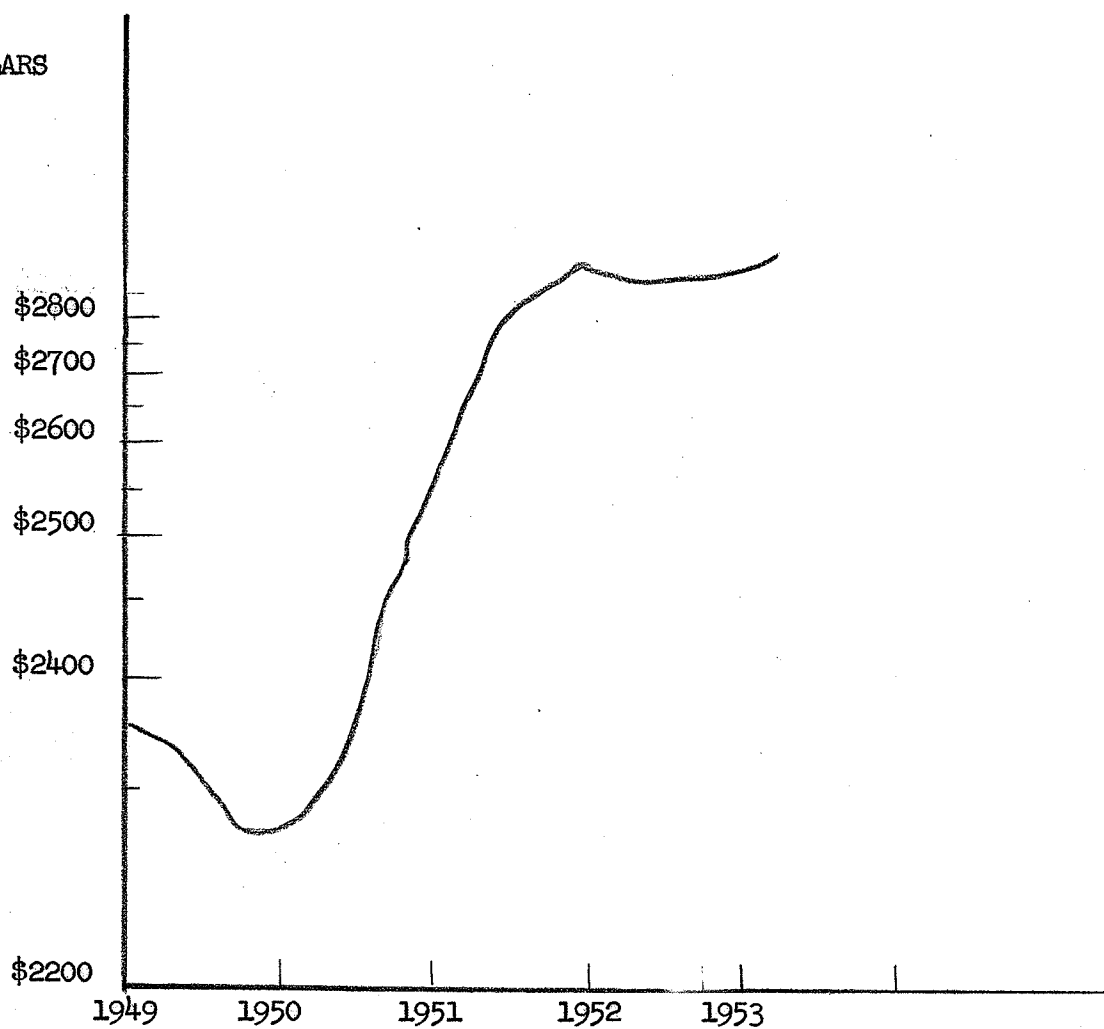
steep increases in both wholesale and consumer price indexes over this period, with a noticeable pause in price increases during the recession of 1948-49, and the renewed resurgence in these series coinciding with the outbreak of the Korean War. Chart 18, total production of iron and steel, mining, and electricity and gas, though more erratic than previous selected indicators, suggests a levelling off in all series during the 1948-49 recession, with renewed resurgence during the recovery of 1950 - 1953. Chart 19, which outlines total manufacturing inventories owned, follows the cyclical pattern very closely, and points out the rather heavy accumulation of inventories between 1950 and 1952, a reaction to the Korean War. Pent-up demand and buoyancy are very evident from charts 20 and 21, retail trade and department store sales, while the changing character of the Canadian trade picture stands out in chart 22. Corporation profits before taxes seemed to be scarcely affected by the 1948 - 49 recession, but increased tremendously with the onset of the Korean War, as evidenced from chart 23.

CHART 18
 TOTAL PRODUCTION IRON AND STEEL, MINING, AND ELECTRICITY AND GAS,
 VOLUME INDEX (1949 = 100) SEASONALLY ADJUSTED* 1946 - 1953



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 19
MANUFACTURING INVENTORIES OWNED 1949 - 1953
SEASONALLY ADJUSTED (MILLION DOLLARS)*

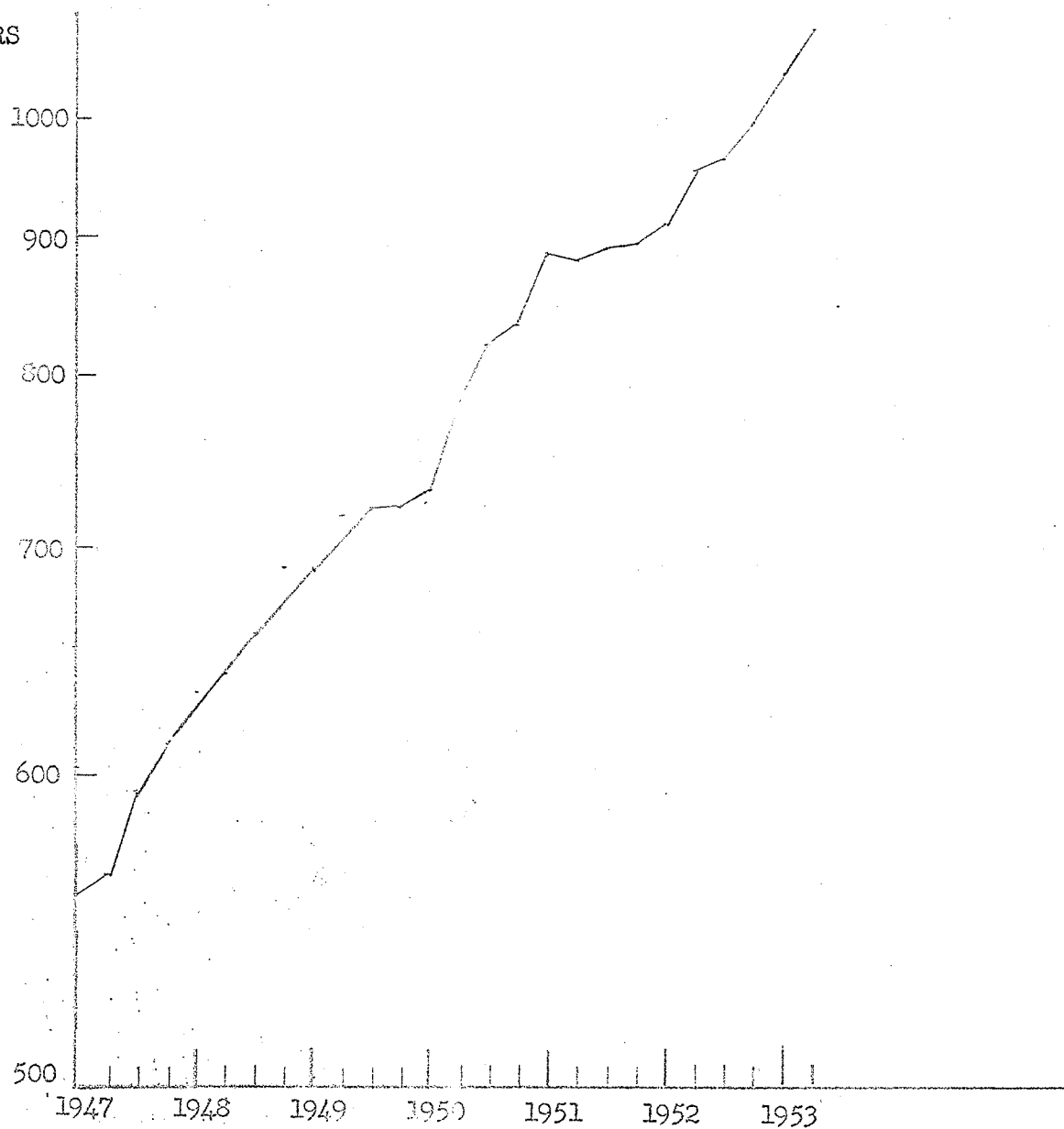


*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHAPTER 20
RETAIL TRADE (MILLION DOLLARS) 1947 - 1953
SEASONALLY ADJUSTED*

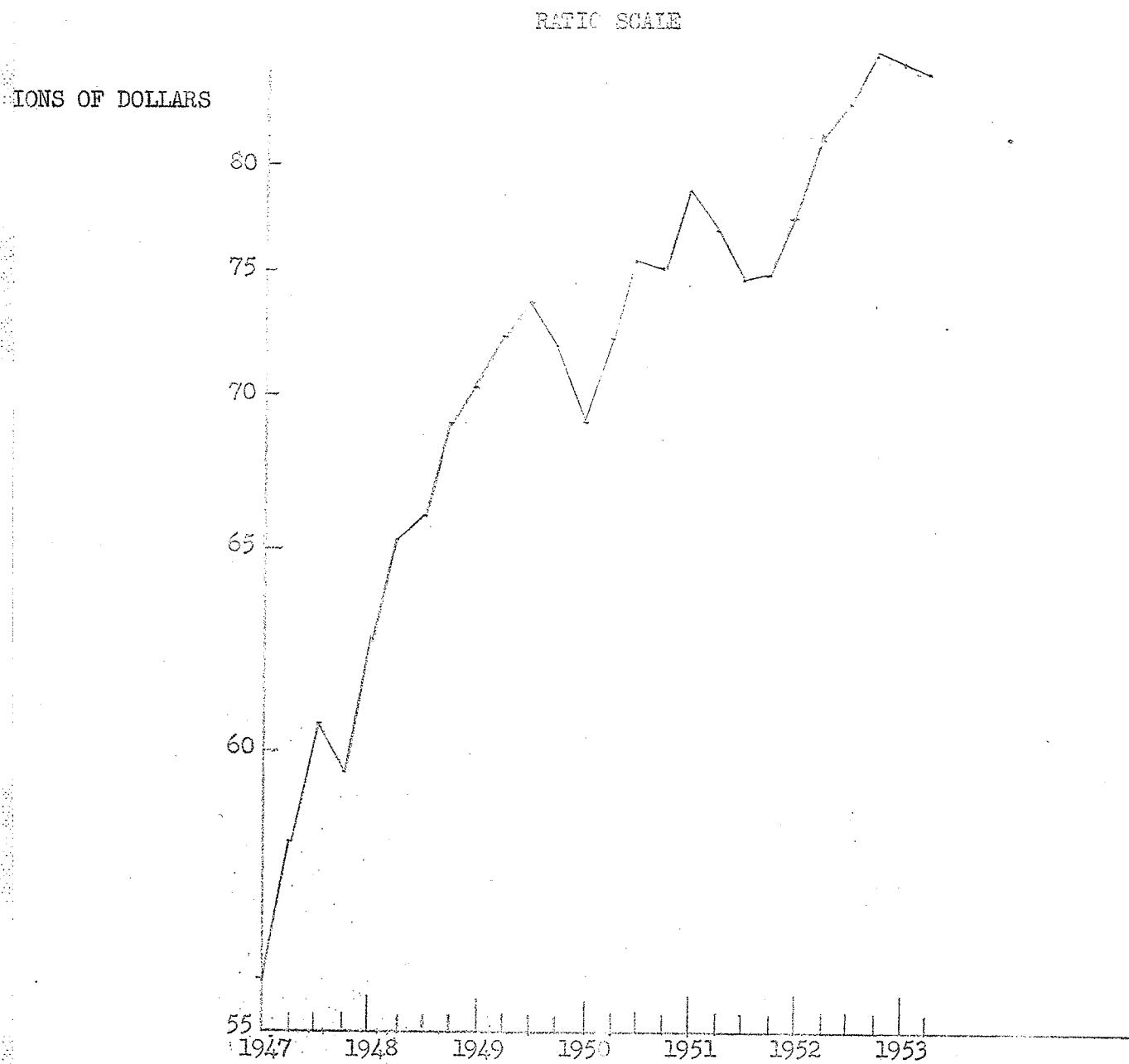
RATIO SCALE

IONS OF DOLLARS



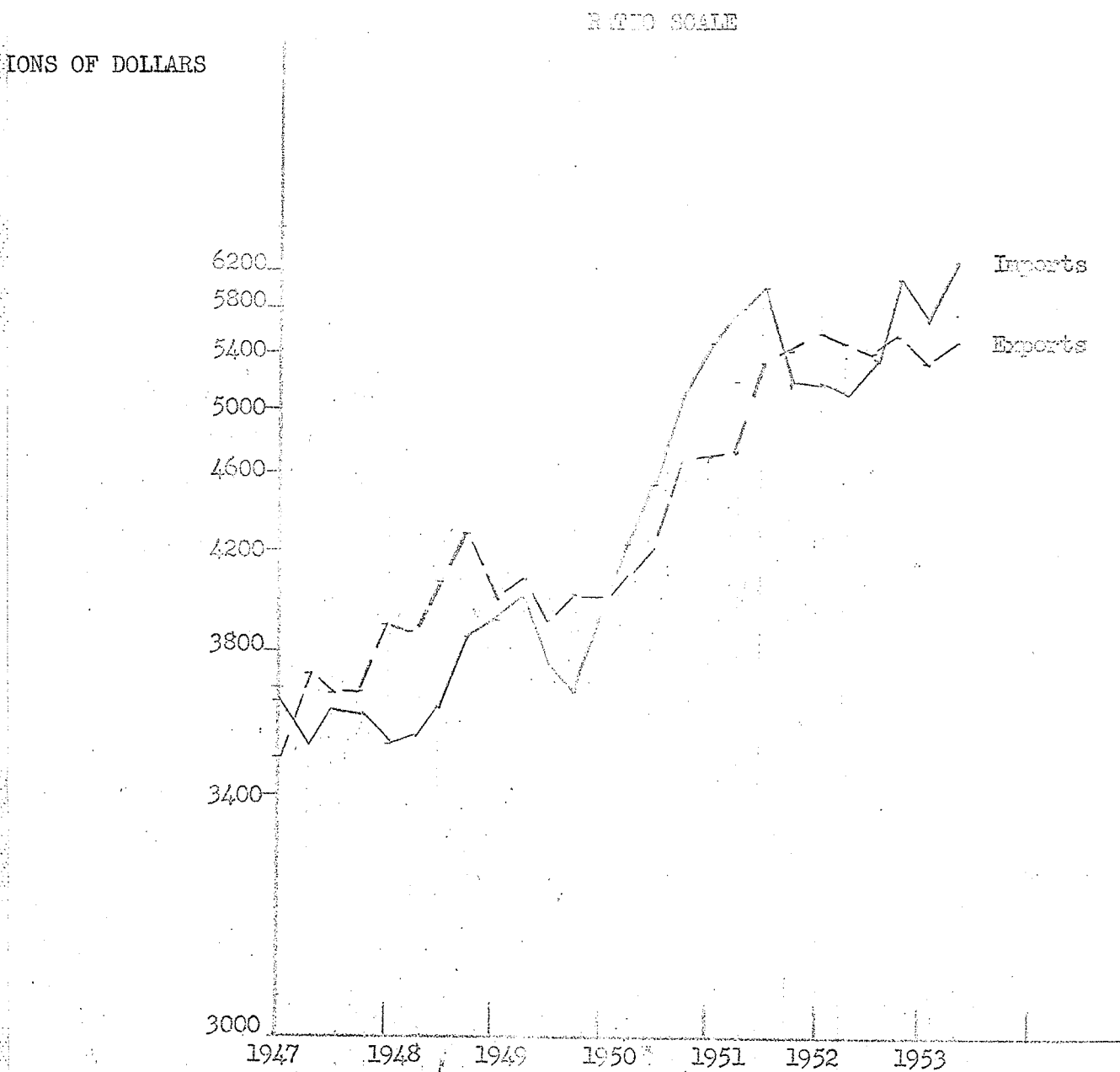
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 21
DEPARTMENT STORE SALES (MILLIONS OF DOLLARS) 1947 - 1953
SEASONALLY ADJUSTED



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

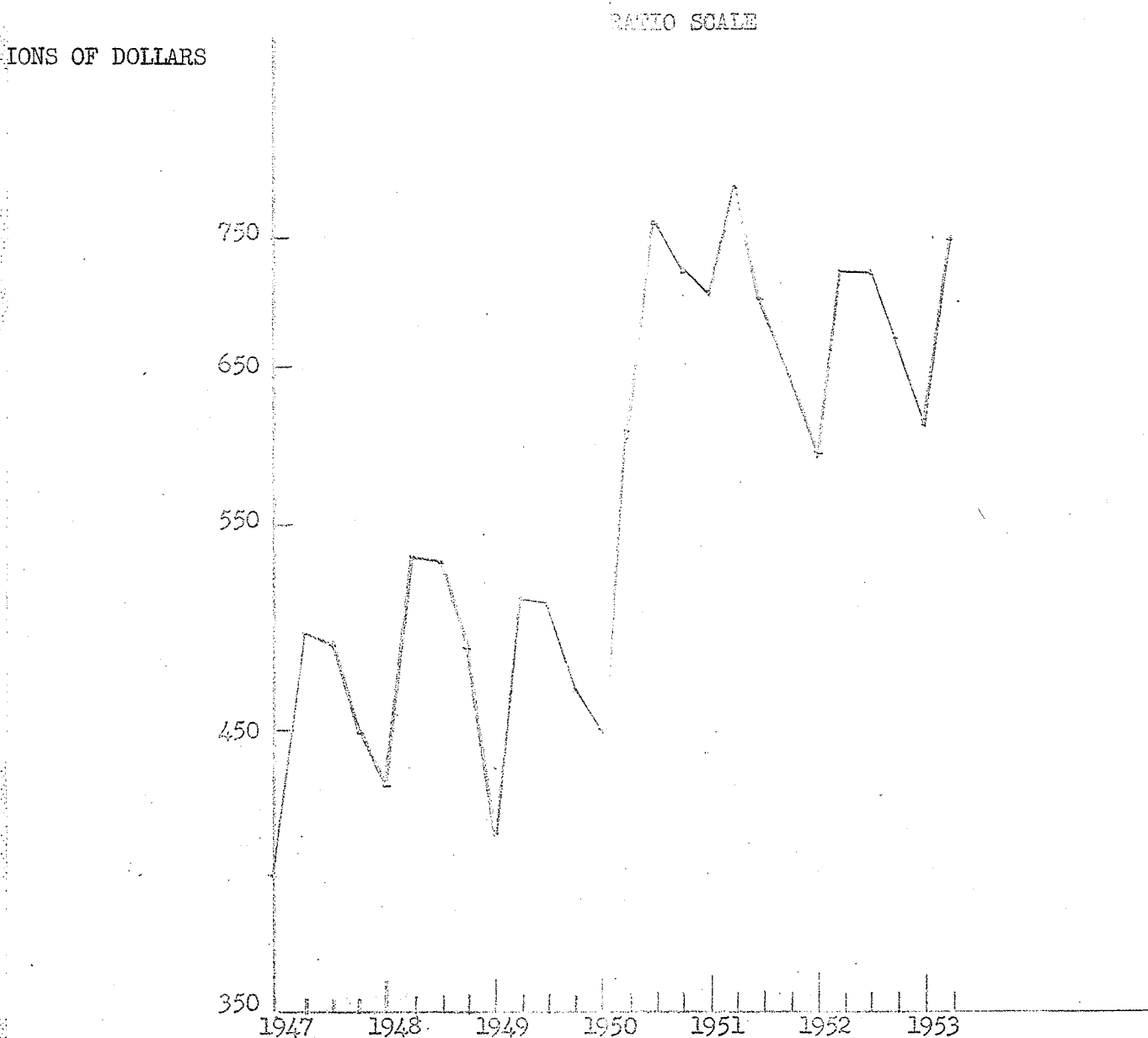
CHART 22
 EXPORTS AND IMPORTS AT MARKET PRICES 1947 - 1953
 SEASONALLY ADJUSTED AT ANNUAL RATES (MILLIONS)*



*Source: D.B.S., National Accounts, Income and Expenditure, by Quarters, 1947 - 1954

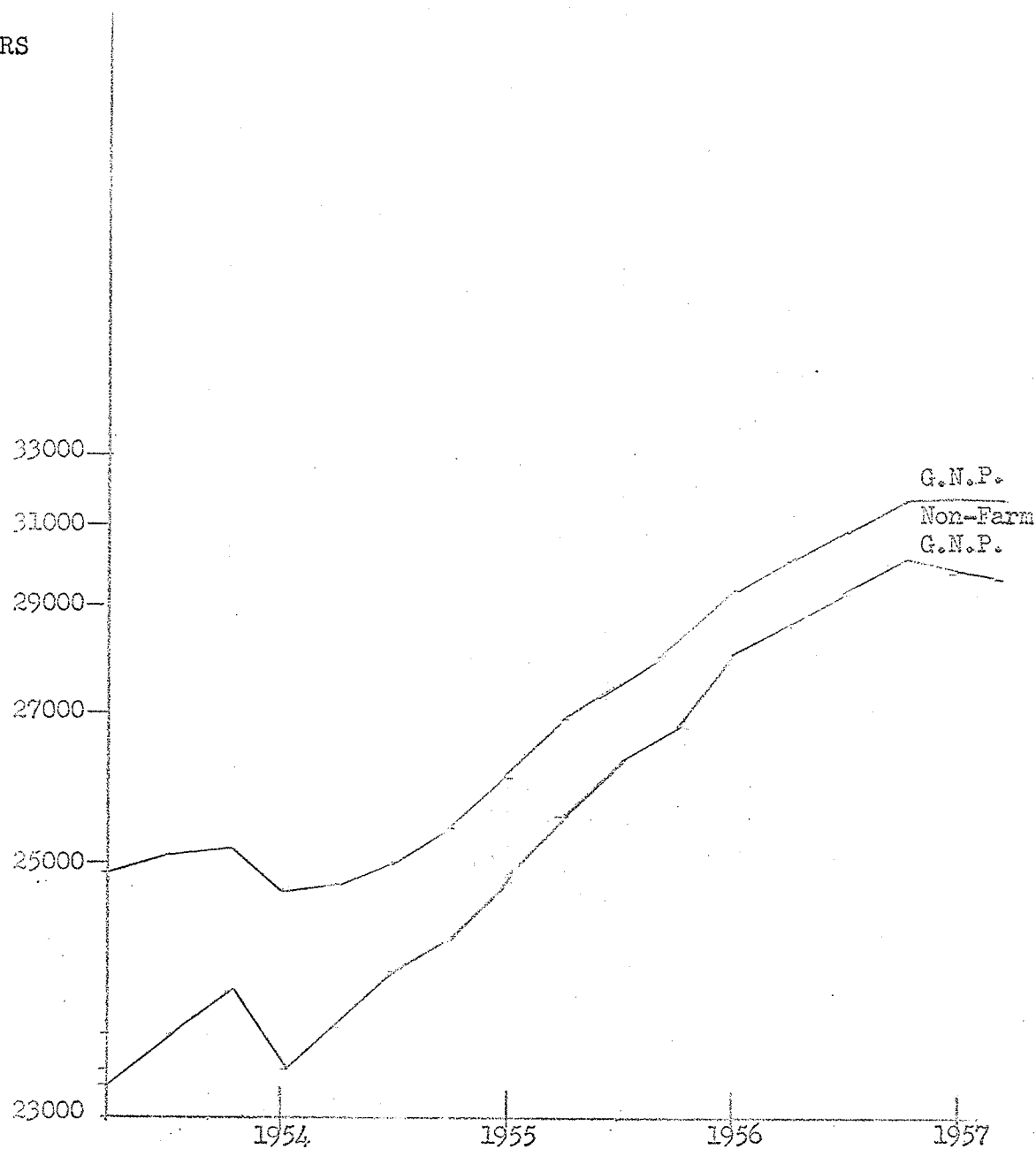
CHART 23

NON SEASONALLY ADJUSTED CORPORATION PROFITS BEFORE
TAXES, 1947-1953*



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 24
G.N.P. AND NON-FARM G.N.P. AT MARKET PRICES,
SEASONALLY ADJUSTED AT ANNUAL RATE (MILLIONS)*
RATIO SCALE 1953 = 1957



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHAPTER 5

BACKGROUND TO THE 1953-57 CYCLE

The general resurrection of monetary policy which took place in Western Europe and the United States in the early fifties also occurred in Canada. Signalling the Canadian change was the rise in the Bank rate from $1\frac{1}{2}$ per cent to 2 per cent on October 17, 1950. However, this action barely affected the chartered banks since they rarely borrowed funds from the Bank of Canada. However, other actions followed. Interest rates rose between September 1950 and September 1953, and the yield on long-term government bonds climbed from 2.74 per cent to 3.76 per cent.¹ Other policy measures were the unprecedented introduction of a credit ceiling in 1951.

The Korean War boom came to an end in 1953, declines in business inventories, business construction and equipment expenditures, and in consumer expenditures on durables reinforced cuts in defence expenditure to bring on the recession. The Bank of Canada shifted from a policy of monetary restraint to one of monetary ease, and the federal government's 1953 surplus of \$143 million gave way to a deficit of \$57 million in 1954. It becomes apparent that the dominant factor in this recession of 1953-54 was the shift from accumulation to liquidation of inventories.

By the second quarter of 1955 economic conditions had improved markedly, and general bank loans, which had slackened off during the short 1953-54 recession, showed their first major increase in a year and a half. Short-term and long-term interest rates started to climb in both the United States and Canada.

During 1953 and early 1954, Canadian yields on treasury bills rose rapidly relative to American yields, with a turning point in long-term Canadian interest rates following the American turning point. "While American long-term interest rates began to move upward in August, 1954, the Bank of Canada continued to permit credit expansion because of persistent unemployment and yields on Canadian bonds continued to fall through the last half of 1954. It was not until February 1955, that the Bank of Canada made a sizeable reduction in its bond holdings, and a rise in bond yields lagged yet another two months. During the remainder of 1955 and throughout 1956, the American and Canadian bond yields moved in roughly parallel direction although the rise in Canadian yields was somewhat greater than the American increase in the last two quarters of 1955. The Canadian economic expansion, financed in part by a large capital inflow, was accompanied by an only slightly less striking American expansion." ²

The 1953-54 Recession

Following the termination of the Korean War there was a reduction in defence expenditures, some slackening in the growth of capital formation, and a shift from accumulation to liquidation of inventories, of which the latter factor turned out to be the dominant factor in the 1953-1954 recession.

The characteristics of the second post-war recession prove most interesting. In the first case it was both a mild and short recession. The decline in industrial activity had been reversed by the second quarter of 1954, though recovery did not become pronounced until late 1954 and early 1955.

Secondly to the extent that the Canadian economy did turn down it was a farm recession. Non-farm G.N.P. declined about 4% as compared with the 20% drop in net farm income. Also, for the first time in the post-war period investment in plant and equipment was lower than the previous year, mainly reflecting an 11% decline in purchases of machinery and equipment.

Similarly investment in business inventories dropped off sharply. Whereas in 1953 investment in business inventories ran at the high rate of \$353 million, in 1954 stocks were drawn down by \$40 million.

Thirdly, the 1953-54 recession offered a demonstration of Canada's ability to be moderately influenced by a minor American downswing. In the United States too, economic contraction set in against a background of rapid and substantial growth in real output, and similarly the two main contractive factors were inventory liquidation and the curtailment of federal government defence expenditure. Between the third quarters of 1953 and 1954, inventory and federal spending declined in Canada at a combined annual rate of \$18.5 billion. This reduction of expenditure was promptly reflected in national income, production and employment. The over-all decline in economic activity was small, but its impact was very uneven and some industries suffered seriously.

Other factors were a fall in consumer outlays for durable goods, a reduction of investment in fixed capital, and agriculture continued to be characterized by large surpluses, inadequate exports and lower prices received by farmers relative to those paid by them.

Economic Indicators of 1953-54 Recession

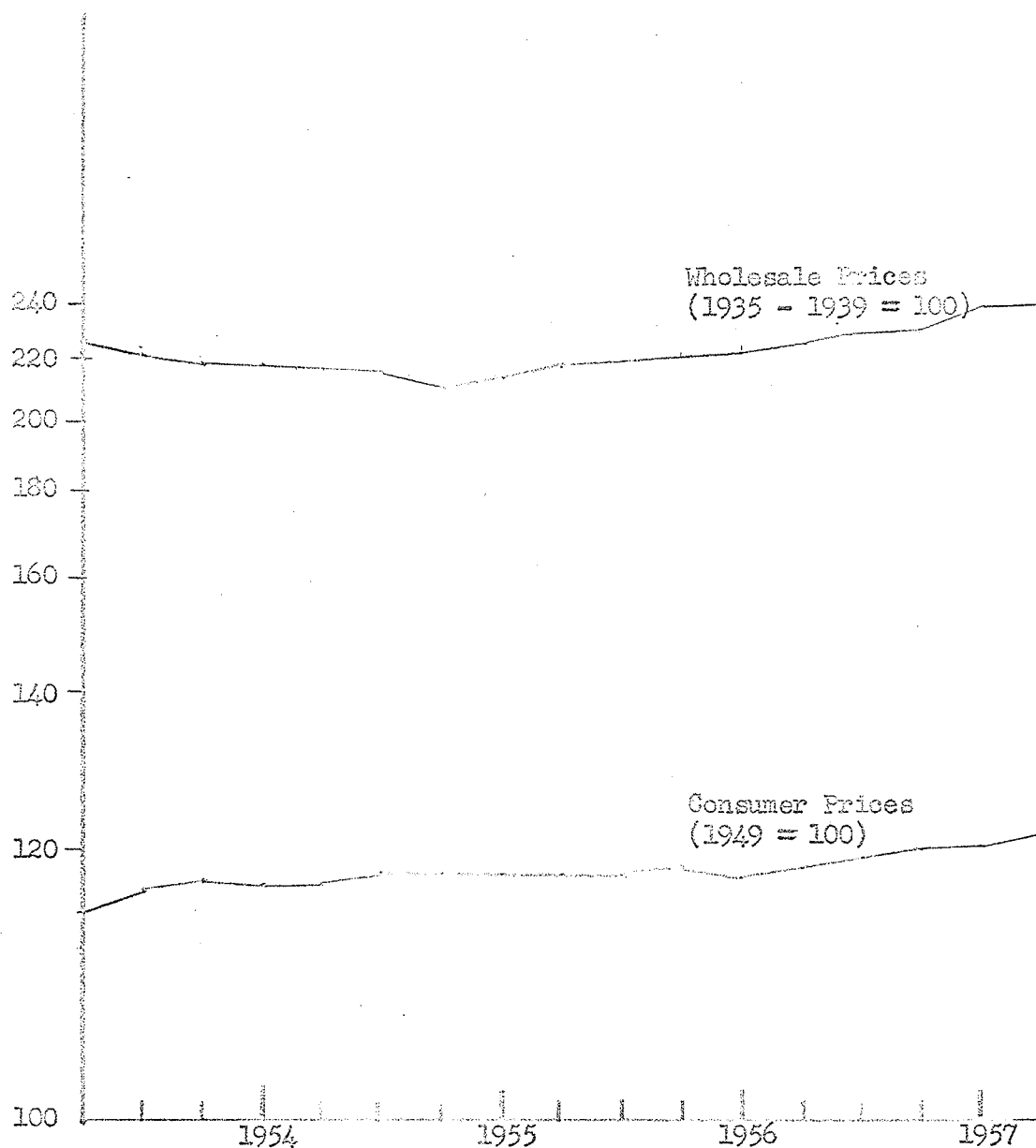
This second post-war recession was more evident in more series of economic indicators than the 1948-49 "pause". This recession clearly travelled along the channels of foreign trade. Its significance was felt in the wheat economy of the prairie provinces, but almost nowhere else in Canada. In volume terms

Canadian exports dropped very slightly from 1952 to 1953, then fell 4 per cent from 1953 to 1954. In value terms, the fall was greater in both years. Gross farm income in these three years was respectively \$2,849,000,000, \$2,776,000,000, and \$2,378,000,000. During the 1948-49 downturn, a decline in farm cash income due to the recession was not too evident, while in the recession of 1953-54 the decline was evident, hitting its lowest point in the third quarter of 1954. Non-farm gross national product fell in the first quarter 1954 and did not significantly exceed this level until the final quarter 1954. Personal disposable income fell in the fourth quarter 1953 and didn't significantly exceed its former high point until the fourth quarter 1954. Inventory accumulation dropped in the third and fourth quarter 1953, with the liquidation of inventories culminating in the first quarter 1954 and only terminating by the first quarter 1955. In 1954 all major classes of production fell, except the export-dependent mining industry. In the first two quarters of 1953 the rise in index of industrial production slowed down, with the index falling between the third quarter 1953 and the second quarter 1954, with non-durable production not decreasing notably, however, durable manufacturing production fell in the second quarter 1953 and didn't regain its former level until the first quarter 1955.

It is interesting to note that the value of building permits barely declined in the 1953-54 recession, while the number

CHART 25
WHOLESALE AND CONSUMER PRICE INDEX 1953 - 1957
RATIO SCALE 77

INDEX

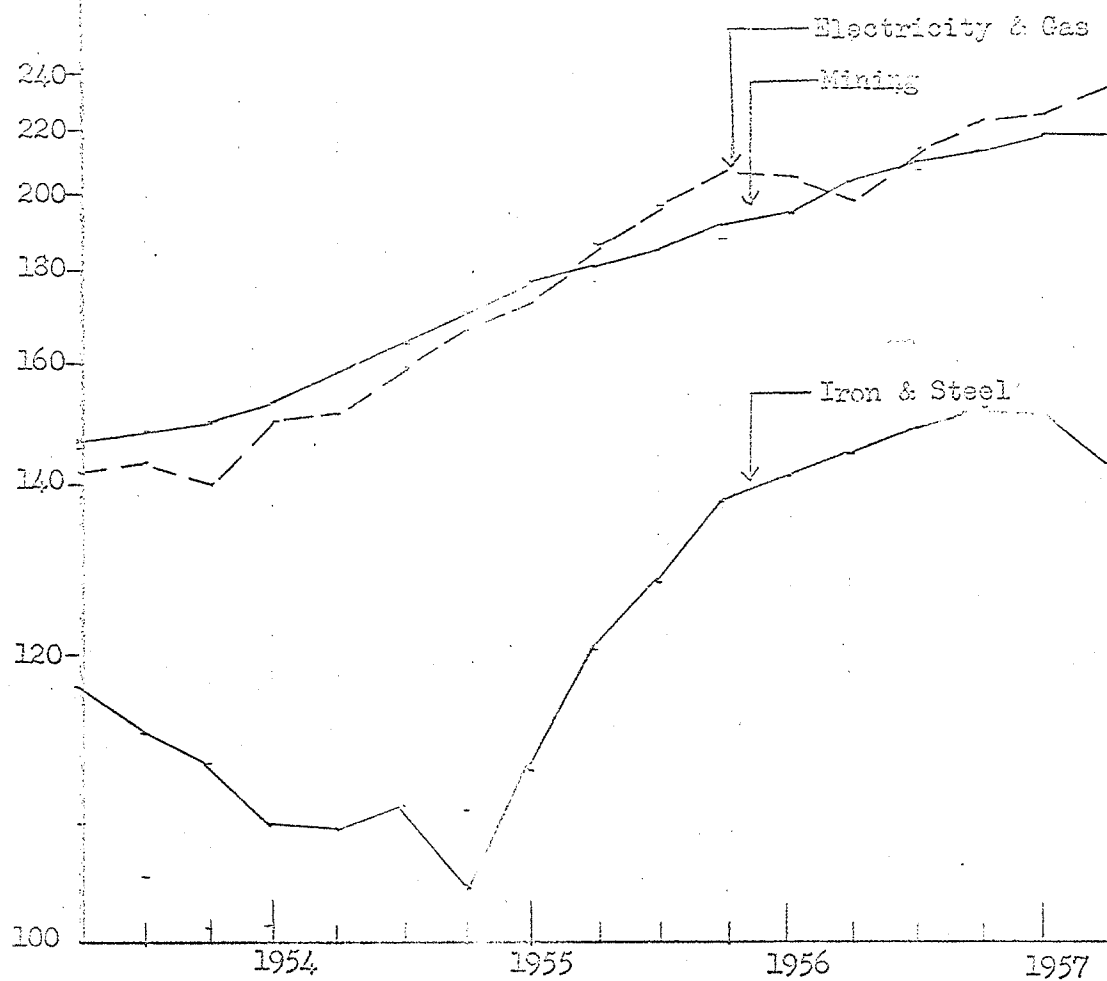


*Source: D.B.S., Canadian Statistical Review, Various Issues

CHART 26
TOTAL PRODUCTION IRON AND STEEL, MINING, AND ELECTRICITY AND GAS
1953 - 1957 VOLUME INDEX (1949 = 100)
SEASONALLY ADJUSTED*

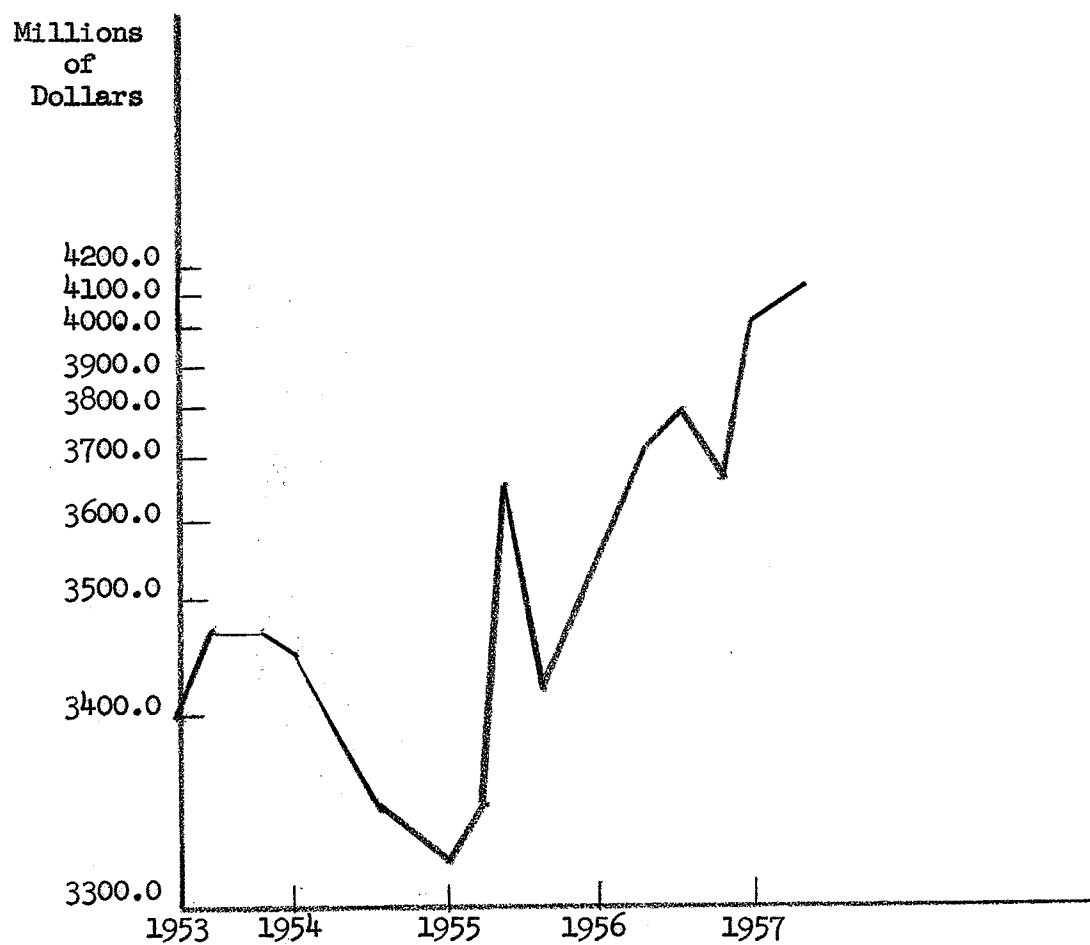
RATIO SCALE

INDEX



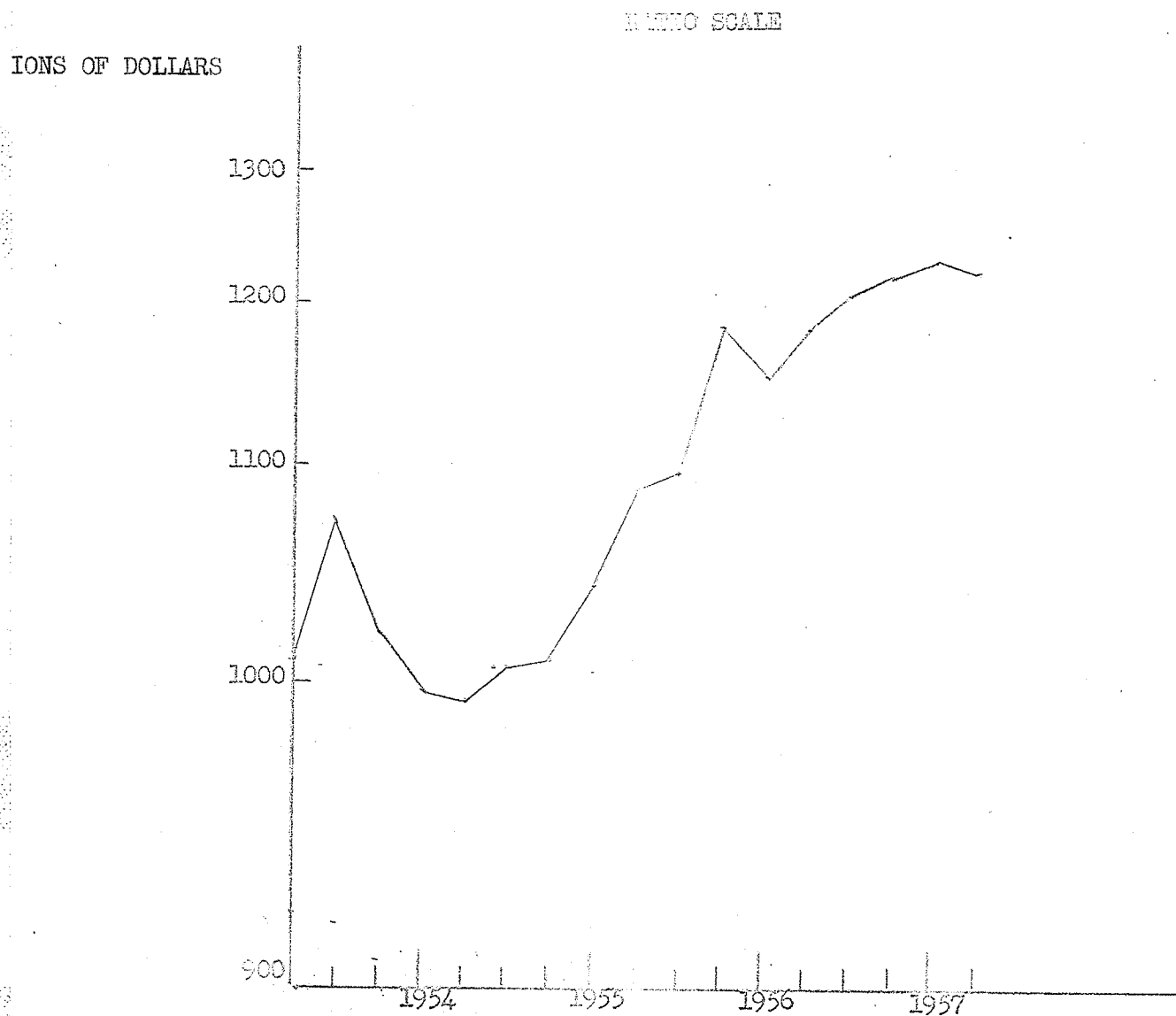
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 27
MANUFACTURING INVENTORIES OWNED, 1953 = 1957
SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)*



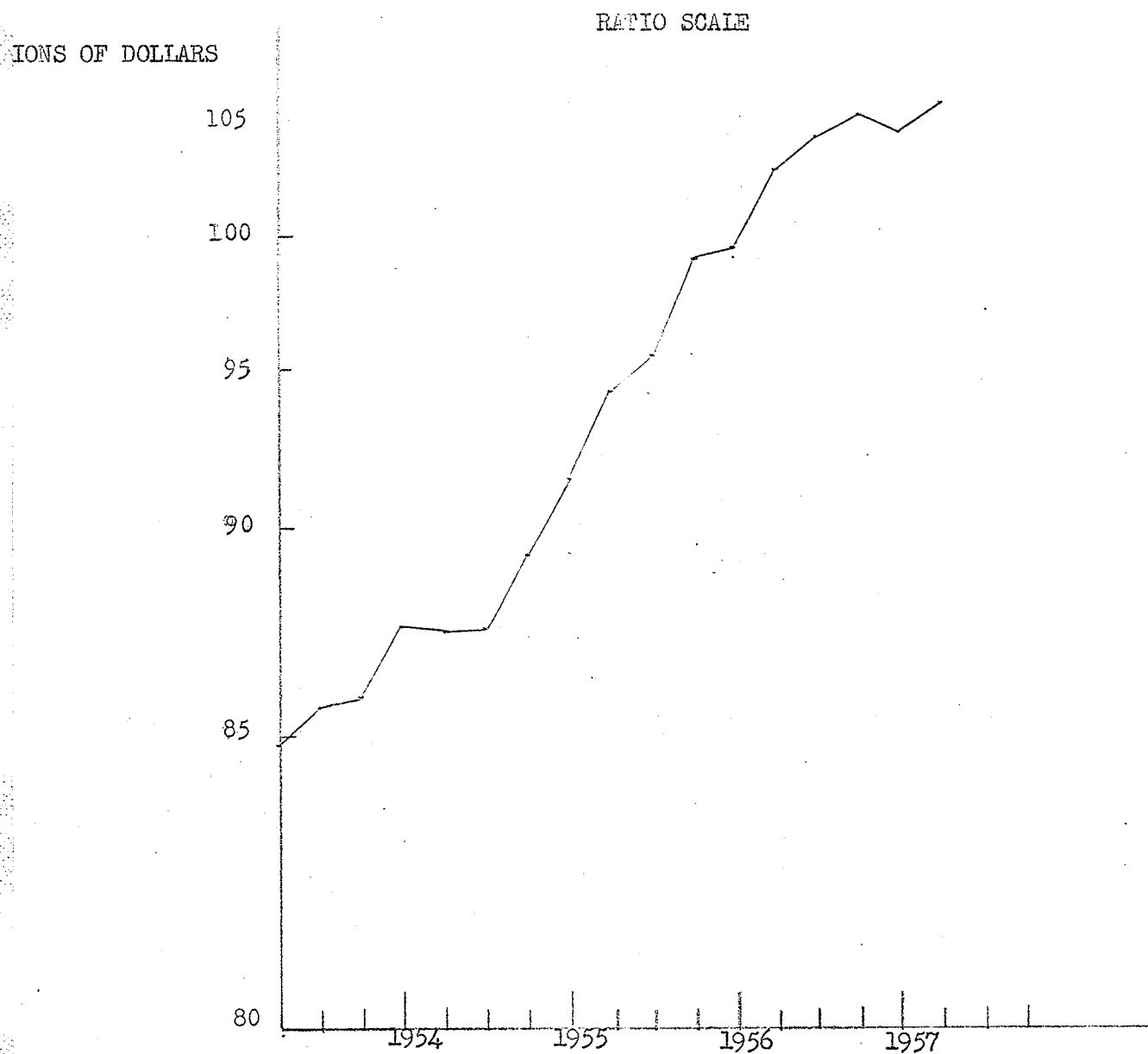
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 28
RETAIL TRADE (BILLION DOLLARS) 1953 - 1957
SEASONALLY ADJUSTED



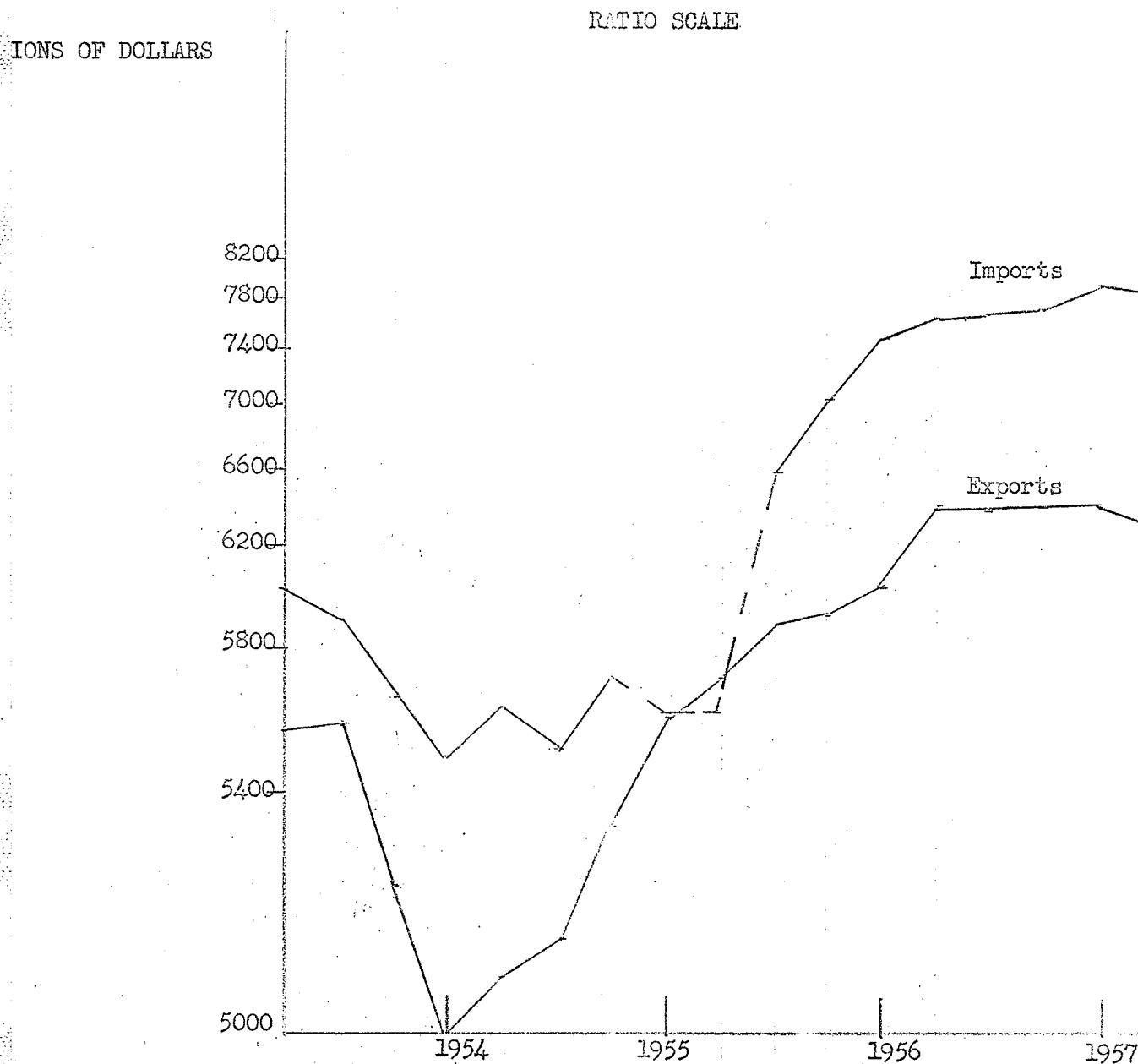
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 29
DEPARTMENT STORE SALES (MILLION DOLLARS) 1953 - 1957
SEASONALLY ADJUSTED*



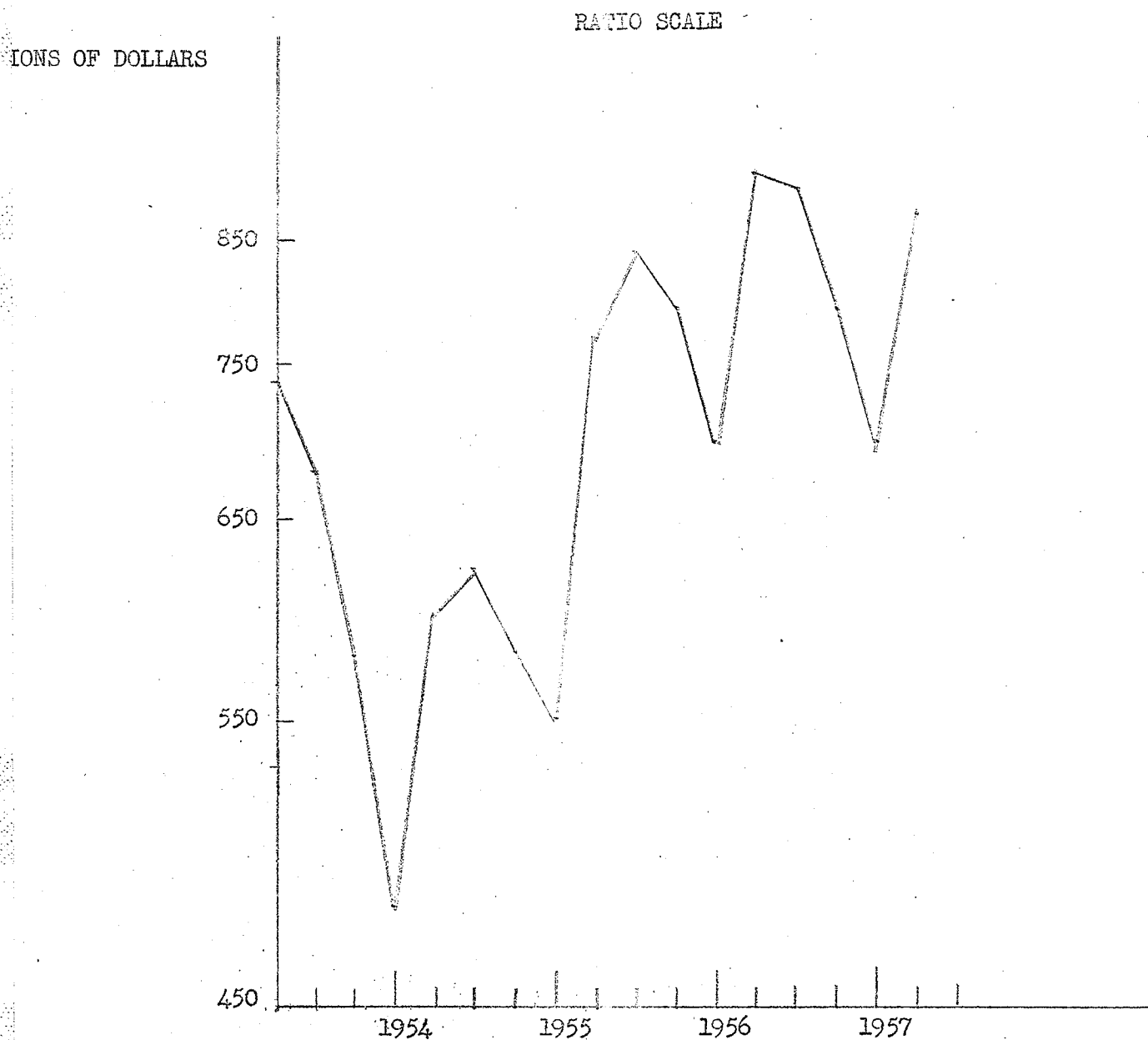
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 30
EXPORTS AND IMPORTS AT MARKET PRICES
SEASONALLY ADJUSTED AT ANNUAL RATES (MILLIONS)*



*Source: D.B.S., National Accounts, Income and Expenditure, by Quarters, 1947 - 1954; ibid 1954 - 1956

CHART 31
CORPORATION PROFITS BEFORE TAXES (MILLION DOLLARS)
1953 - 1957



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

of dwelling units started actually increased during this period. Corporation profits followed the general cyclical pattern and fell in the third quarter of 1953 and didn't make a substantial gain until the third quarter 1954.

The over-all degree and direction of change in this recession has been summarized as follows:

"There were fairly sharp reductions in output and employment in a number of industries (but) --- the recession was not at any stage a general phenomenon. Declining output in some industries was accompanied by stability in others and by expansion, sometimes rapid expansion, in still others. Activity in forest products, mining and service industries continued to grow. The construction of homes and municipal facilities rose appreciably through this period. There was also a moderate expansion of output in many sectors of manufacturing, although there were marked declines in textile, iron and steel, and most of the industries producing durable goods --- as a result of --- conflicting tendencies, total demand was sufficient to prevent more than a minor and temporary decline in total non-farm output from its 1953 peak."³

Background to the Expansion 1955-57

In the latter half of 1954, as the Canadian economy moved away from its second post-war recession, a major rise in capital spending and capital inflow developed. It might be appropriate at this point to review the trends in capital inflows. We can

safely confine our attention to three types of capital movement into Canada: direct investment in Canada, new issues of Canadian securities abroad, and net sales abroad of outstanding issues. Direct investment did not become substantial until 1950. In that year and in every year since, direct investment in Canada has been at least \$200,000,000.⁴ In the earlier years of the post-war period it was below \$100,000,000. Trade in outstanding securities has been erratic - very high in 1946, 1950, and 1956, but otherwise rather random in its movements.⁵ The explanation, of course, is that this trade often reflects short-term capital transactions more strongly than it does the working of long-term investment motives. New issues of Canadian securities abroad, on the other hand, have been high ever since 1946. In no post-war year have they been much below \$1000,000,000.⁶

TABLE 17

**BALANCE OF INTERNATIONAL PAYMENTS ON CAPITAL ACCOUNT
(MILLIONS OF DOLLARS)^a**

	Canadians Borrowing Abroad. ^b	Portfolio Investment	Net Direct Investment	Changes in Official Hold- ing of Gold and Foreign Exchange	Other Capital Movements (Mainly Short- Term)	Net Capital Move- ment
1951	227	53	289	- 56	4	517
1952	208	-83	269	- 37	-521	-164
1953	160	- 2	363	38	-116	443
1954	118	49	311	-124	78	432
1955	- 75	24	343	44	362	698
1956	461	266	479	- 33	193	1366
1957	629	134	446	105	141	1455
1958	492	118	372	-109	258	1131
1959	419	198	470	70	347	1504
1960	177	49	560	39	392	1217

a. Canadian Imperial Bank of Commerce Commercial Letter, Disciplines Descending, (Toronto, July 1962)

b. The negative signs indicate movements out of Canada.

Since 1950, when Canada became a net importer of capital for the first time in the post-war period, there has been a capital inflow in every year, with the exception of 1952. The magnitude of the inflow of funds has, however, varied considerably from year to year as can be seen from table 17. The largest annual increase took place in 1956, when net imports of capital nearly doubled over the previous year, and reached a breathtaking \$1,366,000,000, while in the following year capital flows rose to nearly \$1.5 billion. In the years 1950-54 the capital

inflow was moderate in size, averaging just over \$300 million, and the Canadian economy adjusted to it with no apparent difficulty. During these years the Canadian dollar appreciated gradually from the discount of 9 per cent on the American dollar that existed when the rate was set free in September, 1950, to a premium of more than 2 per cent in 1954, and this helped induce the required deficit in the current account balance. A resort to foreign borrowing was encouraged by the growth in business capital formation (including inventories) from less than 19 per cent of gross national product before 1950 to an average of 22 per cent for the years 1950 to 1953 and by a gradual decline in the size of government surpluses. It seems clear that in this period the capital inflow permitted a higher level of capital spending and a faster rate of growth than would have occurred in its absence.

As the Canadian economy recovered from the mild recession of 1953-54 capital spending increased until in 1956-57, it attained over 24 per cent of the gross national product, and this capital boom was accompanied by a substantial increase in the size of Canada's current account deficit, with the following results. "As capital spending increased in the face of the Bank of Canada's restrictive monetary policy, prospective spenders were forced to resort increasingly to foreign sources for funds.

The conversion of these funds into Canadian dollars exerted upward pressure on the exchange market and, as a result, the value of our dollar, which had slipped back to about par with American currency in late 1955, climbed steadily throughout 1956 and 1957 until it reached a peak of almost 6 per cent in August, 1957."⁸ It is this same mechanism of adjustment which proves to be a nemesis of the following cycle.

Characteristics of the Expansion 1954-57

The 1954 recession proved to be both short and mild, and the economy moved out of it very easily, as is indicated by leading economic indicators. The expansion in retail trade hit all-time highs in the years 1955 and 1956, and reached a peak of \$1,225,400 by the second quarter 1957. Similarly department store sales showed considerable strength during this expansion. By the third quarter 1956 manufacturing inventories started to accumulate, and accumulated up until the third quarter of 1957. Non-farm gross national product started to increase in the second quarter of 1954 and increased steadily until the first quarter 1957, with a slight drop in the second quarter of that year. Total gross national product followed a similar pattern while industrial production turned up in the third quarter of 1954 and declined somewhat earlier by the first quarter of 1957. Total consumer credit outstanding followed this same general pattern, initiating expansion in the third quarter of 1954 and slowing down by early 1957.

It is interesting to note that both the wholesale and retail price indexes remained in a substantial eclipse throughout this entire period, barely reflecting at all the 1953-54 recession or the ensuing recovery which followed. Throughout this period inflationary pressures, which ran so rampant between 1946 and 1953, was held under control.

TABLE 18

SELECTED INDICATORS, 1948-49 and 1953-54 RECESSIONS -
CHANGE FROM QUARTERLY PEAKS TO TROUGHS ^a

	Absolute Change (Millions of Dollars) 4 Q 48 - 3Q 49	Percentage Change (%)	Absolute Change (Millions of Dollars) 2Q 53 - 2Q 54	Percentage Change (%)
Consumption	592	4.47	288	1.73
Non Durables	- 16	- .21	148	1.75
Durables	184	15.54	- 44	- 2.23
Services	548	1.56	- 96	- 1.53
Government Exp.	448	15.40	- 100	- 1.91
Business Gross Fixed Capital Formation	80	1.88	- 200	- 3.57
New Residential Construction	80	7.75	4	.31
New Non-Residential Construction	36	2.72	44	- 2.34
New Machinery & Equipment	- 36	- 1.90	- 168	- 6.87
Change in Inventories				
ies	188	293.75	- 912	- 154.05
Non-Farm	48	19.35	- 728	- 128.16
Farm	104	89.65	- 200	- 294.11
Exports	- 324	- 6.43	- 420	- 7.17
Imports	- 24	- .52	- 484	- 7.49
Gross National Expenditure	780	3.68	- 1084	- 3.93
Index of Indus- trial Production	9.2	9.33	- 3.2	- 2.46
Non-Farm G.N.P. (Market Prices)	984	6.80	332	1.42

a. D.B.S. National Accounts, Income and Expenditure by Quarters, 1947-1961,
and Various Issues of The Canadian Statistical Review.*

* Data is seasonally adjusted, in constant 1957 dollars.

As table 18 indicates, the first post-war recession was certainly very mild. Gross National expenditure, consumer expenditures, non-farm G.N.P. and industrial production all exhibited marked advances during this recession. In fact the only components of gross national expenditure to turn down were non-durables, exports and imports, with the value of exports declining the most markedly in percentage terms.

This picture certainly changed in the second post-war recession. All major aggregate demand components, except consumption, registered declines between peak and trough. Consumption was buoyed up mainly by a 1.75% increase in the non-durable component. While business gross fixed capital formation registered a 3.57% decline, new residential construction was the only major sub-component to indicate a positive growth. All inventories were drawn down by \$912,000,000 in the latter recession, compared to a total accumulation of \$188,000,000 in the first recession. In both recessions farm and non-farm inventory components moved in the same direction as total inventory movements with the non-farm reduction of \$728,000,000 in the latter recession being the most marked, compared to a \$48,000,000 accumulation in the 1948-49 downturn.

Both exports and imports declined in these recessions, although the magnitudes differed slightly. In the earlier recession exports registered a 6.43% decline compared to a mild

.52% decline in imports, while in the latter recession imports and exports almost reacted equally, with a 7.49% decline in imports compared to a 7.17% decline in exports.

The total summation of these components registered a strong difference in terms of aggregate demand, for in the first recession, aggregate demand increased 3.68%, while in the second post-war recession, aggregate demand illustrated a percentage decline in total, and in most of its major components. The index of industrial production and non-farm G.N.P. at market prices follow this general picture, registering strong advances in the first recession and mild declines in the second downturn.

TABLE 19

CHANGE IN MAJOR SOURCES OF PERSONAL INCOME AND PERSONAL DISPOSABLE INCOME, 1948-49 RECESSION AND 1953-54 RECESSION - CHANGE FROM QUARTERLY PEAKS TO TROUGHS.^a

	Absolute Change (Millions of Dollars) 4Q48-3Q49	Percentage Change	Absolute Change (Millions of Dollars) 2Q53-2Q54	Percentage Change
Wages and Salaries	626	8.44	224	1.85
Net Income of Farm Operators	- 238	-16.10	- 700	- 41.6
Net Income of Non-Farm Unincorporated Business	123	9.69	- 92	- 5.37
Interest & Dividends and Net Rents	42	4.20	172	11.13
Government Transfer Payments	98	11.36	160	11.20
Personal Income	671	5.63	- 188	- 1.02
Personal Disposable Income	520	4.54	- 188	- 1.10

a. D.B.S., National Accounts, Income & Expenditure By Quarters, 1947-61.*

* Data is seasonally adjusted in constant 1957 dollars.

These differences are also reflected in the components of personal income and personal disposable income. In the earlier recession,

the only component of personal income to decline was net income of farm operators, which declined \$238,000,000 or 16.10% from peak to trough. Personal disposable income rose 4.54% and was reflected in the upsurge of consumption expenditure, which illustrated a 4.47% rise in this period. Government transfer payments showed the largest peak to trough increase of 11.36%, with business net income, and wages and salaries following closely.

In the latter recession, personal disposable income, personal income, net income of non-farm unincorporated businesses, and net income of farm operators all exhibited declines. The only three components which advanced were wages and salaries, interest and dividends, and government transfer payments. Government transfer payments were a considerable source of strength to personal income in both these recessions. Their impact in terms of percentage increases were almost the same, 11.20% in the later recession compared to a 11.36% in the earlier recession.

Personal Income Components, 1949-53 and 1953-57.

TABLE 20

CHANGE IN THE MAJOR SOURCES OF PERSONAL INCOME AND PERSONAL
DISPOSABLE INCOME, 1949-53 and 1954-57 EXPANSIONS -
CHANGE FROM QUARTERLY TROUGHS TO PEAKS.^a

	Absolute Change (Millions of Dollars) 3Q49-2Q53	Percentage Change	Absolute Change (Millions of Dollars) 2Q54-2Q57	Percentage Change
Wages & Salaries	4068	50.59	3640	29.51
Net Income of Farm Operator	448	36.12	112	11.33
Net Income of Non-Farm Unincor- porated Business	320	22.98	380	23.45
Interest & Divid- ends & Net Rents	504	48.46	436	25.40
Government Trans- fer Payments	468	48.75	280	17.63
Personal Income	5832	46.38	4692	25.75
Personal Dispos- able Income	5008	41.88	4224	25.17

a. National Accounts, Income and Expenditure, By Quarters, 1947-1961*

* Data is seasonally adjusted in constant 1957 dollars.

As one would expect, all the major components of personal income and personal disposable income indicated positive advances during the 1949-53 and the 1954-57 expansions, with a rather more

substantial increase in the earlier expansionary phase. The only component in the later expansion to increase more than its counterpart in the earlier expansion was net income of unincorporated business. Transfer payments, interest and dividends, and wages and salaries were all down significantly from the past gains. This situation was reflected by smaller gains among personal income and personal disposable income components in the 1954-57 expansion.

CHAPTER 6

APRIL 1957 to APRIL 1960 - THE FEAR OF CREEPING INFLATION

Background to the 1957 - 1960 Cycle

During the period of inflationary pressure extending from about mid-1955 to mid-1957, the Bank of Canada pursued a tight monetary policy. Gross National Expenditure was rising at a rapid rate and the money supply, although rising too, was restricted to a much slower rate of increase.¹ Capital expansion was in full swing, and the demand for money outran the supply, with the result that interest rates rose sharply between 1954 and 1957.² This upward movement in interest rates continued throughout the first eight months of 1957, although the economy began to show definite signs of levelling off. To complicate the situation further the consumer price index, which had remained steady between 1952 and 1955 before turning upward during the expansion of 1956, continued on its upward way in early 1958. In the first four months of that year, increases of over 1½% occurred on both the food and the non-food items included in the index. This coincidence of high unemployment and rising prices presented the monetary authorities with a difficult decision.⁹ "To make matters worse, large issues of Victory Loans were approaching maturity. The Fifth Victory Loan of \$841 million would fall due on January 1, 1958: The Sixth Victory Loan of \$1,165 million on June 1, 1960; and the

Seventh Victory Loan of \$6,316 million on February 1, 1962. In addition, the Eighty and Ninth Victory Loans totalling \$2,988 million would mature between 1963 and 1966."³

In the face of these conflicting problems, Canada resorted to a relatively loose fiscal policy at the federal level, evidenced by substantial deficits, combined with a relatively tight monetary policy. Observers were very critical of government and Bank of Canada policy at this time. It could be argued that the conversion operation was anti-inflationary, for it raised interest rates and lengthened the term of the national debt. However, this policy was scarcely consistent with the fiscal deficit planned for that year.⁴

Thus the Conversion loan seemed to mark a turning point in the Bank of Canada's operations, which were maintained throughout the remainder of the weak fourth post-war expansion. These operations may be summarized in four points: First, monetary policy ignored the fact that the economy was moving sluggishly between 1957 and 1960 and was substantially tighter in Canada than in the United States.⁵ Secondly, the Bank of Canada's policy resulted in Canadian interest rates being considerably higher than those in the

United States. This situation naturally encouraged Canadian borrowing in the American money market, which in turn, helped to maintain the premium on the Canadian dollar. (Table 21) The Governor of the Bank of Canada repeatedly advocated a reduction in both capital inflow and imports, but actually helped to create the very condition which led to increases in both.⁶

TABLE 21

FOREIGN EXCHANGE RATES 1950 - 1960
(PRICE OF ONE DOLLAR CANADIAN IN UNITED STATES CURRENCY)*

	High	Low	Average
1950	.9685	.9050	.9181
1951	.9882	.9319	.9498
1952	1.0430	.9888	1.0215
1953	1.0336	1.0222	1.0169
1954	1.0380	1.0127	1.0275
1955	1.0366	.9994	1.0139
1956	1.0454	1.0003	1.0162
1957	1.0613	1.0140	1.0430
1958	1.0444	1.0085	1.0303
1959	1.0575	1.0184	1.0427
1960	1.0533	1.0019	1.0312

* Walter Gordon, Troubled Canada - The Need For New Domestic Policies, (McIelland & Stewart, 1961) p. 64.

TABLE 22

**MONEY SUPPLY PER CAPITA AND AS A PERCENT OF GROSS NATIONAL PRODUCT,
CANADA AND THE UNITED STATES, 1949 AND 1960**

	Per Capita		Percent of G.N.P.	
	Canada	United States	Canada	United States
	<u>Currency and Demand Deposits</u>			
1949	\$290	\$730	24	42
1960	\$380	\$770	19	28
	<u>Currency and Deposits (Demand and Notice)</u>			
1949	\$580	\$1120	48	65
1960	\$730	\$1350	36	48

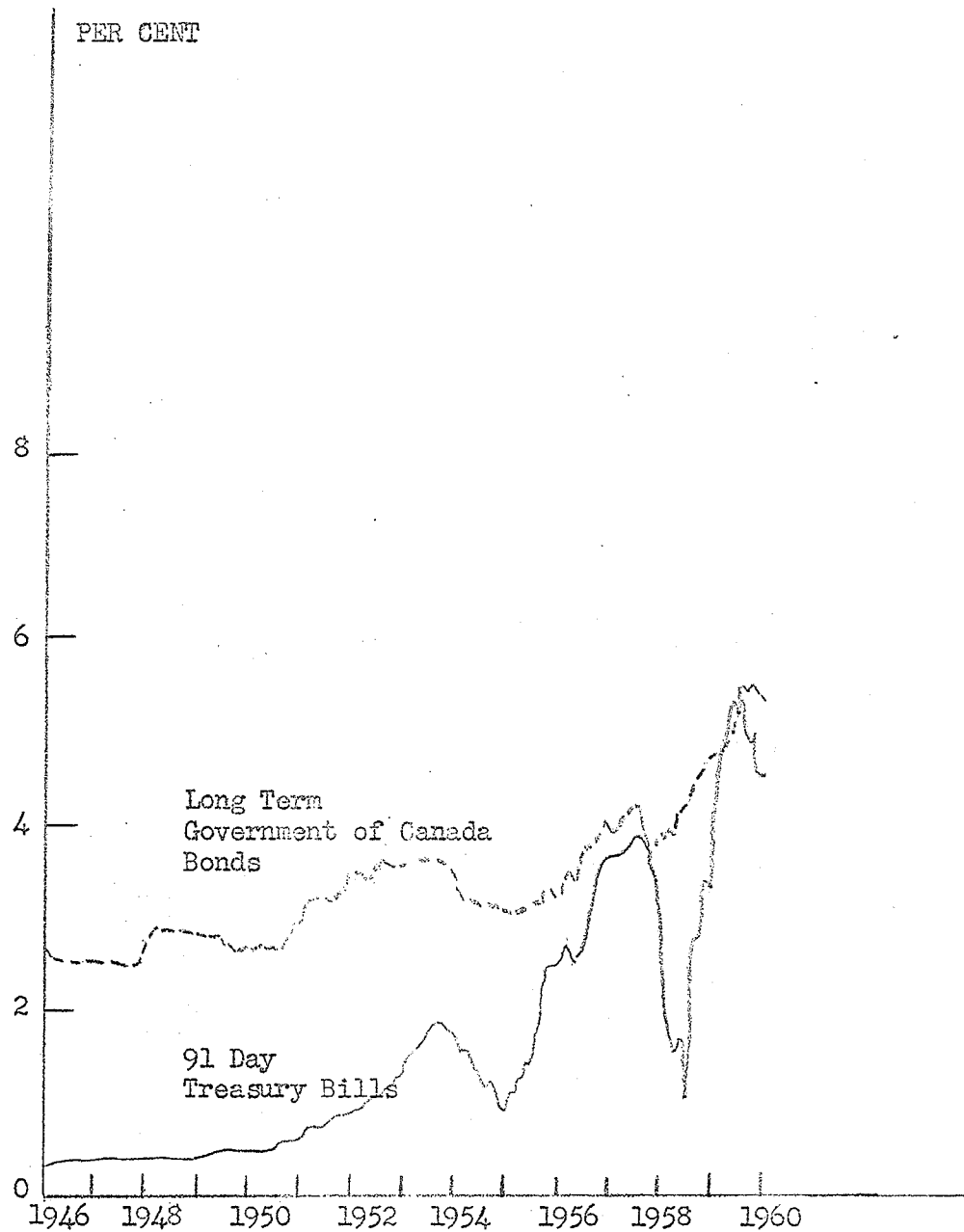
* C. L. Barber, "Canada's Unemployment Problem," C.J.E.P.S., Vol. 23, No. 3. (Aug., 1957) p. 93.

Thirdly, and possibly the most important point, the Conversion loan proved to be the beginning of a series of acts by the monetary authorities that produced extreme instability in the financial market. After the Conversion operation was completed, the Bank of Canada withdrew support from the Bond market, and the market values of the converted bonds fell.⁷

Fourthly, interest rates moved in a direction which was not at all in line to the prevailing economic conditions and levels of unemployment.

At the same time, fiscal policy served to confuse matters further. During the early post-war years greater reliance was placed on fiscal policy than monetary policy to regulate the

CHART 32
INTEREST RATES



*Source: T. N. Brewis et al, Canadian Economic Policy
(Toronto: Macmillan Company, 1961) page 201

economy. This policy was reflected in a tight fiscal policy controlling the levels of prices while the loose monetary policy added impetus to growth. After the Conversion loan the tables were reversed. Monetary policy was left to stem the tide of rising prices (creeping inflation was viewed as a real threat), while the easier fiscal policy was reflected in substantial federal deficit financing between 1958 and 1960. The changing character of federal government spending may be seen in table 23.

TABLE 23

FEDERAL AND TOTAL GOVERNMENTS SURPLUS OR DEFICIT, 1946-60
(MILLIONS OF DOLLARS)*

	Federal Government	All Governments
1946	- 248	- 154
1947	684	753
1948	760	708
1949	480	373
1950	635	585
1951	1,021	985
1952	253	253
1953	142	175
1954	- 100	- 131
1955	176	106
1956	544	350
1957	249	100
1958	- 775	-1030
1959	- 362	- 536
1960	- 411	- 809

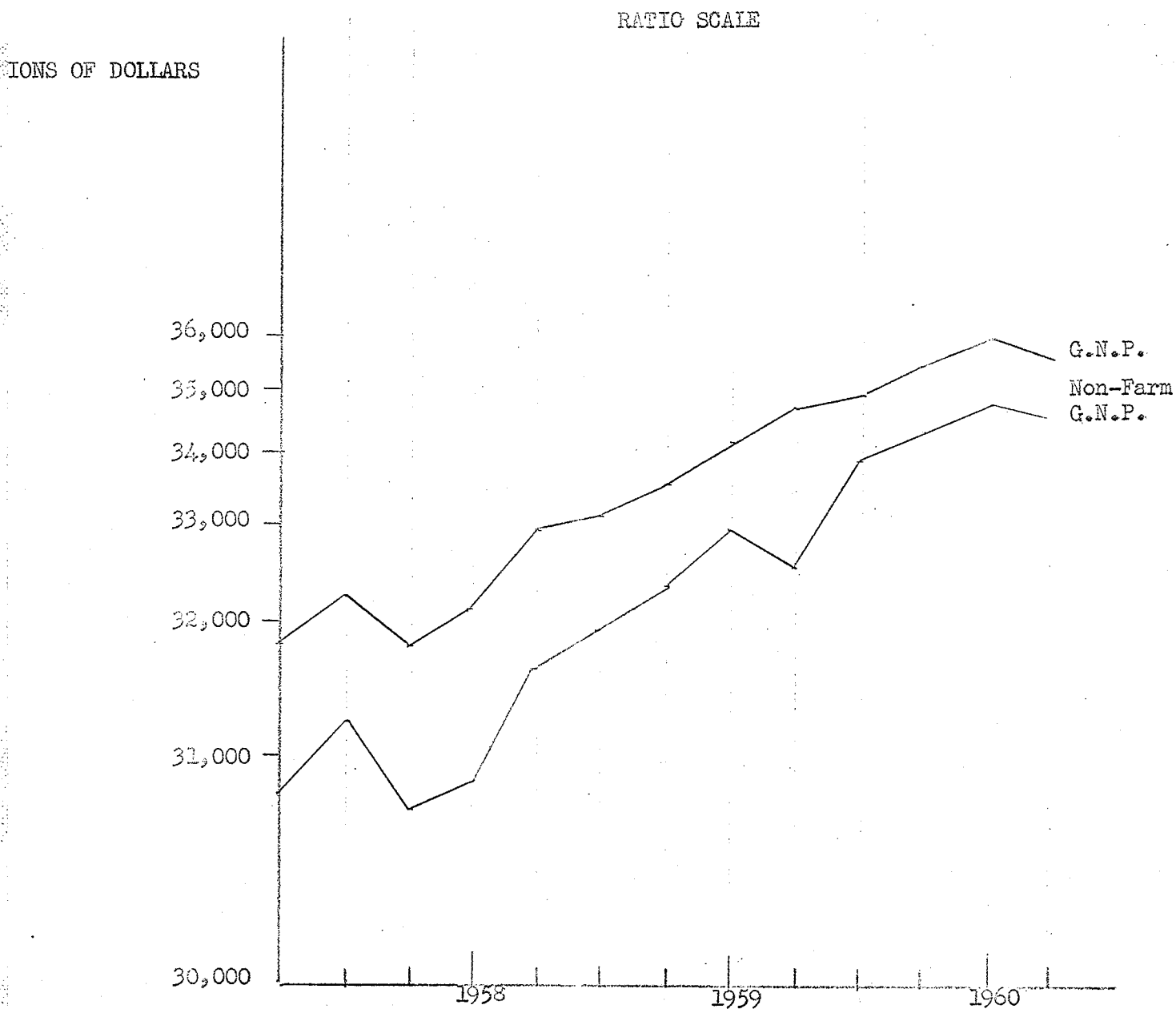
* D.B.S., National Accounts, Income & Expenditure, 1926-56, 1961.

The 1957-58 Contraction

The 1957-58 contraction in Canadian economic activity was a short one, only 12 months, but was certainly not as mild as the 1948-49 contractions and was more significant for future trends than the 1953-54 contraction. This contraction differed noticeably from the previous two cases mainly because of the weak recovery which followed. In the recovery of 1949 to 1953, the average annual rate of growth of gross national product in real terms was 5.7 percent, while in the 1955-57 recovery it was 5.8 per cent, and in the recovery 1958 to 1960 it was 2.1 per cent.

This decline in aggregate production reflected principally a reduction in business spending on capital formation and on inventories.

CHART 33
GROSS NATIONAL PRODUCT AND NON-FARM G.N.P. AT MARKET PRICES,
SEASONALLY ADJUSTED AT ANNUAL RATES*
(MILLIONS) 1957 - 1960



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

TABLE 24

GROSS BUSINESS CAPITAL FORMATION, G.N.P., AND
CHANGE IN NON-FARM INVENTORIES, 1957 - 1960, SEASONALLY
ADJUSTED AT ANNUAL RATES, 1957 CONSTANT DOLLARS (MILLIONS)

		Business Gross Fixed Capital Formation	Change in Non- Farm Inventories	Gross National Product
1957	1	\$ 7608	\$ 774	\$ 32044
	2	7408	292	31828
	3	7268	384	32124
	4	7056	-200	31640
1958	1	6884	-652	31584
	2	6884	-204	32028
	3	6776	- 12	32312
	4	6764	44	32516
1959	1	6352	468	32764
	2	6588	216	33220
	3	6668	408	33396
	4	6592	252	33464
1960	1	6468	640	33980
	2	5932	332	33476

* D.B.S., National Accounts, Income & Expenditure. By Quarters,
1947-1961.

As may be seen in table 24, business gross fixed capital formation in real terms started to decline from the first quarter of 1957, while business spending on inventories changed from a state of accumulation in the first three quarters of 1957 to a state of inventory reduction from the fourth quarter 1957 to the third quarter 1958.

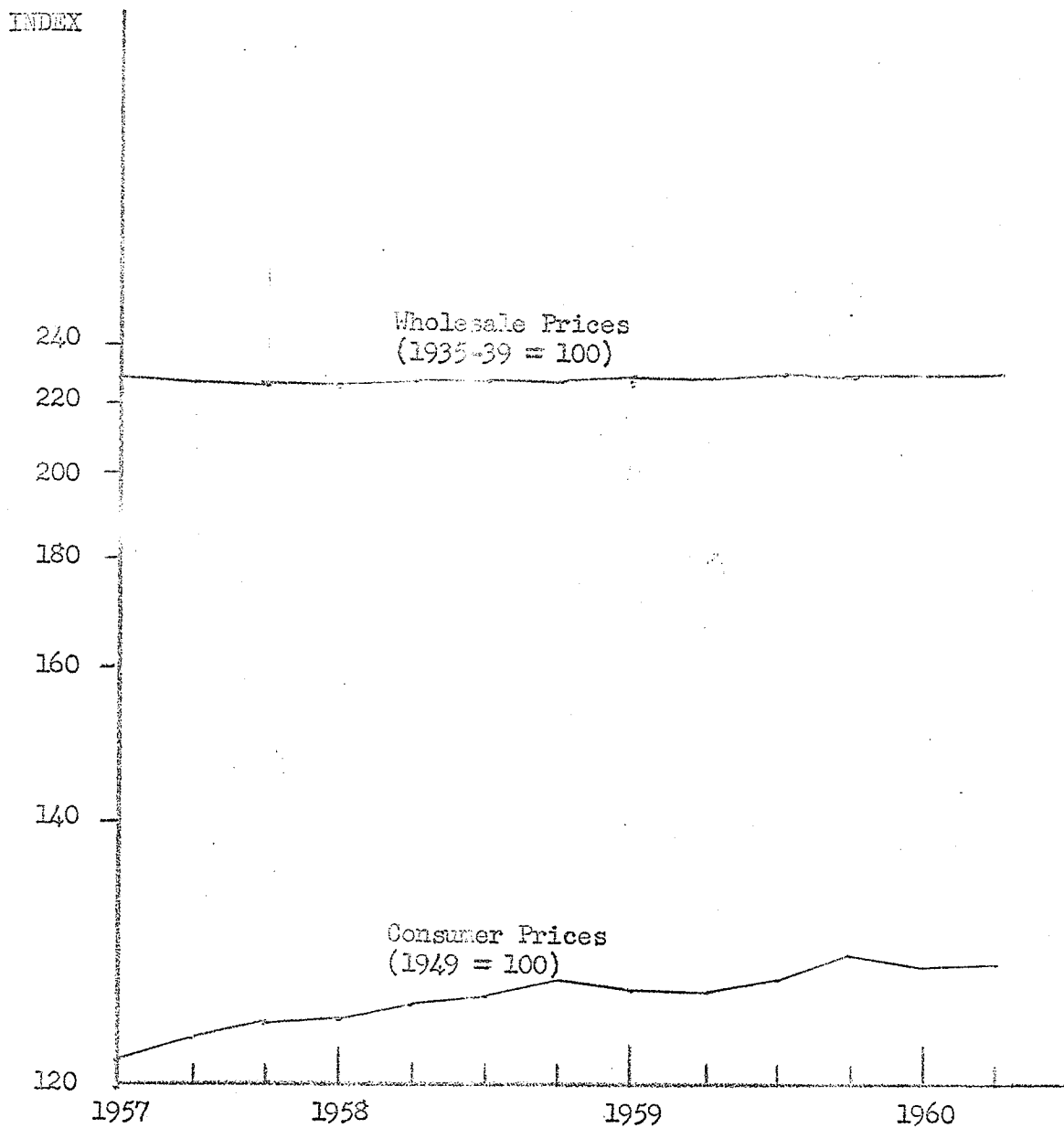
24

Table/also illustrates the slow recovery of gross national expenditure between 1958 and 1960.

1957 had scarcely arrived before demand for non-residential construction, machinery and equipment and consumer durables was sliding off. At that time government purchases rose slightly and then fell back. As the year wore on, the contraction became more serious. Iron and steel production fell substantially throughout 1958, while electricity and gas and mining productions levelled off sharply (chart 35). Consumer expenditures generally were buoyant, and department store sales (chart 38) and retail trade (chart 37) reflected this position. Corporation profits before taxes reflected the influence of the recession with a marked dip in profits in 1957 (chart 40). Unemployment became a real problem in this recession, with seasonally adjusted figures jumping from just under four per cent in the second quarter of 1957 to nearly seven per cent in the second quarter of the following year (chart 15).

CHART 34
WHOLESALE AND CONSUMER PRICE INDEXES 1957 - 1960

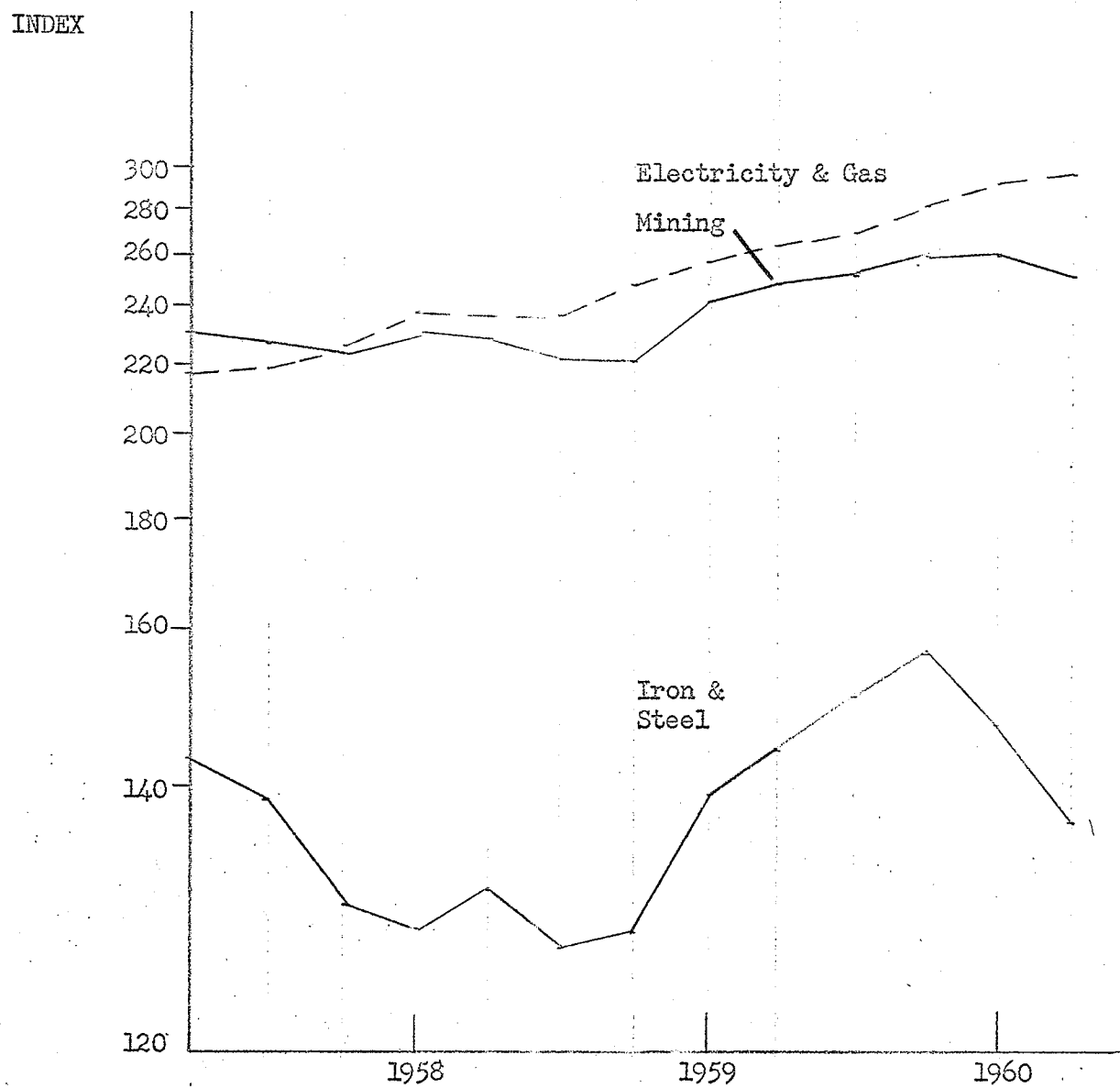
RATIO SCALE*



*Source: D.B.S., Canadian Statistical Review, Various Issues

CHART 35

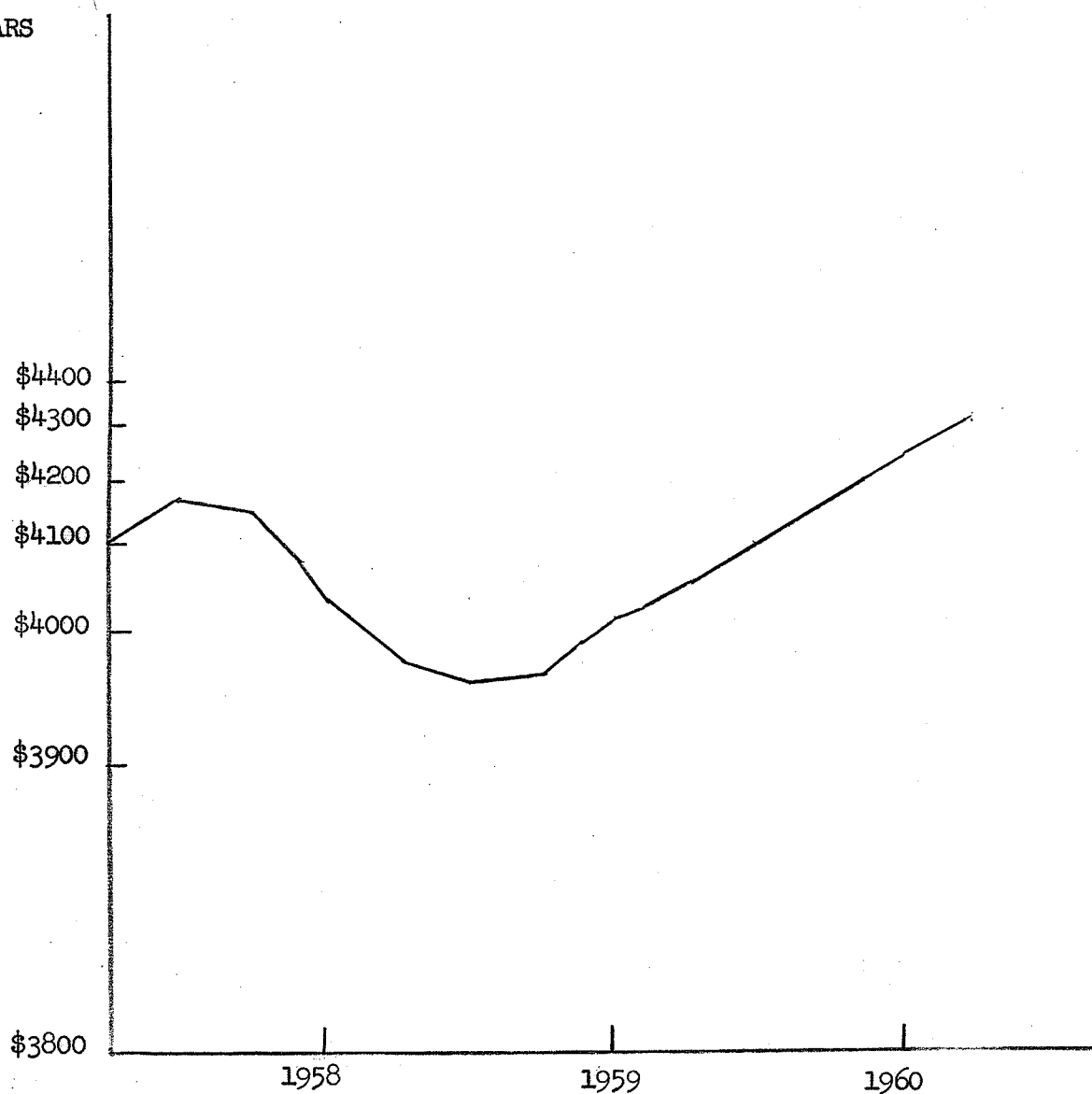
TOTAL PRODUCTION IRON AND STEEL, MINING, AND ELECTRICITY AND GAS,
1957 - 1960 VOLUME INDEX (1949 = 100), SEASONALLY ADJUSTED*
RATIO SCALE



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

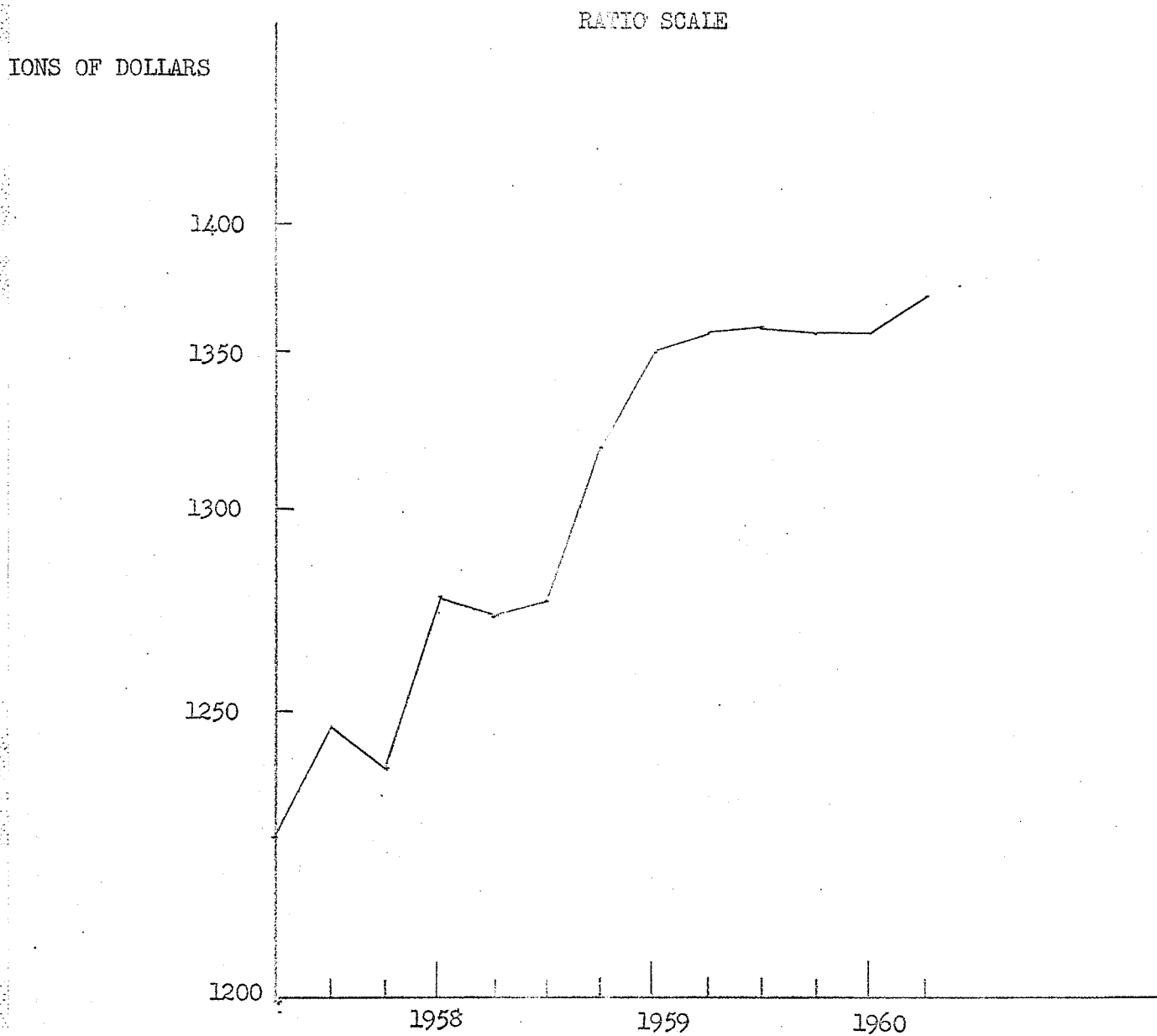
CHART 36
MANUFACTURING INVENTORIES OWNED, 1957 - 1960
SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)*

LIONS OF DOLLARS



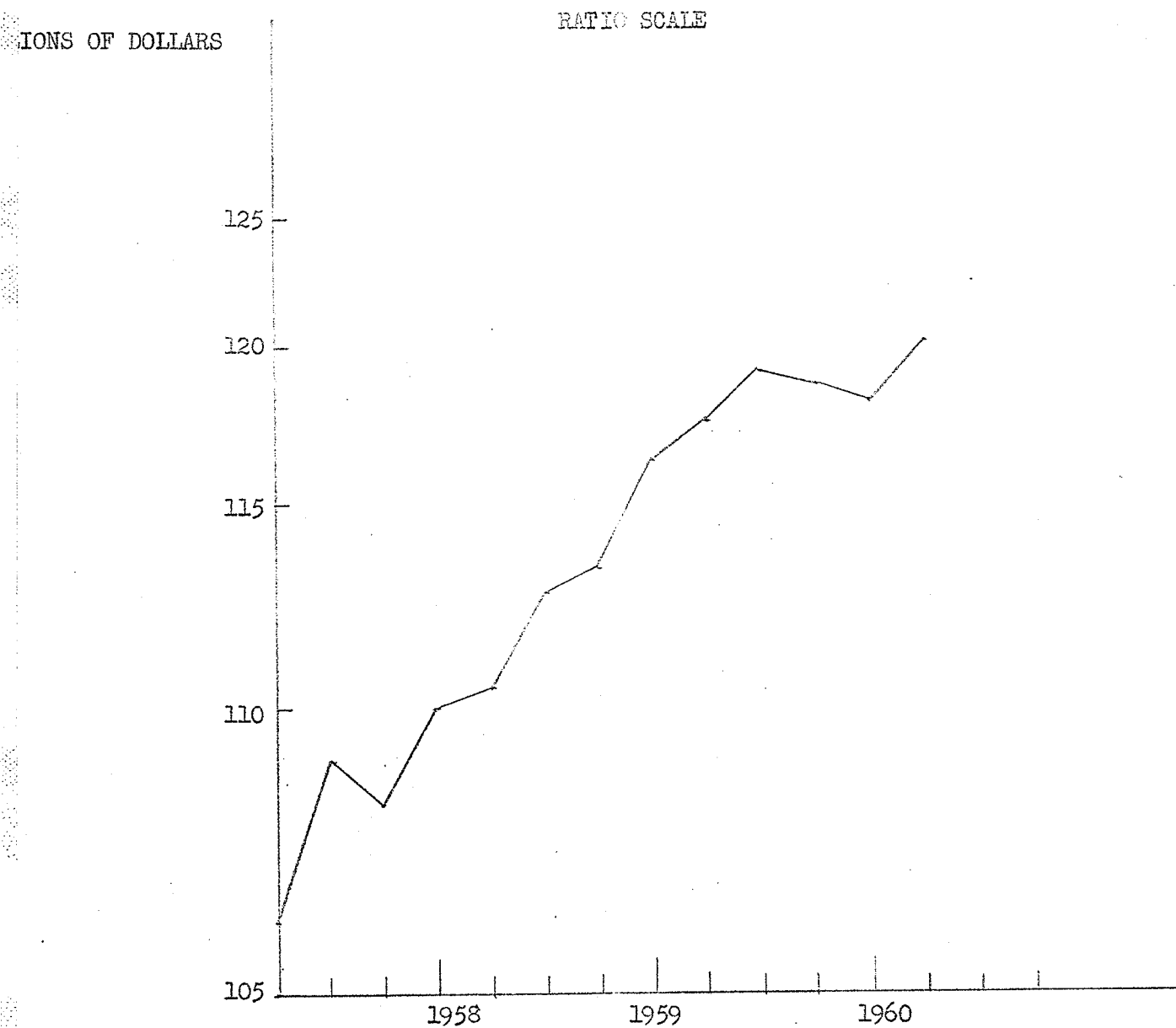
*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 37
RETAIL TRADE (MILLION DOLLARS) 1957 - 1960
SEASONALLY ADJUSTED*



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 38
DEPARTMENT STORE SALES
MILLION DOLLARS, SEASONALLY ADJUSTED* 1957 - 1960

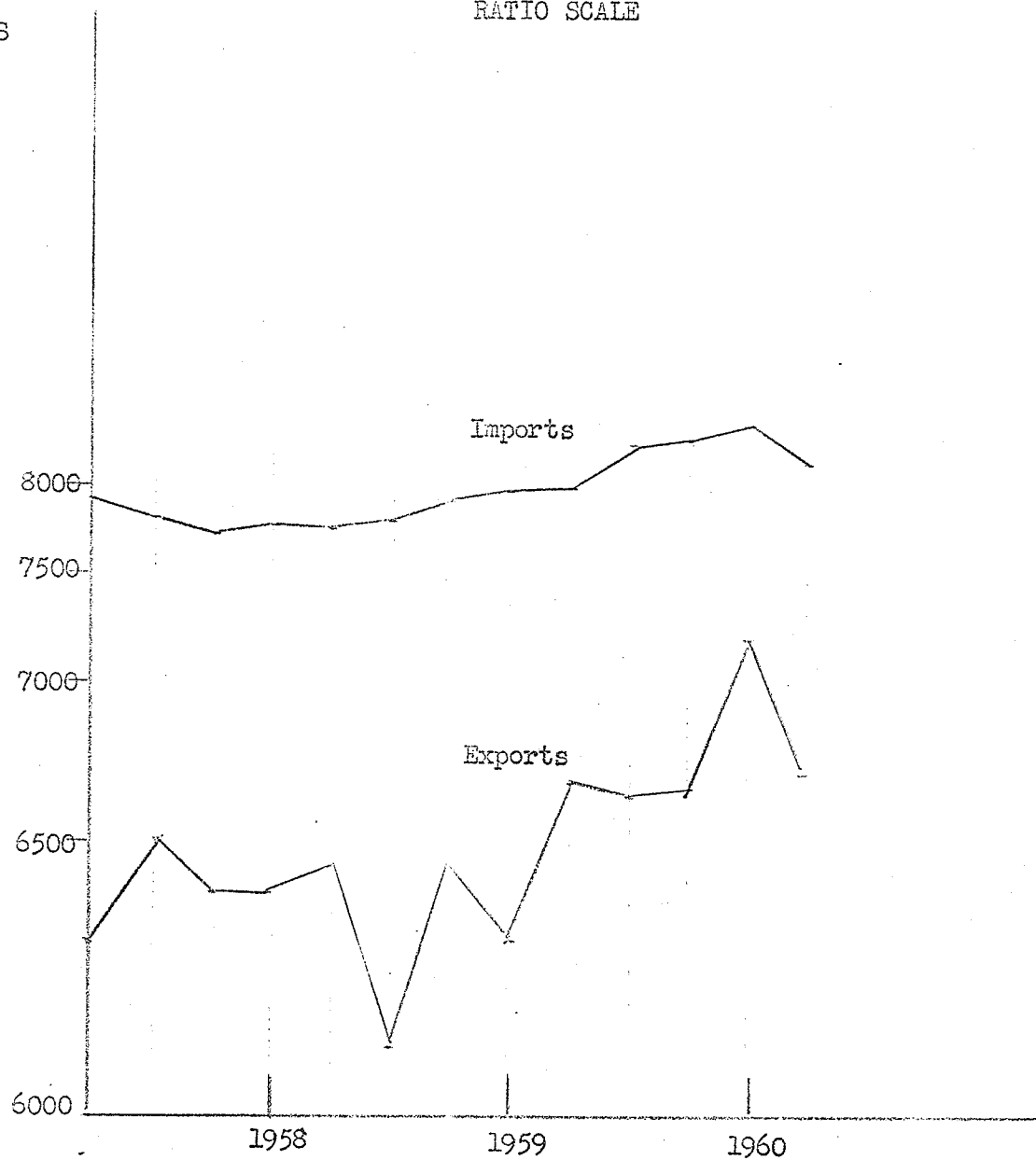


*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

CHART 39
EXPORTS AND IMPORTS AT MARKET PRICES*
SEASONALLY ADJUSTED AT ANNUAL RATES (MILLIONS) 1957 - 1960

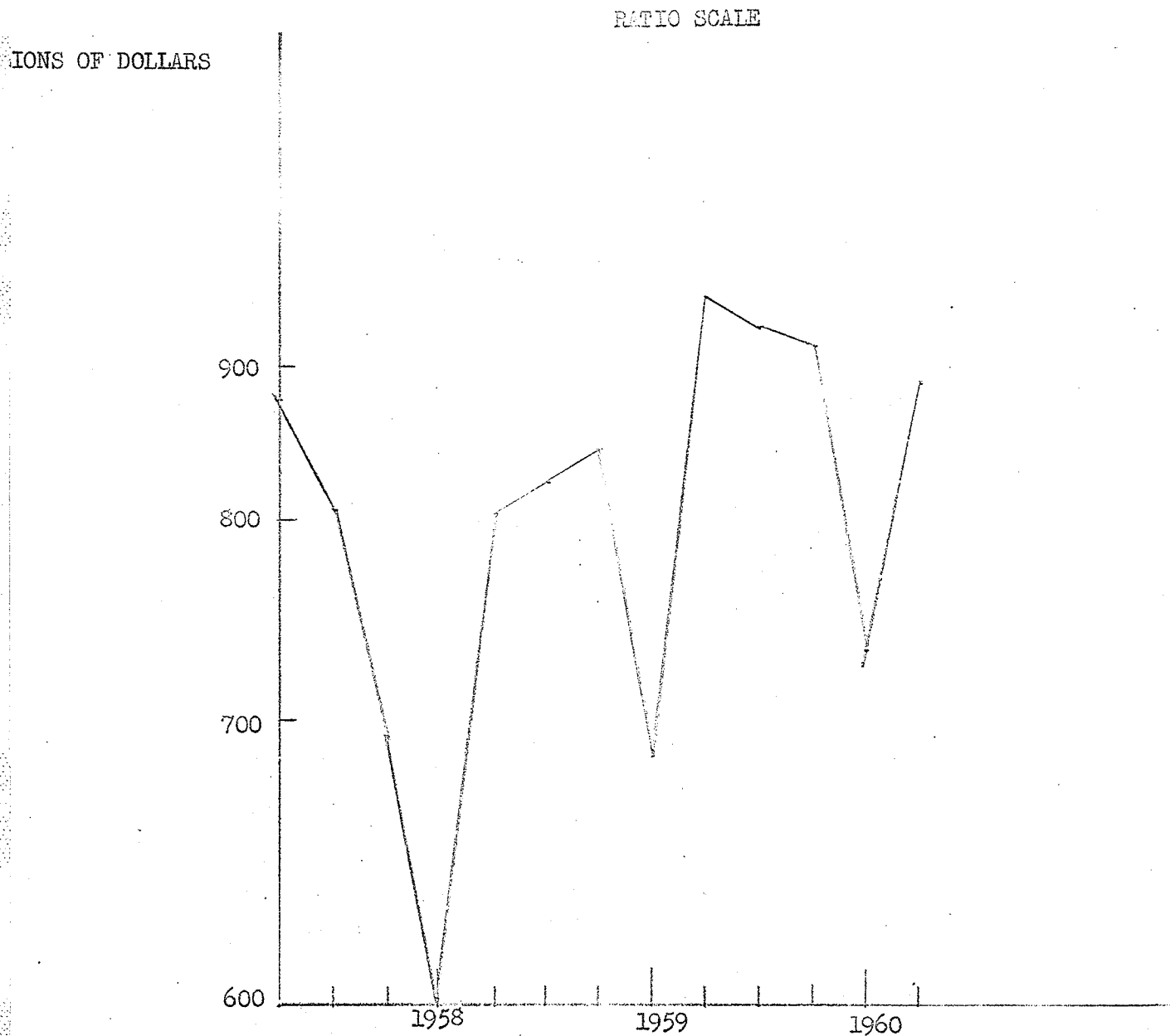
IONS OF DOLLARS

RATIO SCALE



*Source: D.B.S., National Accounts, Income and Expenditure,
by Quarters, 1954 - 1956; 1957 - 1961

CHART 40
CORPORATION PROFITS BEFORE TAXES (MILLION DOLLARS) 1957 - 1960



*Source: D.B.S., Annual Supplement to the Canadian Statistical Review, 1961

TABLE 25
SELECTED INDICATORS, 1957-58 RECESSION
CHANGE FROM QUARTERLY PEAK TO TROUGH^a

	Absolute Change (Millions of Dollars) 2Q57-2Q58	Percentage Change
Consumption	+ 444	+ 2.21
Non-Durables	+ 156	+ 1.50
Durables	0	0 0.00
Services	+ 288	+ 3.98
Government Expenditures	+ 400	+ 6.93
Business Gross Fixed Capital Formation	+ 536	+ 7.23
New Residential Construction	+ 364	+ 26.60
Non-Residential Construction	- 292	- 9.33
New Machinery & Equipment	- 608	- 20.87
Change in Inventories	- 592	-189.74
Non-Farm	- 460	-157.53
Farm	- 132	-660.00
Exports	+ 220	+ 3.51
Imports	- 728	- 9.16
Gross National Expenditure	+ 396	+ 1.24
Index of Industrial Production**	- 2.4	- 1.53
Non-Farm G.N.P. (Market Prices)	+ 840	+ 2.72

a. D.B.S., National Accounts, Income and Expenditure, by Quarters, 1947-61, and Various Issues of The Canadian Statistical Review.*

* G.N.E. data seasonally adjusted in 1957 constant dollars.

** This indicator reflects changes in index numbers.

These facts also stand out with clarity when percentage changes between quarterly peaks and troughs are considered. In table 25 the only gross national expenditure components to exhibit percentage declines were non-residential construction, new machinery and equipment, and both inventory components. The index of industrial production declined 1.53% while non-farm gross national product at market price rose 2.72%.

The role of automatic income stabilizers becomes evident in table 26. In this recession neither personal disposable income nor any of its major components exhibited a percentage decline between peak and trough periods of economic activity. In fact this was the only post-war recession of the three examined which illustrated positive movements in all major components. The largest percentage increase was made by government transfer payments, with the net income of farm operators exhibiting the next largest and first post-war recessionary advance between peak and trough. Personal disposable income, reflecting positive growth in all of its major components, increased a marked 16.87%.

TABLE 26

**CHANGE IN MAJOR SOURCES OF PERSONAL INCOME
AND PERSONAL DISPOSABLE INCOME, 1957-58 RECESSION
CHANGE BETWEEN QUARTERLY PEAKS AND TROUGHS^a**

	Absolute Change (Millions of Dollars) 2Q57-2Q58	Percentage Change
Wages & Salaries	+ 282	+ 1.76
Net Income of Farm Operators	+ 208	+ 20.80
Net Income of Non-Farm Unincorporated Business	+ 64	+ 3.20
Interest, Dividends & Net Rents	+ 80	+ 3.71
Government Transfer Payments	+ 652	+ 34.90
Personal Income	+ 1560	+ 6.80
Personal Disposable Income	+ 3544	+ 16.87

a. D.B.S., National Accounts, Income and Expenditure, By Quarters, 1947-1961.

* Data is based on seasonally adjusted 1957 constant dollars.

To summarize briefly, exports were dropping off, inventory investment decreased, business spending on durables and non-residential construction fell sharply, while federal expenditures didn't fill in the gap. By late 1957 the contraction had diffused throughout the economy.

The Incomplete Recovery, 1958-1960.

An examination of changes between quarterly trough and peak of the last two expansionary phases emphasizes the retardation of the 1958-60 recovery period.

TABLE 27.

SELECTED ECONOMIC INDICATORS, EXPANSION 1954-57 AND 1958-60 -
CHANGE FROM QUARTERLY TROUGH TO PEAK

	Absolute Change (Millions of Dollars) 2Q54-2Q57	Percentage Change	Absolute Change (Millions of Dollars) 2Q58-2Q60	Percentage Change
Consumption	+ 3092	+ 18.28	+ 1752	+ 8.56
Non-Durables	+ 1752	+ 20.36	+ 880	+ 8.37
Durables	+ 488	+ 25.36	+ 132	+ 5.47
Services	+ 1064	+ 17.23	+ 740	+ 9.83
Government Expenditure	+ 648	+ 12.64	- 44	- .71
Business Gross Fixed Capital Formation	+ 2020	+ 37.49	- 776	- 11.29
New Residential Construction	+ 1109	+ 87.34	- 472	- 27.25
New Non-Residential Construc- tion	+ 1292	+ 70.37	- 476	- 16.78
New Machinery & Equipment	+ 636	+ 27.99	+ 172	+ 7.46
Change in Inventories	+ 632	+ 197.50	+ 744	+ 265.71
Non-Farm	+ 452	+ 282.50	+ 540	+ 321.42
Farm	+ 152	+ 115.15	+ 204	+ 182.14
Exports	+ 824	+ 15.15	+ 112	+ 1.72
Imports	+ 1968	+ 32.93	+ 728	+ 10.08
Gross National Expenditure	+ 5348	+ 20.19	+ 1412	+ 4.38
Index of Industrial Pro- duction**	+ 30.4	+ 24.17	+ 124	+ 8.02
Non-Farm G.N.P. (Market Prices)	+ 7180	+ 30.40	+ 2852	+ 9.01

a. D.B.S., National Accounts, Income & Expenditure, By Quarters, 1947-61, and various issues of The Canadian Statistical Review.*

* G.N.E. data seasonally adjusted in constant 1957 dollars.

** This indicator reflects changes in index numbers.

In the earlier expansion all major demand components, plus non-farm gross national product and industrial production advanced positively, while in the 1958-60 expansion government expenditure and business gross fixed capital formation declined from trough to peak. These differences reflected in a marked 20.19% expansion of gross national expenditure in the first upswing compared to a mild 4.38% expansion of total demand in the latter upswing. These disparities are also reflected in the other major components. Aggregate consumption rose only 8.56% compared to a previous 18.28%, government spending declined 11.29% compared to an earlier rise of 37.49%, and imports increased almost 9% more than exports in the latest expansion. Increases made by the index of industrial production and non-farm gross national product reflected the mildness of the expansion phase, with these indicators expanding approximately one-third of their previous increases of 1954 to 1957.

Automatic stabilizers are important in mitigating a contraction, but they cannot reverse one. This was certainly the role of consumer expenditures during the 1957-58 recession and in the following period of weak recovery. With the exception of net income of farm operators, all components of personal disposable income grew throughout the period of weak recovery of 1958-1960.

TABLE 28

CHANGE IN MAJOR SOURCES OF PERSONAL INCOME AND PERSONAL
DISPOSABLE INCOME, 1958-60 - CHANGE BETWEEN QUARTERLY
PEAKS AND TROUGH.^a

	Absolute Change (Millions of Dollars) 2Q58-2Q60	Percentage Change 2Q58-2Q60
Wages & Salaries	+ 1520	+ 9.19
Net Income of Farm Operators	- 100	- 8.27
Net Income of Non-Farm Unincorporated Business	+ 132	+ 6.39
Interest, Dividends & Net Rent	+ 460	+20.60
Government Transfer Payments	+ 488	+19.36
Personal Income	+ 2428	+ 9.92
Personal Disposable Income	+ 708	+ 2.88

a. D.B.S., National Accounts, Income and Expenditures, By Quarters,
1947-1961.*

* Data is based on seasonally adjusted, 1957 constant dollars.

An examination of table 28 illustrates that interest, dividends and net rental income and government transfer payments grew considerably. The strength of these various income stabilizers proved to be the force which supported consumer expenditure throughout this third cycle. However one should not imply too much to the "automatic" role of these stabilizers, for

certainly they partly reflected increases in the rate of payments under welfare programs which could not be deemed automatic.

The weakness in the recovery period of business spending on capital formation has already been mentioned in chapter three. Needless to say, business spending on capital formation never regained its former prominence in the recovery period, partly a function of excess capacity existing in the durable goods industries and a shift in foreign capital from Canada to the Common Market countries. Both exports and imports declined as a percentage of G.N.P. throughout this period, with the export-import gap considerably widening (chart 39). Non-farm inventories, however, started accumulating in the fourth quarter of 1958 and did throughout the remainder of the expansion phase of the cycles. Finally, the weak recovery in the Canadian economy coincided with a decline in the rate of economic growth of the United States.

CONCLUSION

CHAPTER 7

The purpose of this chapter is to attempt an answer to some of the questions posed in the introduction of this study, and within this framework analyse the three and one-half post-war cycles. I will deal specifically with the question concerning the possibility of a future deflation of the same proportion as the 1930's and our present defences against such occurrences, namely automatic stabilizers and government monetary and fiscal policy. I shall also attempt to ascertain whether there was an appropriate blend of monetary, fiscal and debt management policy in the period under study.

One method of assessing the stability of post-war economic forces is to inquire whether some of the most unstable elements of the economy have grown or declined relative to their position previous to the 1930's. By examining historical series it soon becomes evident that exports and imports now play a relatively smaller role in the Canadian economy than they did thirty years ago, while private investment has risen as a proportion of gross national expenditure. The trends are evident in table 29, but in broad perspective what do they mean?

TABLE 29

EXPORTS, IMPORTS AND GROSS FIXED CAPITAL FORMATION AS A
PERCENTAGE OF GROSS NATIONAL PRODUCT
SELECTED YEARS.*

	Exports	Imports	Gross Fixed Capital Formation
1928	26.5	31.7	16.6
1933	23.5	23.6	6.7
1939	25.7	23.6	10.5
1946	22.1	24.3	11.7
1949	24.6	23.6	18.6
1953	21.6	23.4	20.0
1957	20.0	24.5	23.0
1960	19.5	23.4	18.6

*D.B.S., National Accounts, Income and Expenditure, 1926-56, 1961

Has the decline in the relative importance of exports and imports been replaced in the economy by domestic investment, and what implications would such an occurrence have in terms of economic stability? It should be mentioned that a part of this evident decline must lie in the relative decrease of world demand for Canada's agricultural products. However this decline has been at least partly offset by the rapid growth in world demand for industrial materials of mineral and forest origin. Another important aspect of this decline is due to the improvement on the comparative cost position of import competing industries in Canada.¹

Looking at table 29, it would seem that the importance of one cyclically sensitive series is being replaced by that of another cyclically sensitive series. However implications are more deep seated than the first glance tells us. Between 1928 and 1960 exports as a percentage of gross national product fell from 26.5% to 19.5% and imports declined from 31.7% to 23.4%. Were the assumption made that Canada's business cycle is caused abroad, the relative shift in Canada's international trade might be expected to be followed by a decrease in Canadian cyclical amplitude. However, though this theory has been popular in the past, and is supported by evidence that the Canadian and American business cycles almost concur in turning points, it has been pointed out that the Canadian economy is well able to generate its own cyclical fluctuations. In the words of Irving Brecher and S. S. Reisman:

"Cycle transmission does not provide the complete casual explanation of Canada's Great Depression. In broad perspective, the basic destabilizing forces at work within Canada - such as the virtual saturation of investment opportunities in certain important industries, economy-wide rigidities in prices and costs, abuses in corporate financial practice, and over-speculation in the stock market - bore a striking resemblance to the causal factors operative in the United States; similarly for both commercial bank and governmental policies in the two countries."²

Also Paul Wonnacott has argued that it should not be assumed that the decline in the relative share of foreign trade in Canada's economy tends to mitigate cyclical fluctuations, for the rate of changes are just as marked now as in the past.³ Therefore it should not follow that the amplitude of the Canadian business cycle should change because of changes in the relative size of various segments of demand since the late 1920's.

Wonnacott supports this line of thought by emphasizing that empirically it has been shown that Canadian imports tend to decrease more during downswings and increase more during upswings than Canadian exports, and in this respect exports and imports tend to stabilize fluctuations in aggregate demand.⁴

Professor Rosenbluth, in two separate papers, found a statistically significant decline in the power of the United States business cycle to create disturbances in the Canadian economy. He concluded that "the amplitude of Canadian fluctuations exceeded that in the United States before 1914, was frequently about the same in the 1920's, was usually lower in the 1930's, and was often lower after 1945."⁵ Caves and Holton explain this trend in the following way.⁶ In the absence of a major war, domestic investment and exports are the two determinants of income levels (according to the multiplier theory of modern macroeconomics). Investment

may be partly dependent on export levels, but it is also partly autonomous or determined by the long-run prospects for the domestic economy. This is reflected in Rosenbluth's findings that the Canadian economy has followed the United States economy more closely in business downturns than in periods of expansion. Hence, according to Rosenbluth's argument, a rise in the relative importance of private investment compared to exports may mean a lessening of vulnerability to changes abroad.

Another encouraging aspect concerning the rise in the relative importance of private investment compared to exports is that domestic investment is capable of being influenced by the public and monetary authorities, while exports depend very much on the whim of others in our overseas markets. However, when discussing the role of exports and imports in the Canadian cycle, we cannot ignore the effect of an export-import gap. An export-import gap means that there is an inflow of capital which may be directed towards financing the formation of cyclically sensitive real capital in Canada. Hence, if the decline in the relative position of exports and imports is also accompanied by a relative decline in internationally financed capital formation, there might be more cyclical stability introduced into the Canadian economy via less dependence on outside capital.

It is to the government sector that attention must be turned for the most convincing argument supporting the view that cyclical downswings of anything approaching the intensity of the 1930's are unlikely. In both United States and Canada there has been a major revolution in attitude regarding the appropriate scope of government activity in combatting recessions. Besides the changes in over-all attitudes, government activity has been increasing relative to G.N.P. over time and is placing a high floor on the general level of economic activity.

TABLE 30

ALL LEVELS OF GOVERNMENT EXPENDITURE ON GOODS AND SERVICES
AS A PER CENT OF G.N.P. - SELECTED YEARS*

Years	Percentages	Years	Percentages
1928	9.3	1949	13.0
1933	13.2	1953	17.7
1939	12.1	1957	18.0
1946	15.2	1960	18.6

* D.B.S., National Accounts, Income and Expenditure, 1926-56, 1961

As may be seen in table 30, there has been a secular rise in the proportion of all government's expenditure to gross national product, from 9.3 per cent in 1928, and 15.2 per cent in 1946, to a high of 18.6 per cent in 1960. However, while government spending may place a high floor on Canadian economic activity, evidence from the national account hasn't been entirely

encouraging with respect to government's counter cyclical spending, for when rates of change are considered in the post-war period, gross national product and government spending tended to move together in most instances.

TABLE 31

PERCENTAGE VARIATION IN CANADIAN GROSS NATIONAL PRODUCT
AND GOVERNMENT EXPENDITURES*

		I	II	III	IV
Year and Quarter		Change in Gross National Product %	Deviation from Average Change in Gross National Product %	Change in Government Expenditure %	Deviation From Average Change in Government Expenditures %
1948	4	+ .93	+ 2.06	+ 2.54	+ 1.02
1949	1	- .92	- 1.79	- 2.13	- 4.67
	2	+ 2.46	+ 1.59	+ .98	- .54
	3	+ 2.14	+ 1.27	+ 6.06	+ 4.54
	4	+ .53	- .34	- .35	- 1.87
1950	1	+ 2.53	+ 1.48	- 1.34	- 2.86
	2	+ .03	- .83	0	- 1.52
	3	+ 3.20	+ 2.33	+ 1.09	- .43
	4	+ 2.64	+ 1.77	+ 4.20	+ 2.68
1951	1	+ 3.06	+ 2.19	+ 8.75	+ 7.23
	2	+ 1.41	+ .54	+ 10.99	+ 9.47
	3	- 2.22	- 3.09	+ 10.19	+ 8.67
	4	- 2.07	- 2.94	+ .08	- 1.44
1952	1	+ 3.79	+ 2.92	+ 9.42	+ 7.90
	2	+ 1.27	+ .40	+ 6.64	+ 5.12
	3	+ 2.04	+ 1.17	- 3.95	- 5.47
	4	+ 1.85	+ .98	+ 7.68	+ 6.16
1953	1	+ .15	- .72	- 6.70	- 8.22
	2	+ 1.09	+ .32	+ .92	- 2.44
	3	+ .14	- .73	+ 1.37	- 2.89
	4	+ .19	- .68	+ .22	- 1.74
1954	1	- .22	- 1.09	- 7.30	- 8.82
	2	- .44	- 1.31	+ 4.14	+ 2.62
	3	+ 1.09	+ .32	+ .07	- 1.59
	4	+ .91	+ .14	+ 1.79	+ .27
1955	1	+ 3.60	+ 2.73	+ 5.44	+ 3.92
	2	+ 3.44	+ 2.57	- 5.52	- 7.04
	3	+ 1.92	+ 1.05	+ .69	- 2.21
	4	- .04	- .91	+ 1.14	- 2.66

Table 31 (cont'd)

1956	1	+1.33	+ .56	+4.13	+2.61
	2	+1.11	+ .24	- 1.15	- 2.67
	3	- 1.88	- 2.75	+6.43	+4.91
	4	+1.56	+ .69	0	- 1.52
1957	1	- .40	- 1.27	- 3.77	- 5.29
	2	- .42	- 1.29	+2.99	+1.47
	3	+ .93	+ .06	+ .06	- 1.58
	4	- 1.82	- 2.69	- .69	- 2.21
1958	1	+ .47	- .40	+2.71	+1.19
	2	+1.37	+ .50	+4.75	+3.23
	3	+ .84	- .03	+ .97	- .55
	4	+ .41	- .46	- 1.37	- 2.89
1959	1	+ .94	+ .04	+ .45	- 1.07
	2	+1.13	+ .26	+2.78	+1.26
	3	+ .08	- .79	- 4.97	- 6.49
	4	+ .62	- .25	+1.05	- .47
1960	1	+1.76	+ .89	+ .72	- .80
	2	- 1.46	- 2.32	- .32	- 1.84

* Calculated from D.B.S., National Accounts, Income and Expenditure, By Quarters, 1947-61.

When deviations of these movements from their average rates of quarterly growth are calculated, (i.e. columns 2 & 4, table 31), the signs of deviations correspond in twenty-nine of the forty-seven quarters analysed. In terms of straight directional change over the previous quarterly figure, (i.e. columns 1 & 3, table 31), the signs of deviations correspond in thirty-one out of the forty-seven quarters.

This analysis has been pursued further by employing a one and a two quarter lagged relationship of government expenditures on total demand. The results of these calculations are summarized in table 30. In that table we find somewhat mixed and confusing evidence. Employing the concept of deviations from average growth

rate we discover a slightly improving situation when government spending is lagged two quarters instead of one. However when we employ the quarterly directional change concept, we find a more improved situation using a one quarter lag than a two quarter lag.

TABLE 32

GROSS NATIONAL EXPENDITURE AND GOVERNMENT EXPENDITURE
DEVIATION FROM GROWTH RATES*

No Lag		1 Quarter Lag		2 Quarter Lag	
Columns 1 & 3	Columns 2&4	Columns 1&3	Columns 2&4	Columns 1&3	Columns 2&4
Same - 31	Same - 29	Same - 22	Same - 25	Same -27	Same - 21
Opposite - 16	Opposite 18	Opposite -24	Opposite-21	Opposite-18	Opposite -24

* Calculated from table 31.

Although the above evidence is somewhat mixed and conflicting, it seems apparent that government spending has more often been a destabilizing than a stabilizing factor. However a condemnation of governments spending policies in this period is not entirely valid, for it must be borne in mind that most of the post-war period was one of buoyancy and prosperity. Also in some years government spending was clearly attributable to an increase in defence expenditures because of a worsening international situation. Lest the somewhat preverse movements of government spending seem too discouraging it should be pointed out that the capability for counter cyclical

spending does exist, and it seems safe to predict that vigorous government action would be pursued in the event of a major deflationary gap situation ever arising.

The Price Structure and the Problem of Creeping Inflation

In the post-war period as a whole, the economic environment was consistently hospitable to expansion and inflation and hostile to contraction and deflation. Prices rose during each expansion and fell little or not at all during the contractions. We must bear in mind that our post-war attitudes and institutions have fostered the initiation and propagation of inflationary impulses during periods of expansion, while guarding against their liquidation during periods of contraction. Sumner Slichter points out that a little bit of inflation, a slow creeping inflation of perhaps two or three per cent per year, may be the price we must pay in order to have full employment and adequate economic growth.⁷ He maintains that if government's efforts to maintain a stable price level leads to a drastic downswing in the economy and chronic levels of unemployment, we would have been better off in the long run to accept some inflation. Fritz Machlup concludes in a similar argument that the established policy of maximum employment, high rates of economic growth, and price stability are not necessarily compatible, and that empirically it can be shown that rapid rates of economic growth have taken place when prices were rising as well as falling.⁸

As Scott Gordon points out, since Confederation we have had periods of economic growth with both rising prices and falling prices, while we have not had any growth period with very stable prices. "The two greatest economic growth periods in Canadian history since Confederation were in the period from 1896 to 1912 when the Canadian west was being opened and developed, and during the post-World-War-II-years, 1945 to about 1956. In both of these periods growth was accompanied by rising prices."⁹ However, in contrast to this, the period of strong economic growth between 1922 and 1928 was accompanied by a falling price level.

In the post-war period under study, there were three periods of rapidly rising prices, 1946 - 1948, 1950 - 1951, and 1955 - 1956. The first period of inflation was ushered in with price de-controls and the adjustment of the economy from one of war to one of peace, the second period coincided with the war in Korea, and the third period coincided with the tremendous capital spending boom in the Canadian economy. Since then we have been troubled with the phenomenon of 'creeping inflation' as illustrated by the rise of the consumer price index during the 1957-58 recession. I would describe the first two periods as periods of demand inflation, since prices were rising when the economy was at a relative level of full employment and capacity. The period 1955-1956 and the following years is more difficult to account for, but the fact that prices rose during the 1957-58 recession implies strongly the role of

cost-push forces acting through wages and prices. In the light of these facts I would not like to hazard a guess as to the possibility of a serious post-war deflation, however it would seem that institutional forces are more capable of fighting off such a potentiality now if it ever arose.

The Weak Recovery 1958-60

I have previously mentioned that monetary and fiscal policy was found to be conducive to Canadian economic growth between 1946 and 1956, while this policy of stimulating the economy seemed to shift sharply in the second half of the fifties, almost exactly concurring in the slowdown on economic growth. One factor contributing to this pause in Canadian economic expansion, and clearly one of the most important, is the termination of North American world economic sovereignty. This period lasted approximately from the end of the war until some time in the mid-1950's. This expansionary period, the conclusion of which was too gradual to be precisely dated, resulted from the fact that the United States and Canada were the only industrial nations of any consequence which were not seriously crippled by the hostilities. Because of this and other special factors involved a slowdown in growth was almost inevitable. Recently certain economists, C. L. Barber, Walter Gordon and Scott Gordon to name a few, have questioned the wisdom of Canadian fiscal and monetary policy between 1955 and 1960.¹⁰ These economists have emphasized the special role that the tremendous capital flows

have played in influencing the Canadian exchange rate and consequently the demand for Canadian exports. As part of their argument they have emphasized the widening of interest differentials between the United States and Canada - the chief attraction for the tremendous capital inflows, which reflected the existence of tighter monetary conditions in Canada than in the United States.

TABLE 33

INTEREST DIFFERENTIALS ON GOVERNMENT SECURITIES,
CANADA AND THE UNITED STATES,
SELECTED ISSUES, 1955 - 1960*

		Cdn. - 2½ '67-68 U.S. - 2½ '63-68	Cdn. - 3¼ '79 Cdn. - 3¼ '78-83	Cdn. - 3½ '96-98 U.S. - 3 '95
1955	- 1	.22	.38	
	2	.11	.30	
	3	.11	.27	
	4	.43	.41	
1956	- 1	.44	.43	
	2	.49	.46	
	3	.50	.47	
	4	.59	.54	.68
1957	- 1	.78	.72	.70
	2	.87	.62	.67
	3	.88	.64	.70
	4	.56	.52	.62
1958	- 1	.76	.62	.79
	2	.69	.68	.93
	3	.28	.46	.84
	4	.48	.56	.95
1959	- 1	.73	.64	1.05
	2	.69	.79	.98
	3	.48	1.00	1.05
	4	.63	1.08	1.05
1960	- 1	.82	1.06	1.30
	2	.58	.94	1.36

* C. L. Barber, Brief to the Royal Commission on Banking and Finance, 1962, p. 4.

The widening of interest differentials is very obvious in table 33, taken from Professor Barber's Brief to the Royal Commission on Banking and Finance. For example, the differential between the Canadian issue of 3½'s dated October 1, 1979 and the U.S. issue of 3½'s dated January 1978-83 which had been only .4 per cent in 1956 and .63 in 1957 was close to or above 1 per cent from the middle of 1959 until the second quarter 1960. In the same paper, Professor Barber outlines another factor operating to influence interest differentials.

"At one time I took the view that this widening of interest differentials reflected the fact that monetary policy in Canada was relatively tighter than it was in the United States. However, further study has convinced me that the primary and perhaps the sole cause of this widening of interest differentials was the conversion loan carried out by the government in the summer of 1958..... It seems clear that one of the important effects of the conversion loan was to increase substantially the public's demand for cash. Individuals and financial institutions who were induced to exchange short term securities for the much longer term and less liquid conversion loan bonds would naturally want to hold more cash in their portfolio to prevent a serious decline in their liquidity position. This need not have resulted in a serious rise in interest rates had the Bank of Canada been willing to allow a substantial increase in the money supply."¹¹

The Conversion operation ushered in an anti-inflationary era, at a time when unemployment was becoming more crucial. Raising the general level of interest rates is a traditional anti-inflationary device, while lengthening the term of the national debt also puts the monetary authorities in a stronger anti-inflationary position. "But how does this high interest rate, anti-inflation, Conversion Loan square with the fact that just a few weeks before it was announced the Government had put forward the largest deficit budget in our post-war history, a budget which the Minister justified at the time as an expansionary measure designed to lift the economy out of a recession?"¹²

These conflicting actions by the Bank of Canada and the Federal Government seemed to exist throughout and beyond the period 1958-60.

To summarize these arguments, a slowdown in growth was almost inevitable, but the policy measures used to lift the economy out of the 1957-58 recession were contradictory and very ill-advised.

Prospects for Post-War Stability

That there has been a strong upward trend in economic activity in Canada between 1946 and 1960 is obvious. What is not entirely clear about post-war developments is what proportions

should be associated to normal current growth (including structural and technological changes) and what part either to making up for backlogs that developed during the war years and the preceeding depression or to anticipation of future requirements and building in advance the capacity to meet them?

The cyclical phenomenon of the post-war period have been marked by an absence of any extended recessionary influences, although three adjustment phases can be identified, 1948-49, 1953-54 and 1957-58. However, we cannot assume on the basis of studying these fourteen years that severe contractions are impossible. It does seem safe to assume that severe contractions are more unlikely, for our defences against a prolonged depression are stronger than ever, owing to structural changes both inside and outside the Canadian economy. For example, the financial structure of the economy has more built-in resistance to deflationary forces than in pre-war years. Most significant of all, the federal government may be employed to supplement and reinforce the impact of automatic stabilizers, and modern knowledge of its consequences should prevent recurrence of the cyclically perverse policies sometimes followed in the past. Automatic stabilizers are incapable in themselves of holding an economy from deviating upward or downward from an equilibrium path, but with the assistance of capably directed monetary and fiscal policy, should be able to minimize these fluctuations.

NOTES CHAPTER 1

1. R. A. Gordon, Business Fluctuations (New York, Harper & Brothers 1952) pp. 224-225.
2. W. C. Hood, The Demand For Labour, A Report to the Special Committee of the Senate on Manpower and Employment (Ottawa, Dec. 8, 1960, No. 2)
3. See Gordon, op. cit. chapter 17, and A. H. Hansen, Business Cycles and National Income (New York, W. W. Norton & Company Inc., 1961) Chapters 25 and 26
4. B. G. Hickman, "Postwar Cyclical Experience and Economic Stability", Papers and Proceedings of the American Economic Review, Vol. 48, No. 2 (May 1958) p. 134.

NOTES CHAPTER 2

1. For an interesting appraisal of this topic, see A. Achinstein, B. G. Hickman et. al, "Is Another Major Business Contraction Likely?" Papers and Proceedings, American Economic Review, Volume 48, No. 2 (May 1958) pp. 106-144
2. A. H. Hansen, Business Cycles And National Income, (New York, W. W. Norton & Co. Inc., 1951) pp. 17-38
3. J. A. Schumpeter incorporated a three cycle scheme into his theory of business cycles; a 'Kitchen' cycle of three to four years duration; a 'Juglar' cycle of seven to eleven years; and a 'Kondratieff' cycle of fifty to fifty-five years. (In each case the name given to the cycle is that of the economist who first provided empirical evidence of its existence and attempted an explanation of it. See J. A. Schumpeter, Business Cycles (New York, McGraw-Hill Book Co., 1939)
4. Gordon, op. cit., p. 228
5. E. J. Chambers, "Canadian Business Cycles Since 1919", Canadian Journal of Economics & Political Science, Vol. 24, No. 2 (May 1958) p. 180
6. R. A. Gordon, "Investment Behaviour And Business Cycles," Review of Economics and Statistics, Vol. 37, (Feb. 1955) p. 30
7. The acceleration principle states that the derived demand for durable goods (in this case building construction) will vary with the absolute amount of change in the production of the finished goods and services produced with their aid. See Gordon, Business Cycles, pp. 107-112.
8. Ibid, pp. 110-111
9. A. Achinstein, "The Money Economy and Business Contractions," Papers and Proceedings of the American Economic Review, Vol. 48, No. 2 (May 1958) pp. 110-111.

10. N. Kaldor, "The Relation of Economic Growth and Cyclical Fluctuations," Economic Journal, Vol. 4, No. 3, (March 1954)
11. See R. E. Caves and R. H. Holton, The Canadian Economy, Prospect and Retrospect, (Cambridge, Mass., Harvard University Press, 1961)
12. Ibid, p. 31
13. Ibid, Chapter 3
14. Ibid, p. 79
15. Ibid, pp. 79-86
16. Ibid, pp. 94-115
17. Gordon, op. cit., pp. 500-506
18. W. T. Easterbrook and H. G. J. Aitken, Canadian Economic History (Toronto) Macmillan Co., 1956) pp. 40, 187.
19. Achinstein, op. cit., p. 133
20. Gordon, op. cit., p. 123
21. For an interesting evaluation of the topic see R. Craig McIvor, Canadian Monetary, Banking and Fiscal Development (Toronto, Macmillan Co., 1958) Chapters 9-11.
22. Hansen, op. cit., pp. 131-132
23. D. Hamburg, "Is Another Major Business Contraction Likely?" - Discussion, Papers and Proceedings of the American Economic Review, Vol. 48, No. 2 (May 1958) p. 141.
24. W. G. Hood, Financing Economic Activity In Canada, (Royal Commission on Canada's Economic Prospects, July 30, 1958) p. 135.

NOTES CHAPTER 3

1. Report Of The Special Committee Of The Senate on Manpower And Employment. (Ottawa, June 14, 1961, No. 25) p. 21
2. This argument is brought out more forcefully in the following chapters.
3. As. H. Scott Gordon points out, "one of the most steadily reiterated themes of the Bank of Canada's Reports of recent years, and of the Governor's public speeches, is that monetary policy can do very little against the problem of unemployment. The Governor steadily complains that people expect too much of the Bank in this respect and suggests that the proper solution to the unemployment problem lies in actions that are not under the control of the Bank but are, rather, the responsibility of the Government." H. Scott Gordon, The Economists Versus The Bank of Canada, (Toronto, The Ryerson Press, 1961) p. 32.
4. For the sake of clarity and simplicity, I will employ the shortened expression of G.N.E. and G.N.P. interchangeably for gross national expenditure and gross national product.
5. Senate Report, op. cit., p. 27.
6. Ibid., p. 39
7. Professor C. L. Barber brings this out with clarity in his paper on Canada's Unemployment Problem. "Recently, before the Special Committee of the Senate on Manpower and Employment, the thesis was advanced that a new and significant cause of unemployment in Canada is the lack of education and training of an important segment of the labour force. Even if rapid economic growth were to resume a higher level of unemployment would persist, it is argued, because the economy now needs a higher proportion of skilled or more highly educated workers and the unemployed do not possess the required skills or training. The evidence presented in support of this thesis has been one-sided and far from conclusive ... As matters stand now, the thesis is far from proven." C. L. Barber, "Canada's Unemployment Problem," C.J.E.P.S., Vol. 28 (February 1962) pp. 96-97.

8. Bank of Montreal Business Review, The Fifties In Retrospect, (Jan. 26, 1961)
9. K. A. H. Buckley, "Urban Building and Real Estate Fluctuations in Canada," C.J.E.P.S., Vol. 17 (February 1952)
10. D. J. Daly, "Kuznets Cycles In Canada," Paper presented to the Ottawa Chapter, Canadian Political Science Association (March 13, 1962)
11. Friedman strenuously argues that the American economy has been and is now inherently stable, and that it would automatically tend to maintain high employment and a stable price level if only it were not almost continuously thrown off track by erratic and unwise monetary policy. He concludes that contracyclical monetary policy should be abandoned so it would no longer impede the inherent tendencies of the economy towards high levels of employment and stable prices. Milton Friedman, A Program For Monetary Stability, (New York, Fordham University Press, 1959) p. 17.

NOTES CHAPTER 4

1. J. D. Gibson, "Postwar Economic Development and Policy in Canada," C.J.E.P.S., (Nov. 1954) p. 444
2. J. B. Smith, Canadian Economic Growth And Development, A Report to the Royal Commission on Canada's Economic Prospects (May 1957) p. 24.
3. Gibson, loc. cit.
4. C. L. Barber, "Canada's Post-War Monetary Policy, 1945-54," C.J.E.P.S., (August 1957) p. 362.
5. D.B.S., National Accounts, Income & Expenditure, 1926-56, 1961.
6. Various Issues of The Bank of Canada, Statistical Summary.
7. R. C. McIvor, Canadian Monetary, Banking and Fiscal Development (Macmillan Co., Toronto, 1958) pp. 207-211.
8. Ibid, pp. 212-213.
9. I. Brecher and S. S. Reisman, Canada-United States Economic Relations, A Report to the Royal Commission on Canada's Economic Prospects, (November 1957) p. 46.
10. Ibid, p. 46.
11. Ibid, p. 47.
12. D.B.S., Prices & Price Indexes, December 1952
13. Bank of Canada, Annual Report, 1951, p. 9. The governor of the Bank of Canada noted that: "In view of the degree of inflationary pressure and the strength of demand for more credits the Bank felt that the situation called for action over and above further tightening of the chartered banks' cash reserve position. Meetings with representatives of the chartered banks during February 1951 to discuss the situation found the banks in agreement with the suggestion that further expansion in total bank credit was undesirable under existing conditions."

NOTES CHAPTER 5

1. Paul Wonnacott, The Canadian Dollar 1948-1958 (Netherlands, University of Toronto Press, 1960) p.82.
2. Ibid, p.90.
3. The Bank of Canada, Annual Report, op. cit., p.7.
4. Caves & Holton, op. cit., p. 109.
5. Ibid, p. 109.
6. Ibid, p. 109.
7. C.L. Barber, "Canada's Unemployment Problem, "C.J.E.P.S. (February, 1962) p.90.
8. Ibid, p. 90.

NOTES CHAPTER 6

1. See Table 22, this chapter.
2. The Governor of The Bank of Canada attributes the sharp rise in interest rate between 1955 and 1957 as being almost entirely due to an increase in demand for loanable funds, rather than a scarcity in supply of such funds. The Bank of Canada, Annual Report Of The Governor To The Minister of Finance, (1957), pp. 15-17.
3. Wonnacott, op. cit., p. 89.
4. See Budget Speech, Delivered by Honourable D. M. Fleming, House of Commons, (June 17, 1958) p. 8.
5. This situation is brought out more clearly in the following chapter.
6. See The Bank of Canada, Annual Report Of The Governor To The Minister of Finance, (1959) pp. 7-10.
7. H. Scott Gordon has taken Bank of Canada policy to task. See H. Scott Gordon, The Economists Versus The Bank of Canada, (Toronto, The Ryerson Press, 1961).
8. D.B.S., National Accounts, Income & Expenditure, 1947-61.
9. Wonnacott, op-cit., p.89.

NOTES CHAPTER 7

1. This argument is supported in the Final Report, (Royal Commission On Canada's Economic Prospects, Nov. 1957) p. 375.
2. Irving Brecher and S. S. Reisman, Canada-United States Economic Relations, Royal Commission on Canada's Economic Prospects (Ottawa, July 1957) p. 73.
3. Wonnacott, op. cit., p. 75.
4. Wonnacott, ibid, pp. 75-76
5. Rosenbluth, Nov. 1957, op. cit., p. 489.
6. Caves & Holton, op. cit., p. 115.
7. Sumner H. Slichter, "How Bad Is Inflation", found in L. Ritter, Readings In Money & Banking, (Houghton Mifflin Co., Boston, 1961) p. 370.
8. F. Machlup, "Employment, Growth, and a Stable Price Level" found in Ritter, op. cit., p. 375.
9. Scott Gordon, op. cit., p. 39
10. Barber, loc. cit., Walter Gordon, loc. cit., Scott Gordon, loc. cit.
11. C. L. Barber, Brief To The Royal Commission On Banking and Finance 1962, p. 5.
12. Barber, ibid., p. 5.

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