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THE ECONOMIC DEVELOPMENT OF CANADA

1849-1914

by

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TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF CHARTS	vi
Chapter	
I. DEVELOPMENT OF THE CANADIAN ECONOMY TO CONFEDERATION	1
Major Factors in Canadian Economic Development Factors Leading to Confederation	
II. THE CANADIAN ECONOMY, 1849-1900	13
The Export-Base Theory and Canadian Economic Development, 1849-1900 Foreign Trade Canada's Terms of Trade Demand for Canada's Exports Foreign Investment Growth of Gross National Product Population Growth Development of the Prairies	
III. THE WHEAT BOOM	65
IV. SUMMARY AND CONCLUSIONS	79
BIBLIOGRAPHY	86
APPENDIX	

LIST OF TABLES

Table	Page
1. Exports by Classes in Five-Year Averages and for the Fiscal Years, 1911-14	22 ✓
2. Volume of Domestic Production of Selected Items for Canada, Ontario and Quebec, 1871-1901	23
3. The Ten Leading Items of Export - Canada, 1890-1920	24 ?
4. Aggregate External Trade of Canada, Fiscal Years 1868-1914	28-29 ✓
5. Value of Exports from Canada to United Kingdom, United States, and to Other Countries. By Classes of Merchandise the Produce of Canada in Five-Year Averages and for the Fiscal Years 1911-14.	30-32 ✓
6. Canada's Exports and Imports, 1868-1914	33-34 ✓
7. Net Inflow of Foreign Capital, 1868-72 to 1914	38
8. Growth Rates of Gross Value of Manufacturing Output in Constant 1935-39 Dollars. Total, Primary, and Secondary Manufacturing, Selected Years, 1870-1919.	46 ✓
9. Gross Value of Production, Primary, Secondary and Total Manufacturing Industries (Standard Industrial Classification of 1948) Selected Years, 1870-1915	47 ✓
10. Gross National Product, In Current and 1935-39 Dollars, and Implicit Price Index, Selected Years	49 ✓
Percentage Increase in Gross National Product in 1935-39 Dollars, Selected Periods	49 ✓
11. Value Added, By Industry, Selected Years, 1851-1900	50

Table	Page
12. The Leading Industries, By Value of Output, Selected Years	51 ✓
13. Population Balance Sheet, By Decades, 1851-1921	55 ✓
14. Immigrant Arrivals in Canada, Calendar Years, 1852-1959	56
15. Number of Homestead Entries, 1874-1933	57
16. Domestic Investment, Foreign Investment and Gross National Product, 1901-30	66
17. Production of Wheat in the Prairie Provinces and Canada, 1871-1955	71 ✓
18. Canadian Gross Residential Capital Formation and Indexes of Building Activity, 1872-1915	74-75
19. United States Investment in Canada, Selected Years, 1897-1919	77

LIST OF CHARTS

Chart	Page
1. Percentage Distribution of Exports by Classes 1868-1914	20
2. Foreign Trade	26
3. Canada's Terms of Trade	26
4. Imports	27
5. Exports	27
6. Canadian Population Growth	54
7. Growth Trends	64

CHAPTER I

DEVELOPMENT OF THE CANADIAN ECONOMY TO CONFEDERATION

Major Factors in Canadian Economic Development

Along with the other nations of the Western Hemisphere, the antecedents of the Canadian economy may be traced to Europe. The area which eventually became Canada was a part of the mercantile empires of both France and Great Britain. The eventual triumph of Great Britain over France in gaining control of the territory lying to the north of the United States was due to the types of policies each followed.¹ British mercantile policy was better controlled and coordinated and in the long run proved to be more suited to the type of resource exploitation both nations were carrying out in Canada.² The English succeeded in establishing sufficient settlements of people who could produce food supplies by those engaged in producing raw materials being exported to the mother country. By contrast, the French, devoting their resources too completely to fur production,

¹W. T. Easterbrook and Hugh G. J. Aitken, Canadian Economic History, Toronto: The Macmillan Company of Canada, Ltd., 1958, pp. 107-09.

²The French did not develop a successful triangular trade between their North American colony, the West Indies and Europe - as did the British. The French empire was centrifugally oriented whereas the British empire was linked by a complex trading network. The British moved more slowly into new territory but consolidated their position as they went.

failed to establish successful agricultural settlements which could serve as provisioner to the trader, trapper, fisherman and lumberman.¹ Without a supply of basic foodstuffs, attempts to expand the "economy" were severely handicapped.

When the American colonies chose independence from Great Britain in 1776, the settlers in Canada opted to remain a British colony because, among various factors, of the economic advantages they enjoyed as a part of the British mercantile system. The type of commodities they produced - raw materials - was highly dependent on overseas markets. Within the British mercantile system they were given a measure of protection.²

The climate and natural resource endowments of Canada have been of great significance in Canadian economic development. Canada's land area covers more than 3.5 million square miles. However, it is estimated only one-tenth of this area is arable. About fifty percent of the total population live within 100 miles of the United States border and some ninety percent within 200 miles of the American boundary. Thus the bulk of Canada's people live in a long narrow strip stretching from east to west across the continent.

Another factor which has exerted influence throughout Canadian history is the fact that because of land formations and location of waterways, Canada is separated into several economic and geographical

¹op. cit., pp. 87-90.

²Easterbrook and Aitken, op. cit. pp. 111-12.

regions. A. W. Currie writes that:

The important businesses of one Region do not generally speaking, merge gradually into the economic life of the next. The result is that each Region tends to have its own peculiar economic and political interests.¹

Sparse settlement of a vast territory, dissimilar natural resource endowment, language differences and formidable geographical barriers have all aggravated the problems of economic, cultural and political integration of Canada.

A salient feature of the Canadian economy has been the central role played by industries based on production of primary products. An analytical framework based on this fact - the staple theory - has become the usual vehicle of analysis of Canadian economic growth. Using the insights of Adam Smith and G. S. Callender, it has been given specific application to Canada's economic development by W. A. Mackintosh, H. A. Innis and others.²

Essentially a staple product is one with a large natural resource content. The staple does not require elaborate processing in terms of labor or special skills, but at least some processing must

¹A. W. Currie, Economic Geography of Canada. Toronto: The Macmillan Company, 1917, p. 2.

²W. A. Mackintosh, "Economic Factors in Canadian History," Canadian Historical Review, IV, No. 1 (March, 1923), pp. 12-25; H. A. Innis, "Significant Factors in Canadian Economic Development," Essays in Canadian Economic History, Toronto: University of Toronto Press, 1956, pp. 200-10; Richard E. Caves and Richard H. Holton, The Canadian Economy. Cambridge: Harvard University Press, 1959, Chapter 2. For a reappraisal of the staple theory see Kenneth Buckley, "The Role of Staple Industries in Canada's Economic Development," Journal of Economic History, XVIII, No. 4 (December, 1958), pp. 439-52.

be done at the source. Substantial amounts of capital may be required in the production of a staple product. The staple product is export-oriented and is in demand in international markets. As such it can bear transportation charges.¹ This is a regional approach to economic development. The focus is on the region producing the current export staple.

The timing and direction of development of the various staples in Canadian history have been determined by at least three closely related factors. The first of these is discovery of the resource. A deliberate search may have been made for a certain natural resource but just as often discovery has been fortuitous. Development of a new commodity is usually occasioned by market demand. In fact demand may have served to stimulate a search for larger supplies of cheap resources to produce a given product. The third factor, technology (including transportation), also may limit or stimulate search for and development of a resource. Some writers have asserted that technology is the dominant factor and resources are a function of technology.² The staple approach then becomes a "theory of capital formation and industrial location."³

The earliest economic activity associated with Canada was based on fishing off Canada's eastern shores. Later, when attention was turned to the interior, the fur trade was developed. Production of

¹Caves and Holton, op. cit., pp. 31-32

²Irnis, op. cit., pp. 200-03, and Buckley, op. cit., pp. 142-44.

³Caves and Holton, op. cit., p. 30.

these two products had some features in common. Both were based on the exploitation of natural resources for export. Consequently profitability was dependent on market demand. Neither industry gave rise to much permanent settlement or investment in social overhead capital.

The fishing industry was characterized by relative ease of entry, low capital requirements, keen competition, and lack of government regulation. In contrast the fur trade was much better suited to the mercantile system. Risks were great and capital requirements large. Both England and France granted charters to companies with monopoly rights. These chartered companies became far-flung trading organizations which required careful planning, extensive transportation systems and close ties with the markets. The fur industry had to continue expanding and moving into new areas as the resources of the older territories became depleted. Still another difference in the two industries was that the demand for European goods (e.g. fire-arms, household utensils, etc.) grew as the Indians became familiar with European products through engaging in the fur trade.¹

As the fur supply was depleted in the eastern part of the continent, the center of the fur trade moved westward and began to decline in importance in the Canadian economy. In the place of furs other staple products were developed - including potash, wheat and lumber. Chief successor to furs was lumber.²

¹Easterbrook and Aitken, op. cit., p. 38 ff., and Innis, The Fur Trade in Canada, Toronto: University of Toronto Press, 1956, pp. 386-92.

²Easterbrook and Aitken, op. cit., Chapter 9.

British shipbuilders had been dependent on North American forests for certain special woods not available elsewhere for a long period of time. But the chief source of supply for shipbuilding material remained the Baltic. North American timber was high cost both because of scarcity of labor and distance to the market in Europe. As a naval power, however, Britain required a guaranteed source of shipbuilding materials. The Napoleonic wars clearly showed that the Baltic was not a sure supply source.

From 1804 to 1842 tariffs protected wood products exported from Canada to Great Britain. Then in 1842 the first of a series of tariff protection given to Canadian lumber was abolished completely. The result was a leveling off of imports of Canadian lumber into England. But changes were taking place in Canada too. A technology was being developed to enable sawing the logs into lumber in Canada and a North American market for Canadian lumber was developing.¹

Several features of timber as a staple should be noted. Logging complemented agriculture in two ways. In many areas it was necessary to clear the land before farming could be done. On the other hand the logging camps required food supplies. Agricultural settlements sometimes followed the logging industry to serve this demand.

Like fishing, lumbering was quite free of monopoly control. The companies were often branches of a parent company in Great Britain. Entry to the industry was easily gained since initial capital

¹Innis, Essays in Canadian Economic History, p. 213.

requirements were small and unskilled labor could be used. The lumber market was broad because wood was the chief building material used in Great Britain - in contrast to the restricted luxury market served by the fur industry. There was a high rate of failure among logging companies since the industry was dependent on the construction industry and the building cycle in England. Communication with Europe was slow and this served to accentuate the problem of supply and demand.¹ The lumber industry in this period was highly dependent on water transportation.² During this period the wheat industry was in the early stages of development and was becoming increasingly important by 1849.

The fourth factor which has played an important role in shaping Canada's economic development has been transportation.³ Canada was a considerable distance from Europe and furthermore Canada itself was a vast territory of rugged terrain with many natural barriers. Until technology provided the steam engine and steamship, travel in Canada was mainly restricted to the larger rivers, lakes and bays. Inland travel was by canoe. The winter season meant the closure of even many of these avenues of access. The development of the interior was seri-

¹The response mechanism was slow. A good price for lumber in England in year one would stimulate increased production and likely an oversupply in year two. In year three the producers would reduce output and market conditions would begin to improve. By year four the cycle would begin again.

²Ibid., p. 242.

³The classic treatment of this problem is found in the writings of H. A. Innis. See H. A. Innis, Essays in Canadian Economic History, pp. 62-77, 141-55.

ously impeded until new means of motive power were discovered and applied to transportation.

There was another dimension to the transportation problem. The experience with furs and timber illustrate the difficulty of getting balanced two-way cargoes. "Unbalanced cargoes always meant high transport costs, since the freight being shipped in one direction had to bear the expense of the unused capacity moving the other."¹

In the case of the fur trade it was necessary for ships traveling from Europe to Canada to carry large cargoes of supplies for the traders and trappers along with goods for trade with the Indians. Furs were light in weight and compact in size and there was unused space on the ships returning to Europe.

With the lumber industry the problem was reversed. The logs were bulky and heavy. Log-hauling ships had to have large capacity. The return cargo consisting of supplies for the settlers required considerably less space.

For the fur trade there was little choice but to bear the high overhead costs; but alternatives were open to the lumber ships to utilize more fully this available shipping capacity on the voyage from Europe to Canada. Emigration of new settlers from Europe was actively encouraged. Development of the lumber staple was therefore an instrument for spreading settlement in Canada - the first of the staples to play this role. ✓

¹Easterbrook and Aitken, op. cit., p. 199.

H. A. Innis concludes his essay on "Unused Capacity" with these comments:

Problems of unused capacity have had the effect of quickening and accentuating the long-run general trends of economic development and have necessitated governmental intervention as a steadying or remedial factor.¹

Factors Leading to Confederation

A series of factors contributed to the achievement of confederation of the British colonies of North America.² As long as the colonies were given preferential treatment for their exports to British markets, there was little desire to change their status as colonies.

The first of several reductions of tariffs on lumber imports into Britain, which had favored Canadian producers, was made in 1842. By 1860 this tariff was completely eliminated. In 1846 the Corn Laws were repealed in Great Britain and a new policy of semi-autonomy for the colonies was instituted. Actions in this direction made it clear to Canadians that the favored status they had enjoyed was at an end.

Abolition of the lumber tariff caused a leveling off of British imports of Canadian lumber. Canadian lumber producers in turn began developing a North American market for their products (i.e., in Canada

¹Innis, *op. cit.*, p. 155.

²Easterbrook and Aitken, *op. cit.*, Chapter 16; W. A. Mackintosh, *op. cit.*, p. 23 ff; "Confederation," Report of the Royal Commission on Dominion-Provincial Relations, Book I, pp. 19-21, Ottawa: Queen's Printer, 1954.

and the United States) and a technology for further processing of the logs into lumber.¹ Repeal of the Corn laws opened up a market for Canadian wheat in England.

During the first half of the 19th Century the railroad had been proved feasible both in Great Britain and the United States and the steamboat was in use. The implications of these technological advances in communications were only gradually perceived by many Canadians.

In the meantime United States settlers, hungry for land, continued to push northward and westward. The threat of annexation by the United States of additional territory in the West challenged Canadians to think in terms of a nation stretching across the continent.

Canadians had long been intrigued with the idea of developing the St. Lawrence as a major route and tapping the carrying trade of the United States Midwest. This idea gave impetus to construction of the St. Lawrence Canal System. It proved to be a failure in achieving this objective; but the development of the railroads revived this ambition.

During the years 1852 to 1854 a Reciprocity Treaty between the United States and Canada was negotiated and signed. For a time free trade prevailed between the United States and the Canadians. Subsequently this policy gave way to the new tariff policy.

¹Innis, op. cit., p. 243.

During the years just prior to Confederation, a national policy began taking shape.¹ Free trade, as a principle, was accepted. It was considered important to develop and expand trade with the United States without abandoning trade with Great Britain. The railway and tariff became the main instruments of the national policy. The railroad enabled communication with all parts of British North America and for the first time provided a means of exploiting the great prairies west of the Precambrian Shield.

A concomitant of the development of railroads was the new tariff policy of the Canadian colonies. The tariff became a means of raising capital for financing railroad building as well as a method of controlling the direction of trade. Through the tariff producers were encouraged to ship produce east-west through Canada instead of north-south to the United States. The tariff gave protection to Canada's new industries from competition with United States producers.

By 1850 the United States was experiencing rapid economic growth. The American economy was becoming diversified, flexible and geared to expansion. The "American system" of manufacturing was developing.² This development in the United States emphasized the highly specialized development in Canada. The United States economy had been far more successful in attracting British capital and people. Therefore

¹V. C. Fowke, "The National Policy - Old and New," Canadian Journal of Economics and Political Science (hereafter CJEPS), XVIII, No. 3 (August, 1952), pp. 271-86.

²Easterbrook and Aitken, op. cit., p. 356.

the American example was a stimulus to Canadians.

In summary, the introduction of free trade in Great Britain, technological advances bringing new means of communication, the threat of further United States territorial expansion and proximity to the United States were the causal factors. The result was a growing national consciousness, the emergence of a national policy aimed at furthering economic development and finally the confederation of four of the British North American colonies in 1867. The period of 1849 to 1867 marks a major watershed in Canadian history.

CHAPTER II

THE CANADIAN ECONOMY, 1849-1900

Under the impact of free trade, as has already been noted, lumber, as Canada's major export, was beginning a relative decline by 1850. It was already evident that agricultural products - especially wheat - would become the leading staple exports. As new land was opened up in Upper Canada (i.e., Ontario), the production of wheat increased rapidly. Wheat exported through the Welland Canal amounted to 210,105 bushels in 1831 and had increased to 1,579,966 bushels just ten years later.¹ Agriculture began to take on new significance in the Canadian economy by 1850. "Having come to be recognized as the originator of a new staple trade, Canadian agriculture assumed an individual and more direct relationship to commercial activity."²

The prospects of an expanding economy, enjoying the benefits of greater division of labor and specialization, impelled Canadians to form a Confederation in 1867. It was the goal of confederation "to create the framework and the institutions which would provide a sound

¹H. A. Innis, The Fur Trade in Canada, p. 394.

²V. C. Fowke, "An Introduction to Canadian Agricultural History," *CJEPS*, VIII, No. 1 (February, 1942), p. 61.

base for a rapidly growing economy."¹ In the years between Confederation and 1900, however, the nation spent much of its energy and resources getting organized and developing the infrastructure which was as vital to the political integration of the nation as to economic progress. Only after 1900 was the pre-Confederation vision of a successful export agriculture, centered in the prairie provinces, achieved.

During the intervening years, the evolving national policy nurtured along the development of the prairie economy. Following the purchase of Rupert's Land from the Hudson's Bay Company in 1868, Manitoba became a province in 1870; and laws were enacted in 1871 and 1872 providing for the distribution of prairie lands as homesteads.

In the 1870s the tariff policy was altered to support the goals of the national policy. The tariff was to become an instrument for fostering the development of resources, maintaining employment opportunities, protecting Canada's fledgling industry from foreign competition, and developing interprovincial trade. In short, the tariff became a means of protection and only secondarily a source of revenue.

This course of action by the government set the pattern and conditioned development of the prairie economy. According to Fowke, "the prairie economy grew up within a pre-established framework

¹o. J. Firestone, "Development of Canada's Economy, 1850-1900," National Bureau of Economic Research, Trends in the American Economy. Princeton: Princeton University Press, 1960, p. 220. Hereafter cited TAE.

of tariffs which shaped, limited, and curtailed its development."¹

During the period from 1870 to 1896 the world economy went through what has been commonly misnamed the Great Depression.² In Britain there were two trends at work. The marginal return to capital fell while the return to labor rose; and the proportion of capital employed in production rose relative to labor inputs. Real wages rose. The result was a shift in demand and supply curves. The supply curves shifted downward and to the right. The demand curves shifted downward and became more elastic for certain industries. The earlier trend toward large investments overseas by British investors was reversed after a rash of business failures during the 1870s. The British investor now demanded less risky investments - preferably in the home market - even though the rate of interest was considerably lower. Investment overseas was increasingly in colonial areas and where stable government provided greater security for investments.

Canada felt the impact of this period of adjustment in the international economy to some extent but continued to achieve remarkable growth so that "by the mid-1890s Canada was well prepared to take advantage of any upturn engendered by improving conditions abroad."³

¹V. C. Fowke, The National Policy and the Wheat Economy. Toronto: University of Toronto Press, 1957, p. 67.

²W. W. Rostow, British Economy of the Nineteenth Century. Oxford: Clarendon Press, 1948, Chapters 3 and 4.

³Firestone, op. cit., p. 220.

The Export-Base Theory and Canadian Economic
Development, 1849-1900

The export-base theory emphasizes the critical role played by the export base in initiating and generating regional income and in enabling further economic development.¹

Growth is initiated by international demand for a product in which the region has a comparative advantage. A favorable disposition of the resulting income will generate new industry largely geared to serving the regional market (trades, services, social overhead capital). The exact type of development which occurs will depend on the resource endowments, the distribution of income within the region, the development of processing industries in the region, and the growth of transportation and distribution facilities. If the export does induce the growth of other industries, services and social overhead facilities, population will move into the urban centers.

After an initial phase of growth and expansion, the regional economy may take a variety of paths, depending on the natural resources available, the character of the export industry, availability of other factors of production, the institutional framework and the rate of technological change and transportation costs. For

¹Douglass C. North, The Economic Growth of the United States 1790-1860. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961; *ibid.*, "Agriculture in Regional Economic Growth," Journal of Farm Economics, XLI, (December, 1959), pp. 943-51; *ibid.*, "Location Theory and Regional Economic Growth," Journal of Political Economy, LXIII (June, 1955), pp. 243-58; J. N. Tattersall, "Exports and Economic Growth: the Pacific Northwest Experience 1880 to 1960," Manuscript.

example, the economy may remain tied to a narrow export base, or it may continue expanding and diversifying.

Applicability of the export-base theory to Canadian development has been challenged by a number of critics. Kenneth Buckley holds that the theory, as an analytical framework for studying Canadian economic history, breaks down after 1820.

But after 1820, when fur was replaced by timber and wheat, the possibility of other sources of national economic growth and change cannot be ignored . . . Although the absolute volume of export staples in Canada has increased greatly from 1820 to the present time, it is reasonable to believe that the proportion of the total of economic activity that is unrelated to staple production has increased more rapidly.¹

To some critics the theory has seemed especially vulnerable in explaining the period of the "Great Depression," 1873-96 because lumber exports had leveled off and wheat had not yet become important. Too rigid and narrow an interpretation of the theory, on the one hand, and preoccupation with the wheat boom after 1896, on the other, may partially account for dissatisfaction with the export base theory. Several investigations have established that the Canadian economy continued growing during this period from 1873 to 1896. According to M. H. Watkins:

¹Buckley, op. cit., p. 444.

Recent research¹. . . makes it impossible to continue to regard these years as a great depression; they witnessed, in fact, an impressive increase in real per capita income, comparable to that in the United States, considerable industrial expansion, and substantial capital inflow.²

This evidence does not vitiate the applicability of the export-base theory to this period.

It will be argued in this chapter that, in fact, the growth of the economy during this period was geared to the export of staples and industries processing staples. At the same time the economy was becoming more diversified and greater division of labor developed.

Foreign Trade

Foreign trade and participation in the international economy have always been a strong feature of the Canadian economy. The following data show the remarkable stability of exports as a percent of the gross national product. Exports as a percent of GNP for the entire period covered in the table would be between 15 and 16 percent.

¹Firestone, *op. cit.*; Penelope Hartland, "Factors in Economic Growth in Canada," *Journal of Economic History*, XV (1955), pp. 13-22; Duncan McDougall, "Immigration into Canada, 1851-1920," *CJEPS* XVII (November, 1951), pp. 162-75; Gordon W. Bertram, "Economic Growth in Canadian Industry, 1870-1915: The Staple Model and the Take-off Hypothesis," *CJEPS*, XXIX, (May, 1963), pp. 159-84.

²M. H. Watkins, "A Staple Theory of Economic Growth," *CJEPS*, XXIX (May, 1963), p. 155.

Composition of Foreign Trade

Although data for the early part of the period under study are not completely reliable, enough is known to give a picture of the general magnitudes of the components of national product and foreign trade and trends of growth.

EXPORTS AS PERCENT OF GROSS NATIONAL PRODUCT 1851-1911/15

Year	GNP (\$m)	Exports as Percent
1851	169	10.7
1860	319	17.2
1870	459	16.0
1880	581	15.1
1890	803	12.0
1900	1,057	18.1
1901-05	5,650	18.6
1906-10	8,482	15.4
1911-15	12,178	16.2

Source: Firestone, op. cit., p. 222, p. 759; Buckley, Capital Formation in Canada, p. 11; Canada Year Book.

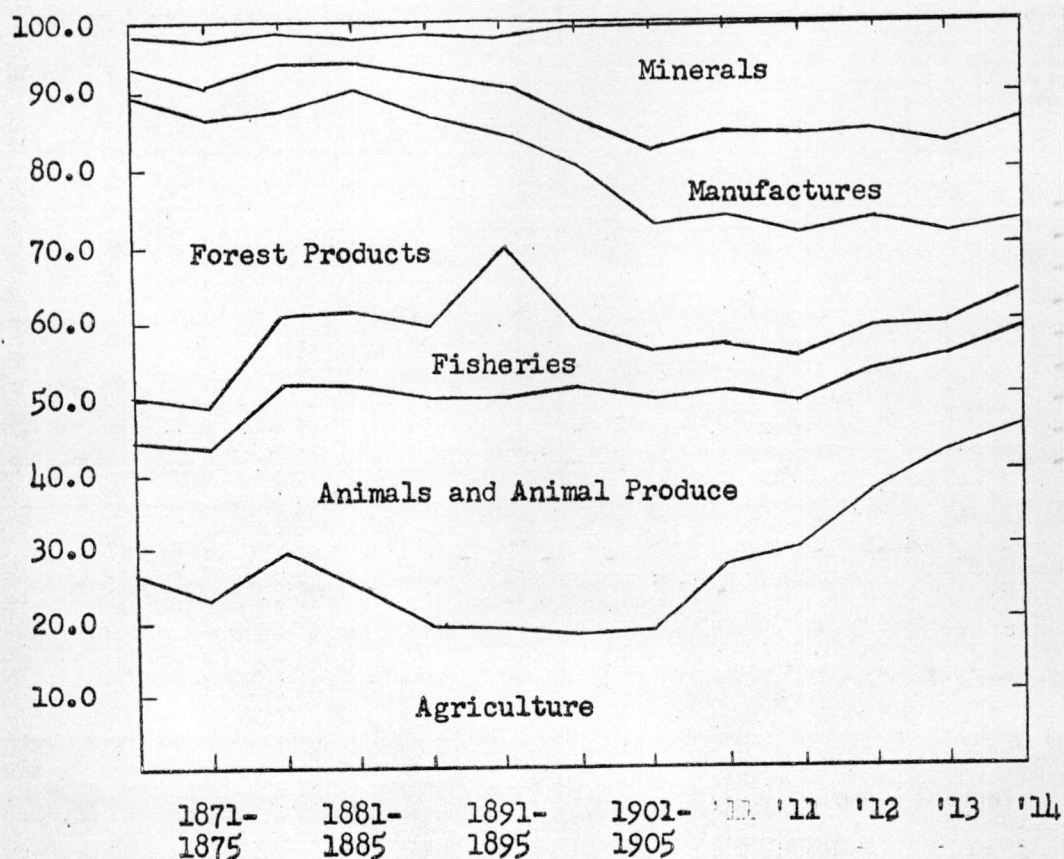
Firestone's estimates of commodity exports¹ for 1851 show wood and wood products accounting for 60 percent of the total (eight groups). Agricultural products made up 27 percent of exports and animals and animal products contributed the other 13 percent. The three groups

¹Firestone, "Canada's Foreign Trade, 1851-1900," op. cit., p. 761. Not reproduced here since they are not directly comparable to Table 1.

accounted for 88 percent of all commodity exports.

In 1860 the picture was changed somewhat. Wood and wood products had fallen to 25 percent of the total (although this group had grown in value from \$9 million to \$14 million). Agricultural

CHART 1
PERCENTAGE DISTRIBUTION OF EXPORTS BY CLASSES
1868-1914



Source: Table 1.

products were the major gainer - capturing 40 percent of total exports and jumping from \$4 million in 1851 to \$16 million in 1860. Animals and animal products had also made substantial gains - going to 20 percent of total exports and increasing in value from \$2 to \$8 million. Nonferrous metals and nonmetallic minerals each grew to \$1 million in value and appear on the list for the first time.

From 1868-70 to about 1890, forest products were the largest group among classes of exports. In terms of value, wood products (except for two five-year periods) grew steadily. After 1876 animals and animal products grew in importance while agricultural products remained about the same in value. From Table 1 it is clear that growth of exports during the period 1851-1900 centered in agriculture, animals-animal products and forest products.¹

A satisfactory disaggregation of export values in Table 1 is not available for the years before 1900. The volumes of domestic production of selected major items being exported are given in Table 2 for Canada as a whole and for Ontario and Quebec. This information shows the preponderance of Ontario, with significant help from Quebec in certain cases, in the production of commodities.

Important Features of the Period

During the period 1851-1900, the majority of exports were pro-

¹Table 1 probably understates the value of commodity exports. Firestone's estimates, which he gives for decadal years, are slightly higher.

TABLE 1

EXPORTS BY CLASSES IN FIVE-YEAR AVERAGES AND FOR THE FISCAL YEARS, 1911-14

Exports	1868- 1870	1871- 1875	1876- 1880	1881- 1885	1886- 1890	1891- 1895	1896- 1900	1901- 1905	1906- 1910	1911	1912	1913	1914
	(\$ millions)												
Agriculture	12.9	15.0	19.1	20.4	15.4	18.2	23.1	34.7	63.6	82.6	107.1	150.1	198.2
Animals and Their Prod.	9.2	13.3	14.7	22.0	24.0	30.5	44.5	62.3	56.4	52.2	48.2	44.7	53.3
Fisheries	3.4	4.7	6.3	7.9	7.4	9.9	10.6	11.7	13.8	15.6	16.7	16.3	20.6
Forest Prod.	20.2	25.8	18.5	24.2	22.4	24.6	28.5	32.9	40.7	45.4	40.8	43.2	42.7
Manufactures	2.3	2.9	3.8	3.3	4.0	7.2	11.0	19.2	26.5	35.2	35.8	43.6	57.4
Minerals	1.8	4.1	3.2	3.1	4.2	5.9	14.3	34.3	35.6	42.7	41.3	57.4	59.0
Miscellaneous	.3	.4	.4	.5	.5	.1	.1	.1	.1	.2	.1	.1	.1
Total	50.3	66.5	66.3	81.7	78.1	96.7	132.4	195.4	236.9	275.3	290.2	355.7	431.5
	(percentage distribution)												
Agriculture	26.0	22.7	28.8	24.4	19.2	18.5	17.4	17.9	27.0	30.0	36.9	42.1	45.9
Animals and Their Prod.	18.0	19.7	22.7	26.8	30.7	30.9	33.3	31.8	23.6	19.3	16.2	12.6	12.3
Fisheries	6.0	6.6	9.2	9.8	9.8	10.3	8.3	6.1	5.9	5.8	5.8	4.5	4.9
Forest Prod.	40.0	37.9	27.3	29.6	28.2	25.0	21.2	16.9	17.3	16.4	14.1	12.0	9.9
Manufactures	4.0	4.5	6.0	3.6	5.1	7.2	8.3	9.7	10.9	12.7	12.4	12.3	13.2
Minerals	4.0	6.0	4.5	3.6	5.1	6.3	10.6	17.4	15.2	15.7	14.1	16.0	13.7
Miscellaneous	2.0	2.6	1.5	2.2	1.9	2.1	.9	.2	.1	.1	.5	.5	.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Derived from Table 5.

TABLE 2

VOLUME OF DOMESTIC PRODUCTION OF SELECTED ITEMS FOR CANADA,
ONTARIO AND QUEBEC, 1871-1901
(millions)

	1871	1881	1891	1901
Agriculture:				
Wheat, Barley, Oats (bushels)				
Canada	70.0	119.0	142.0	229.0
Ontario	45.0	81.0	81.0	132.0
Quebec	17.0	24.0	22.0	39.0
Fruit - apples (bushels)				
Canada	6.3	13.3	7.5	18.6
Ontario	5.4	11.4	5.0	13.6
Quebec	.4	.8	1.0	2.0
Animals and Animal Products:-				
Cattle, Sheep, Swine killed and sold (head)				
Canada	3.5	3.5	4.0	4.5
Ontario	1.7	1.8	2.2	2.8
Quebec	.8	.8	.9	1.0
Butter (pounds)				
Canada	74.1	102.5	111.5	105.3
Ontario	37.6	54.8	55.5	55.3
Quebec	24.2	30.6	30.1	18.3
Cheese (pounds)				
Canada	4.9	3.1	6.2	--
Ontario	3.4	1.7	1.0	--
Quebec	.5	.5	4.2	--
Forest Products				
Cubic Feet of Pine				
Canada	2611	43.5	10.5	2.3
Ontario	16.3	14.1	7.4	1.0
Quebec	9.2	5.4	1.9	1.1
Cubic Feet of Other Timber				
Canada	26.1	43.5	10.5	2.3
Ontario	10.5	26.2	4.8	1.1
Quebec	10.4	14.3	11.4	3.6

Source: Canada Year Book, 1905.

TABLE 3

THE TEN LEADING ITEMS OF EXPORT - CANADA, 1890-1920
(\$ millions)

Commodity	1890	1900	1910	1920
Planks and boards	17.6	22.0	33.1	75.2
Cheese	9.3	19.8	21.6	36.3
Fish	8.0	10.5	15.1	40.6
Cattle	6.9	8.7	10.7	46.0
Barley	4.6			
Timber, square	4.3			
Coal	2.4	4.5		
Furs, raw	1.8			
Fruits, chiefly apples	1.0	3.3		
Hair	1.0			
Wheat		11.9	52.6	185.0
Meats		13.6		96.1
Gold, raw		14.1	6.0	
Butter		5.1		
Wheat flour			14.8	94.2
Silver ore and bullion			15.0	
Copper ore and blister			6.0	
Hides and skins, raw			5.5	
Newsprint				53.6
Woodpulp				41.3
Sugar and products				30.6

Source: Canada Year Book, 1940, p. 521.

duced in the Central Provinces, especially in Ontario. Timber products played a dominant role at least until 1890. There was a decided trend toward the further processing of raw materials.

In the early period 1870-90, the two most significant staples in rate of growth . . . and magnitude of value added in manufacturing were primary wood products and primary food products. Judged by its more rapid expansion and size of value added, it would appear that the lumber trade continued during 1870-90 to be the dominant nineteenth century staple.¹

It has been estimated that in 1870 30 percent of Canada's exports were primary products.² Between 1870 and 1915 it is estimated that the proportion of primary products being exported was 40 percent of the total. The percentage was probably well above 40 percent during 1910-15.

A ranking of the ten leading items of export in Table 3 shows planks and boards in first place both in 1890 and 1900.³ Wheat does not appear on the list until 1900.

Canada's Terms of Trade

Charts 2-5 and Table 4 summarize Canada's foreign trade, 1868-1914. The trend for all trade was steadily upward - although growth

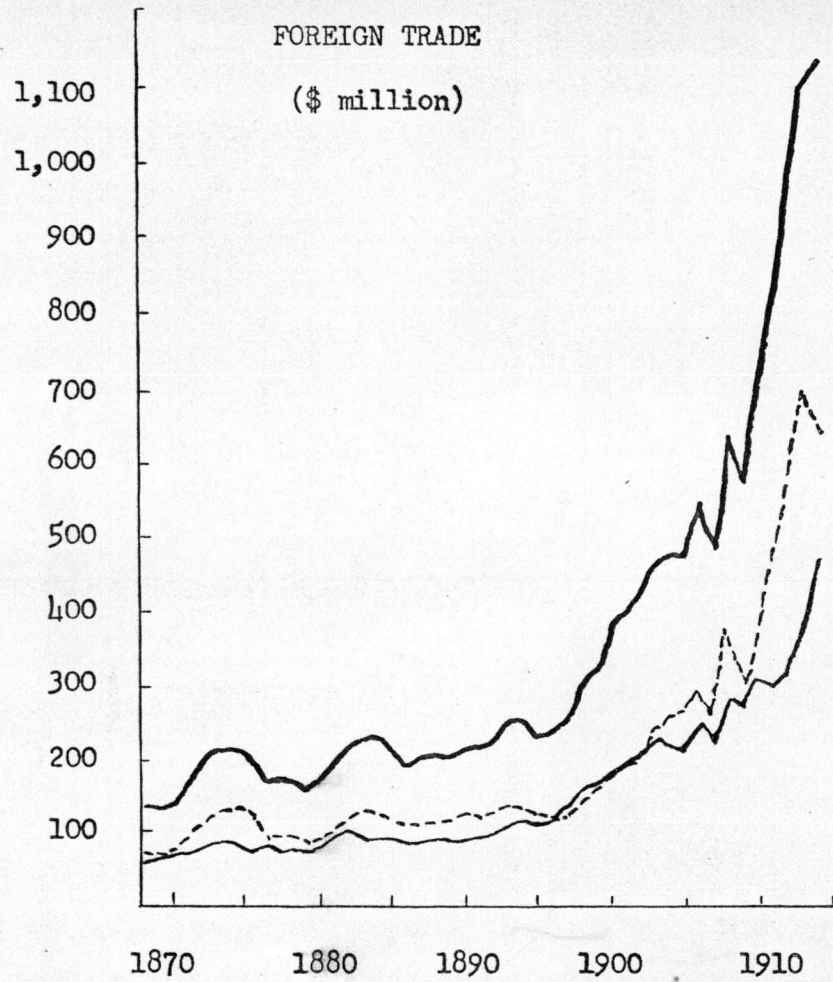
¹Gordon W. Bertram, "Economic Growth in Canadian Industry, 1870-1915: The Staple Model and the Take-off Hypothesis," CJEPS, XXIX (May, 1963), pp. 175-76.

²Ibid., p. 174n.

³Data on timber exports prior to 1890 are incomplete but would certainly show timber products as number one item of export for earlier years as well.

CHART 2

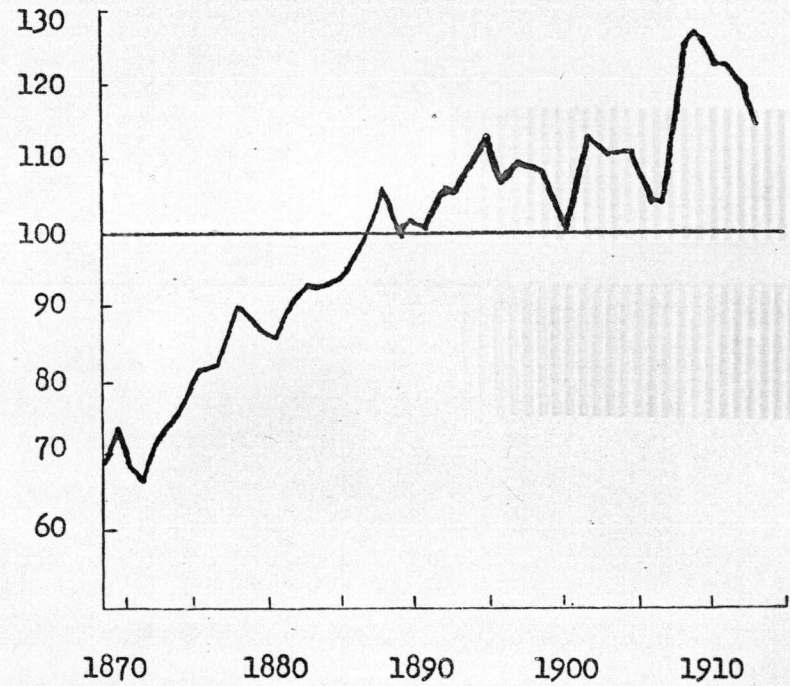
FOREIGN TRADE
(\$ million)



Source: Table 4.

CHART 3

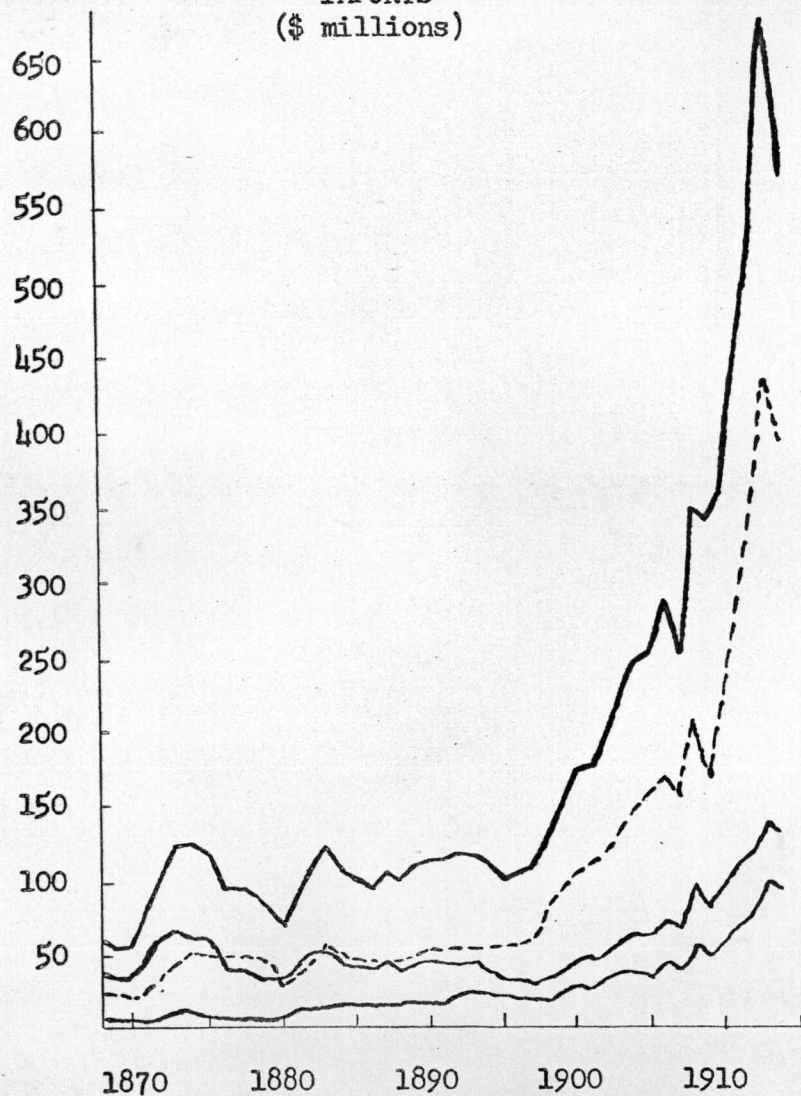
CANADA'S TERMS OF TRADE
(1900 = 100)



Source: Table 4.

CHART 4

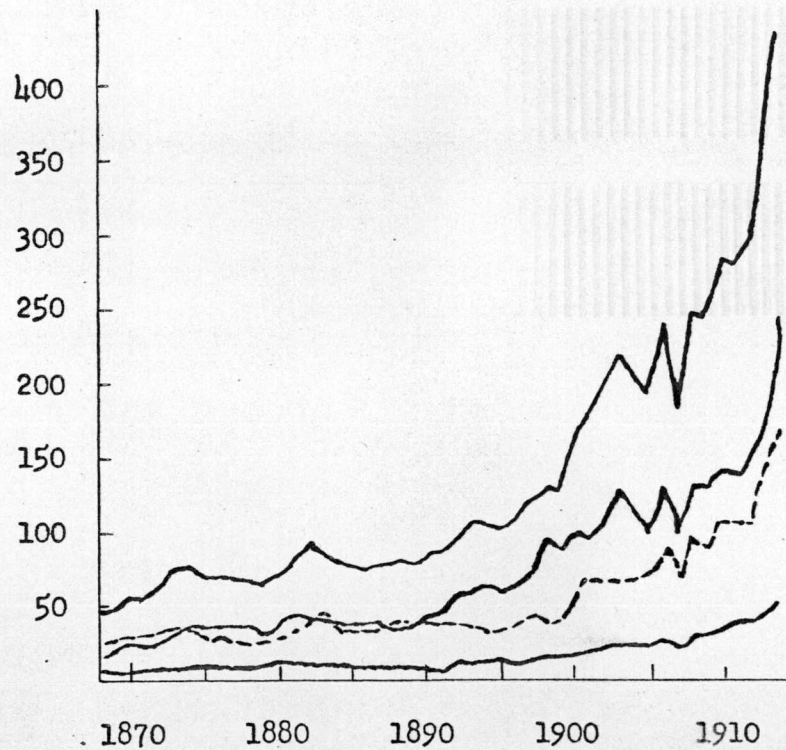
IMPORTS
(\$ millions)



Source: Table 4.

CHART 5

EXPORTS
(\$ millions)



Source: Table 4.

TABLE 4

AGGREGATE EXTERNAL TRADE OF CANADA, FISCAL YEARS 1868-1914

Year	Total Exports (\$m)	Total Imports (\$m)	Value per Capita		Export Price Index	Import Price Index	Terms of Trade (X/M)
			Exports (\$)	Imports (\$)			
1868	57.5	73.4	17.07	21.78			
1869	60.4	70.4	17.72	20.63	89.4	133.0	67.2
1870	73.5	74.8	21.29	21.66	88.4	117.6	75.2
1871	74.1	96.0	21.08	27.31	93.4	137.2	68.1
1872	82.6	111.4	22.88	30.86	95.5	145.7	65.6
1873	89.7	128.0	24.48	34.89	99.1	140.1	71.1
1874	89.3	128.2	23.36	33.52	101.0	132.9	76.1
1875	77.8	123.0	20.04	31.66	105.8	135.4	78.2
1876	80.9	93.2	20.50	23.60	109.1	132.9	82.1
1877	75.8	99.3	18.90	24.75	98.1	119.2	82.3
1878	79.3	93.0	19.44	22.82	100.9	113.5	88.9
1879	71.4	81.9	17.24	19.77	91.6	104.4	87.8
1880	87.9	86.4	20.85	20.52	93.8	109.4	85.7
1881	98.2	105.3	22.67	24.29	97.5	113.3	86.1
1882	102.1	119.4	23.30	27.24	107.2	117.4	91.3
1883	89.0	132.2	22.13	29.84	109.6	117.8	93.1
1884	91.4	116.3	20.39	25.96	104.8	114.3	91.7
1885	89.2	108.9	19.67	24.01	99.2	107.3	92.5
1886	85.2	104.4	18.59	22.77	96.1	101.5	94.7
1887	89.5	112.8	19.31	24.35	96.3	97.7	98.6
1888	90.2	110.8	19.25	23.67	101.6	95.9	106.0
1889	81.1	115.2	18.83	24.33	101.3	102.1	99.2
1890	96.7	121.8	20.20	25.45	103.5	102.4	101.1

1891	98.4	119.9	20.32	24.76	104.0	104.2	99.8
1892	113.9	127.4	23.31	26.06	103.0	97.8	105.3
1893	118.5	129.0	24.02	26.15	100.7	96.3	104.6
1894	117.5	123.4	23.58	24.78	101.0	93.7	107.8
1895	113.6	110.7	22.57	22.01	96.5	85.3	113.1
1896	121.0	118.0	23.79	23.20	93.1	87.9	105.9
1897	137.9	119.2	26.83	23.18	90.9	83.8	108.5
1898	164.1	140.3	31.57	26.99	97.0	88.8	109.2
1899	158.8	162.7	30.31	30.95	95.4	89.6	106.5
1900	191.8	189.6	36.05	35.63	100.0	100.0	100.0
1901	196.4	190.4	36.37	35.24	101.6	94.0	108.1
1902	211.6	212.2	38.26	38.37	103.3	92.2	112.0
1903	225.8	241.2	39.81	42.52	105.0	95.7	109.7
1904	213.5	259.2	36.66	44.50	103.0	92.7	111.1
1905	203.3	266.8	33.93	44.53	108.2	97.8	110.6
1906	256.5	294.2	41.58	47.69	112.1	108.7	103.1
1907	205.2	259.7	32.57	41.42	119.9	115.6	103.7
1908	280.0	370.7	43.14	57.12	122.2	96.8	126.2
1909	261.5	309.7	39.06	46.27	124.0	97.1	126.7
1910	301.3	391.8	43.57	56.65	124.9	102.3	122.1
1911	297.1	472.2	41.52	65.97	123.9	101.1	122.6
1912	315.3	559.3	42.23	74.91	129.4	108.0	119.6
1913	393.2	692.0	50.69	89.19	126.0	109.7	114.9
1914	478.9	650.7	59.32	80.59			

Note: Aggregate trade includes the exports and imports of coin and bullion.
For the price indexes 1900 = 100.

Sources: Canada Year Book, 1915, pp. 251-52; J. A. Stovel, Canada in the World Economy, p. 97, for series 1869-1900; and A. K. Cairncross, Home and Foreign Investment, 1870-1913, p. 61, for series 1900-1913.

TABLE 5

VALUES OF EXPORTS FROM CANADA TO UNITED KINGDOM, UNITED STATES, AND TO OTHER COUNTRIES BY CLASSES OF MERCHANDISE THE PRODUCE OF CANADA IN FIVE-YEAR AVERAGES AND FOR THE FISCAL YEARS 1911-14
(\$ millions)

Five Year Averages	Agricultural Produce				Animals and Their Produce			
	U.K.	U.S.	Other	Totals	U.K.	U.S.	Other	Totals
1868-1870	4.3	7.8	.6	12.9	3.4	5.3	.4	9.2
1871-1875	6.6	7.4	.8	15.0	6.7	6.1	.5	13.3
1876-1880	9.3	8.6	1.0	19.1	9.2	4.9	.5	14.7
1881-1885	7.9	11.3	1.1	20.4	15.1	6.3	.5	22.0
1886-1890	5.7	8.7	.9	15.4	16.5	6.9	.5	24.0
1891-1895	11.7	4.4	2.0	18.2	26.2	3.6	.6	30.5
1896-1900	18.1	1.9	2.9	23.1	39.4	4.5	.6	44.5
1901-1905	25.1	3.6	5.9	34.7	55.7	5.1	1.3	62.3
1906-1910	51.5	4.6	7.4	63.6	47.4	7.8	1.1	56.4
1911	61.3	10.3	10.8	82.6	40.6	10.0	1.5	52.2
1912	81.8	11.6	13.6	107.1	36.9	9.8	1.4	48.2
1913	106.5	27.2	16.3	150.1	30.3	12.8	1.5	44.7
1914	146.2	32.5	19.4	198.2	26.7	22.7	1.8	53.3

	Fisheries Produce				Forest Produce			
1868-1870	.2	.9	2.1	3.4	10.3	8.0	1.7	20.2
1871-1875	.5	1.2	2.9	4.7	13.8	9.4	2.5	25.8
1876-1880	1.0	1.7	3.5	6.3	12.0	4.9	1.6	18.5
1881-1885	1.8	2.0	3.1	7.9	12.4	9.5	2.1	24.2
1886-1890	1.7	2.8	2.8	7.4	10.7	9.9	1.7	22.4
1891-1895	3.3	3.4	3.2	9.9	10.5	12.5	1.4	24.6
1896-1900	4.2	3.2	3.1	10.6	14.5	12.2	1.7	28.5
1901-1905	3.8	4.1	3.7	11.7	14.7	15.5	2.7	32.9
1906-1910	4.1	4.4	5.2	13.8	11.4	25.4	3.8	40.7
1911	4.4	4.9	6.2	15.6	11.9	28.7	4.6	45.4
1912	5.1	5.3	6.1	16.7	10.9	25.4	4.4	40.8
1913	3.9	3.7	6.6	16.3	10.1	29.9	3.1	43.2
1914	7.0	6.8	6.7	20.6	10.6	29.3	2.8	42.7
	Manufactures				Mineral Produce			
1868-1870	1.1	.8	.3	2.3	.6	1.0	.1	1.8
1871-1875	1.2	1.2	.4	2.9	.5	3.3	.2	4.1
1876-1880	1.9	1.0	.8	3.8	.4	2.6	.1	3.2
1881-1885	1.3	1.3	.6	3.3	.3	2.5	.2	3.1
1886-1890	1.5	1.7	.8	4.0	.5	3.4	.2	4.2
1891-1895	2.6	3.0	1.6	7.2	.4	5.1	.3	5.9
1896-1900	4.6	3.5	2.8	11.0	.2	13.6	.4	14.3
1901-1905	6.6	6.9	5.5	19.2	.7	32.3	1.2	34.3
1906-1910	6.8	11.4	8.2	26.5	2.1	31.3	2.0	35.6
1911	6.9	16.5	11.7	35.2	6.7	33.1	2.9	42.7
1912	6.8	16.3	12.6	35.8	5.5	33.2	2.5	41.3
1913	7.1	21.3	15.2	43.6	12.0	42.5	2.8	57.4
1914	8.5	30.3	18.4	57.4	16.0	39.4	3.5	59.0

	Miscellaneous Produce				Total Value of Exports			
1868-1870	.01	.3	.02	.3	20.3	24.4	5.5	50.3
1871-1875	.04	.3	.02	.4	29.6	29.2	7.6	66.5
1876-1880	.03	.3	.00	.4	34.0	24.3	7.9	66.3
1881-1885	.03	.5	.00	.5	39.1	34.6	7.9	81.7
1886-1890	.04	.5	.00	.5	36.8	34.1	7.1	78.1
1891-1895	.01	.05	.00	.07	55.0	32.3	9.3	96.7
1896-1900	.03	.06	.00	.1	81.3	39.1	11.8	132.4
1901-1905	.02	.03	.00	.06	106.9	67.9	20.5	195.4
1906-1910	.03	.03	.01	.09	123.6	85.2	28.0	236.9
1911	.02	.2	.01	.2	132.1	104.1	38.0	274.3
1912	.04	.05	.01	.1	147.2	102.0	40.9	290.2
1913	.01	.08	.00	.09	170.1	139.7	45.8	355.7
1914	.02	.09	.00	.1	215.2	163.3	52.9	431.5

Note: Statistics are exclusive of coin and bullion, and of exports to the United States estimated "short" for the years 1868-1900. Rows may not total due to rounding.

Source: Canada Year Book, 1915, pp. 258-60.

TABLE 6

CANADA'S EXPORTS AND IMPORTS, 1868-1914
(\$ millions)

33

Fiscal Year	Exports of Merchandise the Produce of Canada				Imports of Merchandise entered for home consumption			
	U.K.	U.S.	Other	Totals	U.K.	U.S.	Other	Totals
1868	17.9	22.3	5.2	45.5	37.6	22.6	6.8	67.0
1869	20.4	23.6	5.1	49.3	35.4	21.4	6.1	63.1
1870	22.5	27.3	6.1	56.0	37.5	21.6	7.6	66.9
1871	21.7	26.7	6.7	55.1	48.4	27.1	8.5	84.2
1872	25.2	29.9	7.7	62.9	62.2	33.7	9.0	104.9
1873	31.4	33.4	8.4	73.2	67.9	45.1	11.3	124.5
1874	35.7	30.3	7.7	73.9	61.4	51.7	10.0	123.1
1875	34.1	25.6	7.6	67.4	60.0	48.9	8.4	117.4
1876	34.3	27.4	8.0	69.8	40.4	44.0	7.9	92.5
1877	35.4	22.1	8.2	65.8	39.3	49.3	5.4	94.1
1878	35.8	22.1	7.7	65.7	37.2	48.0	5.1	90.3
1879	29.3	23.1	7.5	60.0	30.9	42.1	5.5	78.7
1880	35.2	26.7	8.1	70.0	33.7	28.1	7.9	69.9
1881	42.6	31.0	7.2	80.9	42.8	36.3	11.2	90.4
1882	39.8	41.6	8.5	90.0	50.3	47.0	13.7	111.1
1883	39.5	36.0	8.6	84.2	51.6	55.1	15.0	121.8
1884	37.4	31.6	8.0	77.1	41.9	49.7	14.2	105.9
1885	36.4	32.6	7.0	76.1	40.0	45.5	14.1	99.7
1886	36.6	31.5	6.7	74.9	39.0	42.8	14.1	95.9
1887	38.7	32.2	6.9	77.9	44.7	44.7	15.5	105.1
1888	33.6	37.3	7.3	78.2	39.1	46.4	15.0	100.6

1889	33.5	36.4	7.2	77.2	42.2	50.0	16.8	109.0
1890	41.4	33.2	7.5	82.3	43.2	51.3	17.0	111.6
1891	43.2	34.8	7.6	85.7	42.0	52.0	17.4	111.5
1892	54.9	31.3	9.4	95.1	41.0	51.7	22.3	115.1
1893	58.4	33.8	9.7	102.0	42.5	52.3	20.3	115.1
1894	60.8	29.2	10.4	100.5	37.0	50.7	21.2	109.0
1895	57.9	32.3	9.3	99.5	31.0	50.1	19.4	100.6
1896	62.7	34.4	9.2	106.3	32.8	53.5	19.0	105.3
1897	69.5	39.7	10.4	119.6	29.4	57.0	20.1	106.6
1898	93.0	34.3	12.4	139.9	32.0	74.8	19.4	126.3
1899	85.1	34.7	12.9	132.8	36.9	88.4	23.9	149.3
1900	96.5	52.5	14.4	163.5	44.2	102.0	26.1	172.5
1901	92.8	67.9	16.5	177.4	42.8	107.1	27.7	177.7
1902	109.3	66.5	20.1	196.0	49.0	114.7	32.7	196.4
1903	125.1	67.7	21.4	214.4	58.7	128.7	37.2	224.8
1904	110.1	66.8	21.4	198.4	61.7	143.0	38.8	243.5
1905	97.1	70.4	23.3	190.8	60.3	152.4	30.8	251.6
1906	127.4	83.5	24.4	235.4	69.1	168.7	45.2	283.2
1907 ^a	98.6	62.2	19.5	180.5	64.4	148.5	36.7	249.7
1908	126.1	90.8	29.9	246.9	94.4	204.6	52.8	351.8
1909	126.3	85.3	30.8	242.6	70.6	170.0	47.4	288.2
1910	139.4	104.1	35.5	279.2	95.3	217.5	56.9	369.8
1911	132.1	104.1	38.0	274.3	109.9	274.8	66.9	451.7
1912	147.2	102.0	40.9	290.2	116.9	330.4	74.1	521.4
1913	170.1	139.7	45.8	355.7	138.7	435.7	95.5	670.0
1914	215.2	163.3	52.9	431.5	131.9	395.5	90.8	618.3

^aFor nine months only.

Note: Excluding coin and bullion.

Source: Canada Year Book, 1913, pp. 228-30.

was not as rapid as after 1900. Fluctuations in exports were less severe than for imports, especially in the 1870s and 1880s. The steady improvement in the terms of trade (the index of export prices divided by the index of import prices) is shown in Chart 3. The index of export prices rose generally from 1869 to 1900; but the import price index fell considerably more, thereby bringing about steady improvement for Canada. World demand for staple products was rising generally throughout the period 1851-1900. The European countries and the United States were rapidly industrializing. Between 1870 and 1913 world manufacturing activity increased more than four-fold.¹ As they diverted capital and labor away from agricultural production to industrial production, their demand for agricultural imports grew. At the same time, the prices of manufactured goods was falling as industrial production realized the benefits of economies of scale and increasing specialization.² According to Professor Ashworth:

In the fifteen years from 1890 trade in primary products was on the whole increasing faster than that in manufactured goods, especially in the earlier years, while from about 1905 the reverse was true.³

Per capita value of Canada's exports doubled between 1868 and

¹William Ashworth, A Short History of the International Economy, 1850-1950. London: Longmans, Green and Company, 1952, p. 38.

²See Table A-8, appendix.

³Ashworth, ibid., p. 165.

1900 from \$17 to \$36 while imports per capita almost doubled - going from \$22 to \$36.

Demand For Canada's Exports

Canada's foreign trade was largely with the United Kingdom and the United States. In 1868 Canada's commodity debit trade balance was about \$20 million. Canada's trade balance was passive until 1895. The debit balance had grown progressively smaller especially after 1880. After 1891 Canada consistently had a credit trade balance with Great Britain. The opposite obtained between Canada and the United States. This set of circumstances enabled a triangular adjustment of the balance of indebtedness.

The changes in demand for Canadian produce were significant (Table 5). In the 1870s and 1880s the United States bought more than half of Canada's agricultural exports. After 1890 the pattern changed. United States demand was being increasingly met from growing domestic production. The United States farm was becoming more highly mechanized and efficient. The British economy was expanding steel and textile production while importing more of its food. Great Britain was also the major market for Canadian exports of animals and animal products after 1880.

British demand for Canadian forest products rose slightly in the late 1800s and then settled back to a level of about \$10 million by 1914 while United States demand was growing rapidly between 1890 and 1914. The eastern supplies of pine timber in the United States

were depleted by 1900 and consequently the United States turned to Canada as a major source of lumber and wood products. The increase in exports of manufactures to the United States was due to increased United States demand for pulp and paper which grew rapidly after 1900.

Foreign Investment

Foreign capital was attracted into Canada to a large extent by railroad building. During the 1850s Canada experienced its first railroad building boom which attracted a good deal of foreign capital.¹

All the concomitants of a boom were present: labor and materials scarcity, rapid urban growth and rising land values. The government participated freely in raising capital abroad - a pattern which became standard in Canada. The years 1857-58 were hit by crisis as the result of a poor harvest in 1857. Depression ensued. There was little borrowing abroad until Confederation. From 1867 to 1900, however, there was sustained growth and a consolidation of gains made in the 1850s. According to Penelope Hartland, "The real capital formation of the 1850s, however, provided the foundation for

¹H. C. Pentland's estimate places the amount at \$100 million. P. G. Hartland indicates the total was considerably greater. See Pentland, "The Role of Capital in Canadian Economic Development Before 1875," *CJEPS*, XVI (November, 1950), pp. 464-65; Hartland, *op. cit.*, p. 14.

TABLE 7

NET INFLOW OF FOREIGN CAPITAL, 1868-72 TO 1914
 (\$ million per calendar year or annual
 average; - sign indicates
 net outflow)

Year	Net Inflow of Foreign Capital ^a	Year	Net Inflow of Foreign Capital ^a
1868-72	16.5	1892-96	33.0
1869-73	21.7	1893-97	26.7
1870-74	29.9	1894-98	23.7
1871-75	34.3	1895-99	22.7
1872-76	34.2	1896-00	24.1
1873-77	32.0	1897-01	23.7
1874-78	29.0	1898-02	27.0
1875-79	22.7	1900	35.8
1876-80	18.2	1901	19.2
1877-81	17.5	1902	26.4
1878-82	19.6	1903	69.2
1879-83	23.4	1904	90.2
1880-84	28.4	1905	81.8
1881-85	33.7	1906	109.1
1882-86	37.9	1907	183.0
1883-87	39.4	1908	122.5
1884-88	40.0	1909	147.7
1885-89	42.6	1910	234.4
1886-90	45.2	1911	337.9
1887-91	46.3	1912	418.7
1888-92	46.6	1913	400.4
1889-93	45.3	1914	290.0
1890-94	42.3		
1891-95	38.0		

^aNet Inflow of Foreign Capital = Net Debit of Current Account Balance.

Source: P.G. Hartland, "Canadian Balance of Payments Since 1868," TAE, p. 718.

the subsequent increases in output and productivity."¹

Estimates of the net inflow of foreign capital are available for the years since Confederation. As Table 7 shows, there was a growing inflow of foreign capital following Confederation which was attracted by a small rail building boom in the early 1870s. During the late seventies the pace slackened. As a result of the renewed efforts on the part of the government, the transcontinental railroad was completed in 1885-86. Foreign capital inflow swelled in volume during the next twelve years (i.e., from 1880 on) going from \$23 million in 1879 to a high of \$47 million in 1888. During the nineties the inflow gradually diminished. The next great upswing came, of course, during the wheat boom after the turn of the century.

Sources and Application of Foreign Capital

The estimates of foreign capital inflow into Canada were derived using two different methods, as shown in the table, and are in surprising agreement. However, these should be viewed as "minimum" amounts rather than averages. Distributing inflows of foreign capital according to type, public issues floated mainly in Great Britain amounted to \$789 million, United States direct and private investments came to \$191 million, British direct and private investments added another \$90 million and the investments by all other countries

¹Hartland, ibid., p. 14.

(principally Western Europe) accounted for the remaining \$35 million.¹

ESTIMATES OF FOREIGN CAPITAL IN CANADA, 1868-1899

Period	Direct Estimate		Balance of Payments Estimate	
	(\$m)	(%)	(\$m)	(%)
1868-79	238.8	22	281.3	26
1880-89	454.3	41	384.3	36
1890-99	412.3	37	400.5	38
	1,105.4	100	1,066.0	100

Source: Hartland, Trends in the American Economy, p. 740.

It has been estimated there was a total of \$200 million of foreign capital in Canada before Confederation.² (British investment: 70 in provincial bonds, 90 in railroads and 25 other; United States: 15 chiefly in lumber and mines). The total foreign capital invested in Canada before 1900 totals about \$1.3 billions, according to the above estimates.

The first incentive to foreign investment in Canada (i.e., since 1850) was the building of the railroads. The largest portion of capital invested in railroads was British. The return on capital was falling during the seventies and eighties in the industrial nations. The situation in Britain is indicated by the following figures:

¹Hartland, Trends in the American Economy, p. 740.

²Ibid., pp. 741-42.

	Rates on Bankers' Best 3- Months' Bills	Yield on Consols percent	Index of fixed- interest securities prices (1900 = 100)	Index of Industrial Securities Prices
1873	4.70	3.24	81.5	84.3
1879	2.14	3.08	85.5	58.0
1883	3.22	2.96	91.5	61.8
1886	2.33	2.97	93.0	58.7

Source: Rostow, British Economy of the Nineteenth Century, p. 68.

During these years of expansion in Canada, there was a demand for additional capital. The financing for the Canadian Pacific Railway was well-arranged with the Dominion government guaranteeing loans. The expectation of a good rate of return made the railroad a desirable investment to the British investor who faced falling yields at home.

United States investment went increasingly into branch companies as the processing of Canada's raw materials was expanded and new resources such as minerals began to be exploited.

The Transfer Mechanism

The period of the 1870s and the 1880s was one of falling prices in Canada and throughout the world. However Canada's prices did not fall as much as world prices. During these decades there was also more emigration from Canada than immigration into the country - due to more favorable employment opportunities in the United States.

It has been estimated that gross foreign capital inflow was 30 percent of domestic gross investment in 1870 and about 25 percent of DGI in 1900.¹

The data are not sufficiently good to attempt a rigorous examination and verification of the transfer mechanism for this period. Canada was on the gold standard but the classical theory neglects changes in income and spending and their effects on the balance of payments.²

It seems likely that a good portion of the loans made by British investors to Canada was spent directly in Great Britain for capital goods for railroad building and for the manufacturing industries. A growing amount was also used to service loans. For these the transfer was automatic. The funds transferred to Canada went largely into railroad construction and manufacturing enterprises and, therefore, induced considerable domestic investment and expenditure. Residential construction estimates bear this out. Gross residential capital formation was \$69 million in 1872, reached a high of \$95 million in 1873 -- the last year of the 1872-73 railroad boom -- gradually declined to a level of about \$30 million annually during the 1880s, and still lower during the 1890s.³

The construction activity increased demand for labor and materials

¹Hartland, *ibid.*, p. 718-19.

²Charles P. Kindleberger, *International Economics*. Homewood, Illinois: Richard D. Irwin, 1958 (Rev. Ed.), p. 350 ff.

³See Table 18.

and raised wages. It is generally assumed that the marginal propensity to import was high for Canada during this period since the major imports were capital goods and manufactures; and the Canadians enjoyed a high standard of living. Therefore, a good part of the real transfer of the funds sold to Canadian banks was brought about in this fashion.

Another part of the real transfer was effected via the United States with Canadians transferring a part of their British loans to the United States to be used to pay for additional imports from the United States.

Growth of Gross National Product

The first years following Confederation were generally prosperous for Canada. Plans for extending the railroads across the continent were made and construction begun. The "Pacific affair" which broke into the open in 1872 caused collapse of most of these plans.

The period 1873-1896 was a time of economic decline and depression for the world economy. Canada was affected to some degree by world economic conditions, but the Canadian economy continued to grow. During this time Canada's terms of trade began improving as the prices of manufactured goods fell and prices of raw materials rose in the world markets.¹

¹Table A-8, appendix.

Between 1870 and 1890 Canada's manufacturing output more than doubled.¹ Manufacturing in Quebec and Ontario prospered in the face of falling prices because of (1) increasing returns as the plants were able to enlarge and (2) declining transportation costs.

The Key Role of Staples

Table 8 contains estimated growth rates of primary, secondary and total manufacturing.² Total manufacturing grew faster for the period 1880-90 than for 1870-80. The rapid increase in primary manufacturing was the source of this growth.

Considerable growth was taking place in the processing of the staples.³ Food products processed in 1871 amounted to \$57 million. In 1881 this had risen to \$75 million and in 1891 was \$109 million. By 1901 the value of food products manufactured was \$125 million. Expansion in the processing of forest products was not as great as for food products but was nevertheless substantial. Timber and lumber products manufactured in 1871 amounted to \$41 million, in 1881 \$55 million and in 1891 totaled \$86 million. Manufactured timber and

¹Firestone, op. cit., p. 219.

²Bertram, op. cit., p. 168, gives these definitions: Primary manufacturing means "operations where relatively minor processing of domestic resources is required and production is from natural resource materials for sale mainly in export markets." Secondary manufacturing is "characterized by a higher degree of processing, greater dependence upon domestic markets, and reliance on both foreign and domestic inputs." Primary products have a competitive advantage vis-a-vis secondary products in international trade.

³Canada Year Book, 1905, pp. 120-33.

lumber products declined to \$80 million in 1901. This strongly indicates that staples played the key role in growth of Canada's economy during this period. Secondary manufacturing grew at a slower rate 1880-90 than during the preceding decade. Growth for all manufacturing slowed during the 1890s. The index in Table 9 indicates there were no abrupt changes before 1900.

Another factor which contributed to growth during the 1880s was the completion of the transcontinental railroad in 1885-86. Between 1881 and 1891, 6,500 miles of new railroad track were built and capital investment in railroads jumped from \$284.4 million in 1881 to \$632 million by 1891.¹

Rates of Growth in Gross National Product

Estimates of Gross National Product for ten-year periods between 1851 and 1900 show the economy growing steadily. During the nine-year period, 1851-1860, the economy grew an estimated 43 percent or from \$406 million to \$582 million.² Between 1860 and 1870 the pace slackened and the economy grew an estimated 31 percent. The decade 1870 to 1880 was slower still. There were setbacks in building the railroads, especially in securing financing. The total growth was only 28.5 percent.

Growth during the 1880s indicates more favorable conditions.

¹Tables A-4 and A-5, appendix.

²See Table 13. Exposition is based on GNP in 1935-39 dollars.

TABLE 8

GROWTH RATES OF GROSS VALUE OF MANUFACTURING OUTPUT IN CONSTANT
1935-39 DOLLARS. TOTAL PRIMARY AND SECONDARY MANUFACTURING,
SELECTED YEARS, 1870-1919
(compound annual rate)

Period	Total Manufacturing	Primary Manufacturing	Secondary Manufacturing
1870-80	4.4	3.6	5.0
1880-90	4.8	4.9	4.7
1890-1900 ^a	2.4	3.4	2.0
1900-10 ^a	6.0	5.0	6.2
1910-19	1.9	2.7	2.2

^aAll firms adjusted plus correction factor.

Source: Gordon W. Bertram, "Economic Growth in Canadian Industry, 1870-1915: The Staple Model and the Take-Off Hypothesis," *CJEPS*, XXIX (May, 1963), p. 170.

TABLE 9

GROSS VALUE OF PRODUCTION, PRIMARY, SECONDARY AND TOTAL MANUFACTURING
INDUSTRIES (STANDARD INDUSTRIAL CLASSIFICATION OF 1948)
SELECTED YEARS, 1870-1915
(\$ millions)

	Primary		Secondary		Total		Index (1935- 1939 = 100)
	Current	Constant	Current	Constant	Current	Constant	
1870 ^a	81,691	102,370	137,534	172,348	219,225	274,718	79.8
1880	102,993	143,444	200,497	279,244	303,490	422,688	71.8
1890	156,529	233,277	296,054	441,213	452,583	674,490	67.1
1900 ^b	199,300	319,380	335,300	537,320	534,600	856,700	62.4
1910 ^b	429,170	546,700	769,630	980,400	1,198,800	1,527,100	78.5
1915 ^c	494,000	538,130	851,700	927,770	1,345,700	1,465,900	91.8

^aIncludes estimate for P.E. Island. ^bAll firms adjusted plus correction factor. ^cFirms of over \$2500 plus correction factor.

Source: Gordon W. Bertram, op. cit., p. 169.

For this decade the GNP grew by 38 percent. The first transcontinental railroad was completed in 1885-86 and manufacturing continued to expand. For the decade 1890-1900 the growth rate was almost the same - 37.4 percent. Overall growth in GNP from 1851 to 1900 was 362 percent. Gains in GNP per capita and per worker - 1851 to 1900 - were 113 and 78.9 percent respectively.

The implicit price index (Table 10) indicates that over the period 1851-70 there was an annual increase in prices of 1.96 percent. From 1870-1900 there was a total decline of 6 percent or .22 percent annually (compound rates). The overall net effect, therefore, was a 35 percent increase - or .62 percent per annum

Value Added by Industrial Sectors

Another view of the 1851-1900 period can be obtained from the relative changes in value added by industry. Table 11 shows agriculture suffered a relative decline of almost six percent, manufacturing increased a modest 2.5 percent from 18.3 to 20.8, construction remained unchanged, forest industries declined by 8.7 percent - from 13.6 to 4.9 - and services expanded from 18.9 to 29.4 percent, for the largest change. Growth in the services sector reflect the changes in transportation, trade, finance and personal and professional services which were expanding rapidly.

This trend toward growth in the services sector is paralleled by the expansion of consumer goods industries. Comparing ten leading industries in 1851, 1870, 1890 and 1900, one finds

TABLE 10

GROSS NATIONAL PRODUCT, IN CURRENT AND 1935-39 DOLLARS,
AND IMPLICIT PRICE INDEX, SELECTED YEARS
(dollar figures in millions)

	1851	1860	1870	1880	1890	1900
Total:						
Current dollars	169	319	459	581	803	1,057
1935-39 dollars	406	582	764	982	1,366	1,877
Implicit price index (1935-39 = 100)	41.6	54.8	60.1	59.2	58.8	56.3
Per capita:						
Current dollars	68	98	125	135	167	197
1935-39 dollars	164	178	208	228	283	350
Per person working:						
Current dollars	244	335	410	433	505	592
1935-39 dollars	588	611	683	731	859	1,052

PERCENTAGE INCREASE IN GROSS NATIONAL PRODUCT
IN 1935-39 DOLLARS, SELECTED PERIODS

	1851-70	1870-90
Total:		
Over period	88.2	78.8
Annual average ^a	3.38	2.95
Per capita:		
Over period	26.8	36.1
Annual average ^a	1.26	1.55
Per person working:		
Over period	16.8	25.8
Annual average ^a	0.77	1.11

^aCompound rates.

Source: Firestone, op. cit., pp. 222-23.

TABLE 11

VALUE ADDED, BY INDUSTRY, SELECTED YEARS, 1851-1900
(dollar figures in millions)

	1851	1860	1870	1880	1890	1900
	(current dollars)					
Primary industries:						
Agriculture	54	122	153	186	217	282
Fishing and Trapping	1	3	5	11	13	17
Mining	1	2	4	6	11	35
Forest Operations	23	33	44	50	53	52
Total	79	160	206	253	294	386
Secondary industries:						
Manufacturing	31	48	87	110	189	223
Construction	7	13	14	22	37	41
Total	38	61	101	132	226	264
Service or tertiary industries	32	63	96	130	214	311
Total, all industries	149	284	403	515	734	961
Adjustment ^a	20	35	56	66	69	96
Gross National Product	169	319	459	581	803	1,057
	(percent based on current dollars)					
Primary industries:						
Agriculture	32.0	38.2	33.3	32.0	27.0	26.7
Fish and Trapping	0.6	1.0	1.1	1.9	1.6	1.6
Mining	0.6	0.6	0.9	1.0	1.4	3.3
Forest Operations	13.6	10.4	9.6	8.6	6.6	4.9
Total	46.8	50.2	44.9	43.5	36.6	36.5
Secondary:						
Manufacturing	18.3	15.0	19.0	18.9	23.5	20.8
Construction	4.2	4.1	3.0	3.8	4.6	4.2
Total	22.5	19.1	22.0	22.7	28.1	25.0
Service or tertiary	18.9	19.7	20.9	22.4	26.7	29.4
Total, all industries	88.2	89.0	87.8	88.6	91.4	90.9

^aComprises rent, indirect taxes less subsidies, plus net investment income.

Source: Firestone, *op. cit.*, p. 225.

TABLE 12
TEN LEADING INDUSTRIES, BY VALUE OF OUTPUT, SELECTED YEARS
(dollar figures in millions)

	Gross Value of Production (% of (\$ Total)			Gross Value of Production (% of (\$ Total)	
1851 ^a			1890		
Flour and Grist			Log Products	54	11.5
Mill Products	24	31.1	Flour and Grist		
Log Products	10	13.0	Mill Products	52	11.1
Shipbuilding	7	9.1	Clothing	34	7.2
Boots and Shoes	5	6.5	Boots and Shoes	19	4.0
Carding, Pulling and Woollens	4	5.2	Foundry Products	17	3.6
Tanned Leather	2	2.6	Bread, Biscuits and Confection.	15	3.2
Carriages and Wagons	2	2.6	Lumber Products	15	3.2
Alcoholic Beverages	1	1.3	Refined Sugar	12	2.6
Foundry Products	1	1.3	Tanned Leather	12	2.6
Furniture	1	1.3	Butter and Cheese	11	2.3
Total	57	74.0	Total	241	51.3
Total, All Mfg.	77	100.0	Total, All Mfg.	470	100.0
1870 ^a			1900		
Flour and Grist			Log Products	59	10.1
Mill Products	39	17.6	Flour and Grist		
Log Products	31	14.0	Mill Products	54	9.3
Boots and Shoes	16	7.2	Butter and Cheese	29	5.0
Clothing	12	5.4	Boots and Shoes	28	4.8
Tanned Leather	9	4.1	Clothing	22	3.8
Foundry Products	7	3.1	Bread, Biscuits and Confection.	21	3.6
Alcoholic Beverages	6	2.7	Foundry Products	16	2.7
Woolen Goods	6	2.7	Tanned Leather	14	2.4
Carriages and Wagons	5	2.2	Refined Sugar	13	2.2
Shipbuilding	4	1.8	Total	286	49.0
Total	135	60.8	Total, All Mfg.	584	100.0
Total, All Mfg.	222	100.0			

^aFor four provinces only.

Source: O.J. Firestone, "Canada's Economy, 1850-1900," TAE, p. 237.

shipbuilding disappears after 1870 as wooden ships were replaced by iron ships. Log products gained substantially and ranked first by 1900. Newcomer to the list in 1900 was slaughtering and meat packing. Bread, biscuits and confectionery was a major item already by 1890 and butter and cheese were fourth in value in 1900. Flour and grist mill products, which led the list in 1851 and 1870, dropped to second place thereafter. (Table 12). If the industries listed in Table 12 are divided on the basis of North's classification¹ of manufacturing -- i.e., materials-oriented, services to export industries, residentiary and footloose -- there is a significant decline in the relative importance of materials-oriented industries. Flour and logs production made up 41 percent of total manufacturing in 1851. The percentage for materials-oriented industries to 24 percent in 1870, 28 percent in 1890 and 24 percent in 1900. Services to export industries (foundry products) changed from one percent in 1851 to three percent in 1870, four percent in 1890 and three percent in 1900. Production for local consumption was 20 percent of total manufacturing in 1851, 24 percent in 1870, 20 percent in 1890 and 17 percent in 1900.

Two comments may be made about this distribution. The value of the ten commodities in Table 12 for four selected years as a percentage of the total value of manufacturing output dropped from 74 percent in 1851 to 49 percent in 1900. The number of products

¹Douglass C. North, "Location Theory & Regional Economic Growth," op. cit., p. 253.

being manufactured increased rapidly during the period 1851 to 1900 (partly by transfer of production from home to factory). Secondly the distribution of manufacturing among the categories listed is not very precise and is suggestive only.

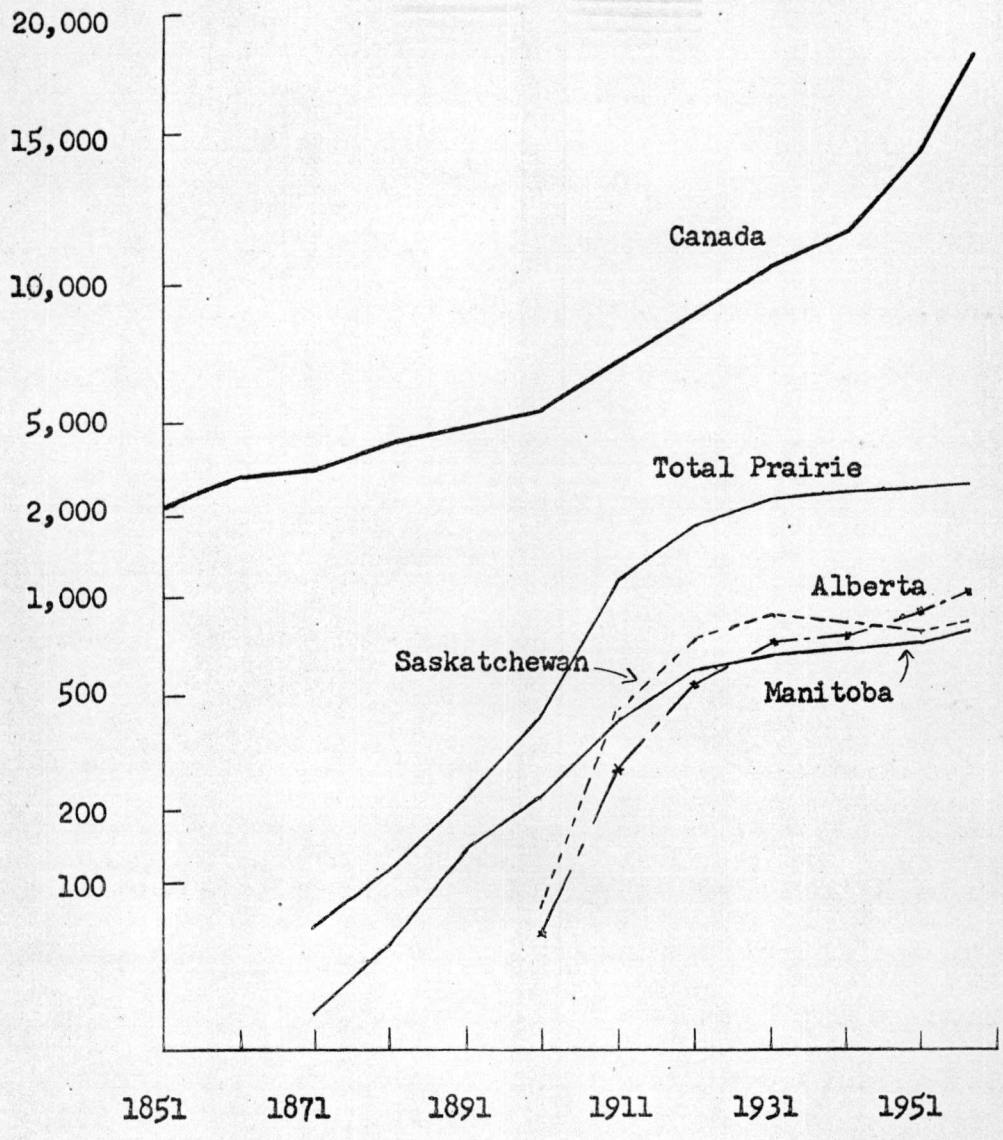
Population Growth

Between 1851 and 1861 the population grew by 33 percent from 2.4 million to 3.2 million. Immigration figures for this ten year period are 209,000 people while emigration is placed at 86,000.¹ During the 1860s population increased by 15.6 percent, immigration fell to 186,000 persons and emigration rose to 376,000. The upsurge in emigration followed the crisis of 1857-58 which was precipitated by the poor harvest of 1857. The depression which followed lasted until well into the 1860s.

Canadian population grew by 16 percent during the 1870s. There was a small railroad building boom (ending in 1873) which attracted additional immigrants. By 1870 the trend of immigration was upward - reaching its high point in the 1880s but holding at a high level until 1891. However, Canada continued to lose more people through emigration than were gained by immigration until 1900. In the 1880s and nineties population growth was a little more than 11 percent per decade. The rapid economic expansion which occurred

¹All migration figures include persons 10 years and older only. See Table 13 for alternative migration estimates. Exposition is based on Keyfitz's estimates shown in parentheses.

CHART 6
 CANADIAN POPULATION GROWTH 1851-1956
 (000)



Source: Canada Year Book.

TABLE 13

POPULATION BALANCE SHEET FOR CANADA, BY DECADES, 1851-1921
(thousands of persons, 10 years of age and over)

	Total Population Start of Decade	Natural Increase During Decade	Net Migration During Decade	Total Population End of Decade	Immigration During Decade	Emigration During Decade
1851-1861	1,639	464(495)	154 (123)	2,258	486 (209)	332 (86)
1861-1871	2,258	543(563)	-170(-191)	2,630	266 (186)	436 (376)
1871-1881	2,630	575(619)	- 40(- 85)	3,164	253 (353)	293 (438)
1881-1891	3,164	617(669)	-154(-205)	3,628	448 (903)	602(1,108)
1891-1901	3,628	595(654)	-115(-181)	4,107(4,101)	249 (326)	364 (507)
1901-1911	4,107(4,101)	631(711)	794 (715)	5,552(5,528)	1,111(1,782)	317(1,066)
1911-1921	5,532(5,528)	841*(916)	306 (233)	6,679(6,677)	1,373(1,592)	1,067 (360)
1921-1931	6,679(6,677)	1,348(1,389)	142 (103)	8,169	-- (1,198)	-- (1,095)

*Includes 120,000 additional deaths due to First World War.

Note: Figures in brackets are from Keyfitz, "Canadian Population," Table 4, p. 51. The differences in the total population figures results from the fact that for the years 1901-31 we used the figures in 1951 Census, I, Table 19, while Keyfitz used 1941, Census, II, Table 41.

Source: Duncan M. McDougall, op. cit., pp. 162-75.

TABLE 14
 IMMIGRANT ARRIVALS IN CANADA, CALENDAR YEARS 1852-1959

Year	Thousands	Year	Thousands	Year	Thousands	Year	Thousands
1852	29	1879	40	1906	212	1933	14
1853	29	1880	39	1907	272	1934	12
1854	37	1881	48	1908	143	1935	11
1855	25	1882	112	1909	174	1936	12
1856	23	1883	134	1910	287	1937	15
1857	34	1884	104	1911	331	1938	17
1858	12	1885	79	1912	376	1939	17
1859	6	1886	69	1913	401	1940	11
1860	6	1887	85	1914	150	1941	9
1861	14	1888	89	1915	37	1942	8
1862	18	1889	92	1916	56	1943	9
1863	21	1890	75	1917	73	1944	13
1864	25	1891	82	1918	42	1945	23
1865	19	1892	31	1919	108	1946	72
1866	11	1893	30	1920	139	1947	64
1867	15	1894	21	1921	92	1948	125
1868	13	1895	19	1922	64	1949	95
1869	19	1896	17	1923	134	1950	74
1870	25	1897	22	1924	125	1951	194
1871	28	1898	32	1925	85	1952	164
1872	37	1899	45	1926	136	1953	169
1873	50	1900	42	1927	159	1954	154
1874	39	1901	56	1928	167	1955	110
1875	27	1902	89	1929	165	1956	165
1876	26	1903	139	1930	105	1957	282
1877	27	1904	131	1931	28	1958	125
1878	30	1905	141	1932	21	1959	107

Source: Canada Yearbook, 1942, 1948-49, 1960.

TABLE 15
NUMBER OF HOMESTEAD ENTRIES, 1874-1933

Year	Number of Entries	Year	Number of Entries	Year	Number of Entries
1874	1,376	1894	3,209	1914	31,829
1875	499	1895	2,394	1915	24,088
1876	347	1896	1,857	1916	17,030
1877	845	1897	2,384	1917	11,199
1878	1,788	1898	4,848	1918	8,319
1879	4,068	1899	6,689	1919	4,227
1880	2,074	1900	7,426	1920	6,732
1881	2,753	1901	8,167	1921	5,389
1882	7,483	1902	14,633	1922	7,349
1883	6,063	1903	31,383	1923	5,343
1884	6,063	1904	26,073	1924	3,843
1885	1,858	1905	30,891	1925	3,653
1886	2,655	1906	41,869	1926	4,685
1887	2,036	1907	21,647	1927	5,760
1888	2,655	1908	30,424	1928	7,233
1889	4,416	1909	39,081	1929	16,157
1890	2,955	1910	41,568	1930	17,504
1891	3,523	1911	44,479	1931	15,133
1892	4,840	1912	39,151	1932	8,108
1893	4,067	1913	33,699	1933	5,215

Source: Canada Year Book.

following 1900 is reflected in the population growth rate which went up to 3½ percent for the period 1900-11. Immigration also increased rapidly. More than 1.7 million people entered the country during the decennial period 1901-11. Net migration became positive again for the first time since the 1850s.

Prairie Population Growth

The first official census figures for prairie population are given for 1871. Manitoba had 25,000 people and the Alberta-Saskatchewan area (which was still part of the Northwest Territories) had 48,000 people. Total prairie population increased by 45,000 during the 1870s and more than doubled during the 1880s to reach 252,000. During the 1890s prairie population added 167,000 people. The really dramatic growth took place, however, during the first two decades of the 1900s. By 1911 there were 1,327,000 people living on the prairies and the total was almost two million by 1921.

Closely correlated with immigration trends up to 1913 is the number of homestead entries recorded. Nearly 1400 entries were filed in 1874. Immigration had reached nearly 50,000 in 1873. During the next few years both immigration and homestead entries fell off. Railroad building slowed considerably during these years. Following the signing of the contract for building the Canadian Pacific Railway in late 1880, both the flow of immigrants and homesteaders increased; although the number of homestead entries fluctuated more sharply than the number of immigrants. Most of the immigrants during the period

1873-90 either settled in the Central Provinces or moved on to the United States. Closer investigation reveals that the prairie economy was not ready to receive great numbers of people, while especially Ontario and Quebec were growing and required additional labor.

Analysis of Population Growth

A variety of theories have been offered to explain the role of population growth in economic development.¹ The Canadian case has the unique additional feature of the large outflows of population concurrently with sizable inflows.

A model based on staple theory may be used to analyze the growth of population.² First there is an exogenous increase in demand for an export (e.g. wheat) and the exporting country has the resources to expand production for export. This leads to increased incomes and, after a lag, to new investment in the export sector. Through the multiplier, incomes in the home sector are increased which causes increased import demand. This in turn brings in additional customs and excise receipts and the government, with the new revenues, initiates new development programs.

World demand for wheat was rising during the 1850s, and Canada

¹For a review of various theories see D. C. Corbett, "Immigration and Economic Development," *CJEPS*, XVIII (August, 1951), pp. 360-68.

²McDougall, op. cit., p. 173.

experienced prosperity during this period¹ and alerted Canadians to the potential of expanded wheat production. Opening the prairies became a national goal. This ambition was not realized for another fifty years. It was important psychologically, however.

Exports based on wood, animal and agricultural products produced primarily in the Ontario-Quebec region continued to grow. Growth in the export sector stimulated investment in ancillary and service industries² which resulted in high incomes. The prices of imports were falling more rapidly than the prices of goods exported - with favorable effects on Canadian expansion. The federal government took an active part in promoting growth and development by guaranteeing railroad loans and giving cash and land subsidies. The government also began to promote immigration actively from the 1880s on.³

People generally can only be induced to move to a new location if there are strong incentives: the promise of prosperity, available resources, markets, technology and a supply of capital. The forces attracting the migrant are likely more significant than those pushing him from his original environment. In this sense, migration plays a passive but necessary role in the reallocation of resources. Population growth in an expanding economy complements other factors

¹Hartland, "Factors in Economic Growth in Canada," op. cit., pp. 13-22.

²Firestone, op. cit., pp. 223-27.

³The government did promote immigration earlier but not on a systematic basis.

by providing labor, increasing demand for consumer and durable goods, and spreading the burden of the cost of social overhead capital and government.

The prairies of Canada were hardly populated until 1870. Even by that date there was not sufficient population to justify the very large expenditures required for capital facilities. But in order to attract people it was necessary for the federal government to initiate the building of transportation facilities and set up a provincial government. Once this was done and other factors were favorable, the people came.

Development of the Prairies

The timing of the development of the prairie economy was determined by at least three factors. Available land on the American frontier was exhausted by about 1890. Canada was unable to attract and hold many immigrants as long as the United States was open to them and offered land for homesteading. The transcontinental railroad across Canada was not completed until 1885-86. Ability to market prairie crops depended on the railroad.¹ Finally, there were important technological problems which were solved near the end of the 19th century. Farm implements suitable for farming the prairie land had to be developed and new varieties of grain were needed due

¹Brinley Thomas, Migration and Economic Growth. Cambridge: University Press, 1954, Chapter 7.

to the shorter growing season and cold climate of the prairies. Important discoveries such as Red Fife and Marquis wheat were not made until around 1900. Important technological innovations in agricultural methods, especially those developed by the Mormons in Utah, and farm implements were borrowed from the United States and applied in the prairies.

A summary of several indicators of population growth, investment, and economic conditions after 1870 is depicted in Chart 7. Population growth was rapid during the 1850s¹ and resulted both from substantial natural increase and immigration. Economic conditions were especially favorable between 1851 and 1856. Substantial foreign capital entered the country in response to the railroad building boom. Between 1858-1867 depression ensued, foreign capital inflow slowed considerably, immigration fell off and emigration rose drastically. Had it not been for a larger natural increase, population growth would have been slowed even more. The fact that the natural increase remained high may be attributed to the fact that the population was generally a young one with a relatively high rate of fertility.

As might be expected, there is close correlation between prairie population growth, immigration into Canada, the number of homestead entries and rail miles built. There is also a fairly good correlation between net inflow of foreign capital (Table 7) and the four

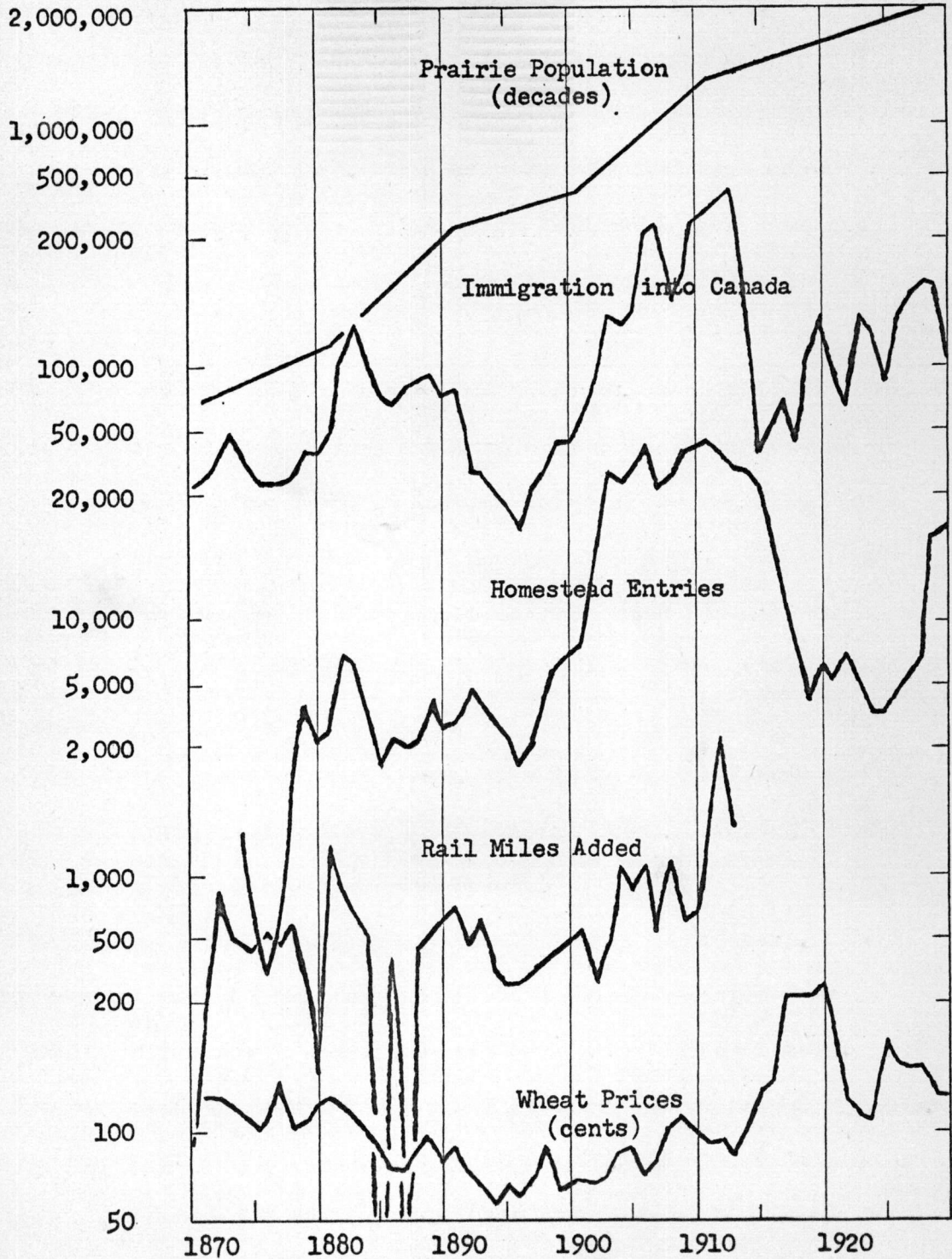
¹Table 13.

factors just mentioned. In contrast the price of wheat trended downward until 1894, after which it moved generally upward.

Prosperity following Confederation caused an upsurge in immigration. This was closely related to the railroad building boom which lasted until 1873. The prairies received some immigrants during the decade of the 1870s but this was a decade of net out-migration (although emigration was down compared with the 1860s). Following the signing of the new contract for building the Canadian Pacific Railway conditions improved. Immigration reached a new high in 1883 (but was offset by a record emigration during the decade), the transcontinental railroad was completed in 1885 and homesteads were taken up at an increased rate. The inflow of foreign capital also increased considerably (from \$20 million in 1879 to \$45 million in 1886). Prairie population growth continued at a steady pace and the total population grew at a slightly higher rate than during the previous decade. The 1880s were a decade of expansion in industries processing timber and foods. Foreign capital inflow was sustained throughout the decade.

During the 1890s the low-point in all trends was reached. The prairie boom started after 1896 when falling rail rates combined with rising wheat prices made wheat production highly profitable. Immigration began an upward trend after 1896, as did homestead entries. Prairie population grew very rapidly after 1900. As the prairie began filling up, substantial additions of railroad mileage were required and railroad building experienced a new boom. Foreign capital inflow grew rapidly after 1900.

CHART 7
GROWTH TRENDS



Sources: Tables A-1, A-3, A-4, 14, 15.

CHAPTER III

THE WHEAT BOOM, 1900-1914

The dynamics of Canadian development from 1896 to 1914 were the frontier, industrialization, urbanization and population growth. Directly responsible for the rapid economic change Canada experienced, after 1896, were the increased production and export of grain and minerals, investment in the prairie economy and investment in railroads and urban development.

The period 1900-1914 is the high point in Canadian economic growth.¹ The rate of increase in real national product has been placed at eight percent. Population grew at three percent annually while the labor force increased by five percent. The rate of net migration was at its highest level during this period. Other measures of the pace of expansion are the rapid increase in farm acreage and the rate of flow of foreign capital into Canada (five percent of GNP for 1901-05, nine percent for 1906-10, 12 percent for 1911-15).

From an estimated GNP of \$1,057 million in 1900, the figure rose to an average of \$1,130 million between 1901-05, and \$1,696 million annually between 1906-11. The rate of gross domestic capital formation averaged about 25 percent from 1900-15. This high

¹Hartland, "Factors in Economic Growth in Canada," *op. cit.*, pp. 13-22.

TABLE 16

DOMESTIC INVESTMENT, FOREIGN INVESTMENT AND
GROSS NATIONAL PRODUCT, 1901-30
(MILLIONS OF DOLLARS)

	1 Gross National Product	2 Gross Domestic Capital Formation	3 Foreign Investment	4 Gross Investment (2 - 3)	5 Percentage 2 is of 1	6 Percentage 4 is of 1
1901-05	5,650	1,283	- 301	982	22.7	17.4
1906-10	8,482	2,287	- 784	1,503	27.0	17.7
1911-15	12,178	3,279	-1,515	1,764	26.9	14.5
1916-20	20,923	4,033	- 262	3,771	19.3	18.0
1921-25	22,589	3,641	72	3,713	16.1	16.4
1926-30	28,758	5,831	- 563	5,268	20.3	18.3

Source: Kenneth Buckley, Capital Formation in Canada, 1896-1930, p.11.

rate was enabled in part by an inflow of \$2.5 billion from abroad.

Between 1900 and 1913, dominion, provincial and local governments borrowed about \$150 million abroad primarily for railroad construction. The railroad companies, generally with government backing, borrowed another \$750 million. A good share of the investment in railroads was for extension of lines in the prairies. By 1908 there was a total of 6,515 miles of railroad track in the three prairie provinces. Another 5,175 miles were added in the next five years. During the same period 7,829 miles were built in all of Canada. Thus the prairies' share was more than 65 percent.¹

PRAIRIE RAILROAD EXPANSION
(thousands of miles)

	1908	1910	1912	1914	1921	1931
Manitoba	3.1	3.2	3.5	4.1	4.4	4.4
Saskatchewan	2.1	2.9	3.8	5.1	6.3	8.3
Alberta	<u>1.3</u>	<u>1.5</u>	<u>1.9</u>	<u>2.5</u>	<u>4.6</u>	<u>5.6</u>
Total	6.5	7.6	9.2	11.7	15.3	18.3

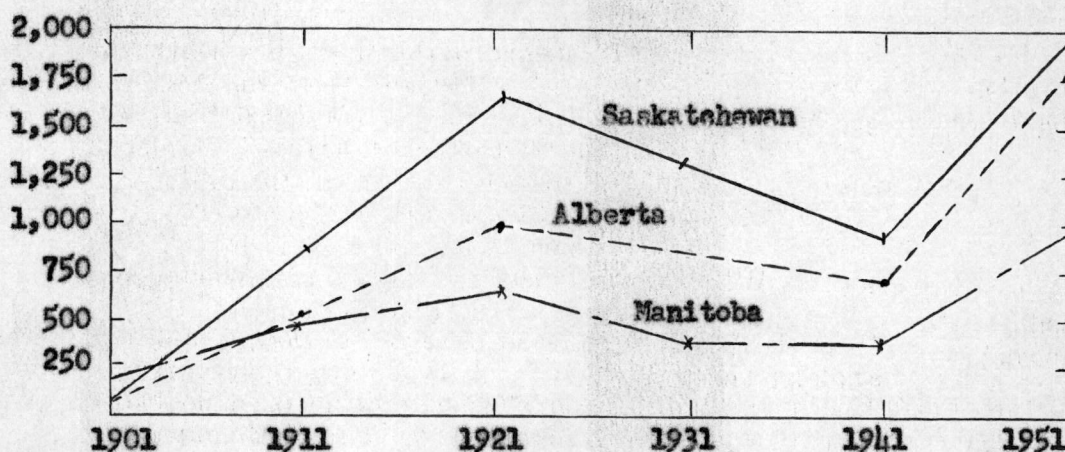
Source: Canada Year Book.

Homestead entries averaged over 29,000 annually from 1900 to 1914. In 1881 occupied farm acreage in the prairies accounted for only 5.9 percent of the total for all of Canada. The prairie share increased to one-fourth of the total for Canada in 1901 and 52.9 percent in

¹Table A-4, appendix

1911.¹ The same trend holds for improved acreage. Although in 1911 half of all the land farmed in Canada was on the prairies, less than a third of all persons employed in Canadian agriculture was employed in the prairie economy. The higher land to labor ratio for the prairies points to a highly specialized type of farming which was being developed.²

VALUES OF FARM PROPERTY - PRAIRIE PROVINCES
(millions of dollars)



Source: Table A-9, Appendix.

The value of farm property increased rapidly after 1900. Total prairie investment rose from \$259 million in 1901 to \$1,783 million in 1911 - a 588 percent increase. By 1921 farm values had increased by more than 80 percent over 1911.

¹Table A-10, Appendix.

²Ibid.; see A. S. Tostlebe, *Capital in Agriculture*, Princeton: Princeton University Press, 1957, p. 106 ff., for relevant data on the capital-product ratio for the United States by regions.

Taken together, the investment in prairie farms and investment in transportation (mostly railroads) amounted to one-third of Gross Domestic Capital Formation in 1901-05, increased to 36 percent in the 1906-10 period and went to 40 percent during 1911-15.

PRAIRIE FARM AND TRANSPORTATION INVESTMENT COMPARED
WITH GROSS DOMESTIC CAPITAL FORMATION
(\$ millions)

	(1) GDCF	(2) Prairie Farm Investment	(3) Percentage (2 is of 1)	(4) Transpor- tation Invest- ment	(5) Percentage (4 is of 1)
1901-05	1,283	221	17.2	201	15.7
1906-10	2,287	319	13.9	539	23.6
1911-15	3,279	463	14.1	848	25.9

Source: Kenneth Buckley, Capital Formation in Canada, 1896-1930, p. 8.

The price of wheat had hit its lowest point in 1894 when it sold at 61 cents per bushel at Winnipeg. In 1898, the year of a bumper crop, the price was a high 93 cents per bushel. The price did not reach this level again until ten years later. The cost of transportation fell during the last two decades of the 19th century and during the 1890s reached 26.7 cents per bushel (Regina to Liverpool).¹

¹The Crow's Nest Pass Agreement was made in 1897 and provided for a 20 percent reduction of rail rates on grain exports as well as reduction in rates for hauling settlers' effects.

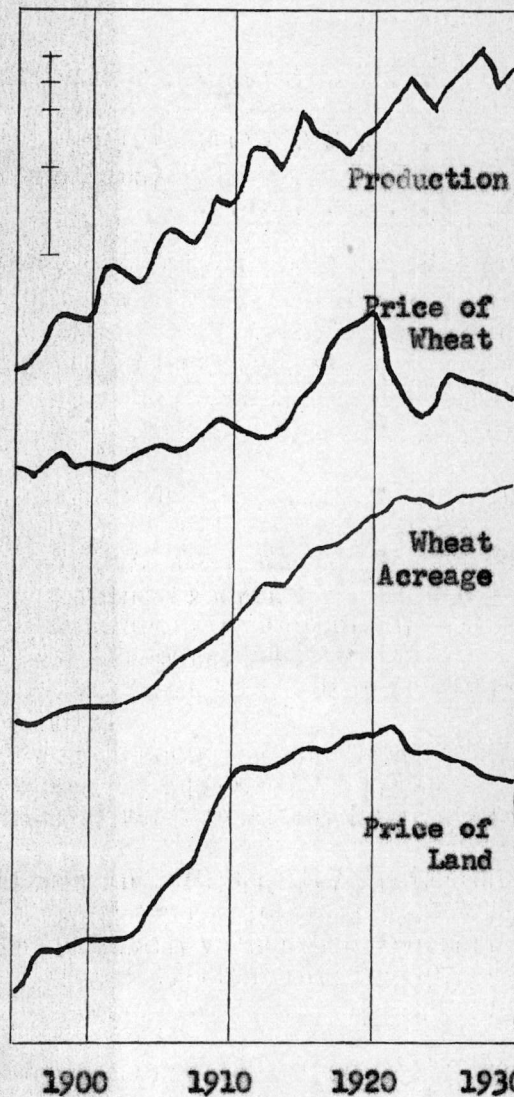
The conjunction of falling costs of transportation and the beginning of an upward trend in the price of wheat initiated the dramatic growth the Canadian economy experienced during the early 1900s.

The sustained upward trend in production and the long swing upward in the price of wheat, wheat acreage and land prices are depicted at the right.

Production of wheat in Canada amounted to 16.7 million bushels in 1871. Production of wheat on the prairies was only a negligible proportion of this total. The records for 1880 show production for Canada had risen to 32.3 million bushels, including over one million bushels from Manitoba. By 1890 wheat production for all of Canada went up to

43.2 million bushels, and the prairies contributed 38 percent of the

Indexes of Prairie
Expansion



Source: Buckley, op. cit., p. 21.

TABLE 17
 PRODUCTION OF WHEAT IN THE PRAIRIE PROVINCES
 AND CANADA, 1871-1955

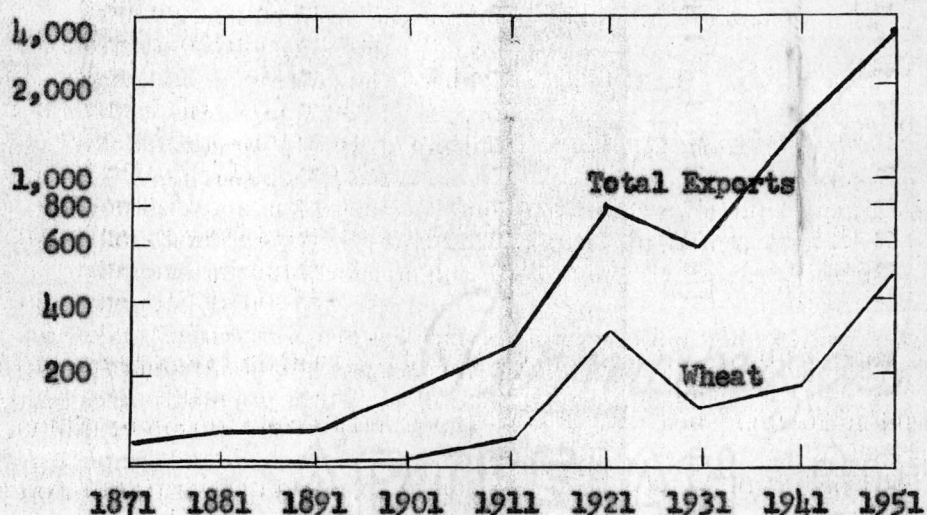
	Prairie Provinces			Canada	Prairies as percent of total
	Wheat Acreage (millions)	Yield per acre (bushels)	Output (millions of bushels)	Output (millions bushels)	
1871	-	-	-	16.7	-
1881	-	-	-	32.4	-
1891	1.0	17.9	17.9	42.2	42.4
1901	2.5	9.4	23.4	55.6	41.0
1911	10.0	20.8	208.4	230.1	90.5
1921	22.2	12.6	280.1	300.9	93.0
1925	19.8	18.2	367.1	395.5	92.8
1926	21.8	17.5	380.8	407.1	93.5
1927	21.4	21.2	454.6	480.0	94.7
1928	23.2	23.5	544.6	566.7	96.1
1929	24.3	11.6	281.7	304.5	92.5
1930	24.8	16.0	397.3	420.7	94.4
1931	25.6	11.8	301.2	321.3	93.7
1932	26.4	16.0	423.0	443.1	95.4
1933	25.2	10.4	263.0	282.0	93.3
1934	23.3	11.3	263.8	275.8	95.6
1935	23.3	11.3	264.1	281.9	93.6
1936	24.6	8.1	202.0	219.2	92.1
1937	24.6	6.4	156.8	180.2	87.0
1938	25.0	13.5	336.0	360.0	93.3
1939	25.8	19.1	494.0	520.6	94.9
1941	21.1	13.9	296.0	314.8	94.0
1951	24.4	21.6	530.0	553.6	95.8
1955	20.8	23.3	472.0	494.1	95.5

Sources: Canada Yearbook, 1905; V. C. Fowke, The National Policy and the Wheat Economy, p.75.

total. By 1900, when total production was 55.5 million bushels, the prairie production was 41 percent. After 1911, with only a few years excepted, the prairies produced more than 90 percent of all Canadian wheat.

As an export wheat did not achieve importance until after 1900. In 1871 wheat accounted for only 3.3 percent of total value of all exports - when leading agricultural exports made up 13 percent of all Canada's exports. From a position of 3.9 percent of total exports

RELATION OF WHEAT TO TOTAL EXPORTS, 1871-1951
(millions of dollars)



Source: Canada Year Book.

in 1901, wheat went to 16.6 percent in 1911 and 38.8 percent in 1921 - when agriculture produced more than half of all that Canada exported.

The process of urbanization gained momentum after 1900 throughout Canada - but especially in the Central Provinces. Buckley's

national index of urban building activity shows the tremendous activity in the industry following 1900. Using 1900 as the base year, construction went to 380 in 1905, 548 in 1910 and then dropped to 438 in 1914 (Table 18, column 9). Pickett's series on gross residential capital formation show that from a level of \$32 million 1900, RCF rose to \$73 million in 1905, \$126 million in 1910 and \$164 million in 1914.

The backward linkages of the wheat industry were soon felt as the wheat boom got under way. The demand for capital, labor and other supply organizations and agencies grew rapidly.¹ There was a reallocation of labor resources as people migrated from the central and eastern provinces to the prairies and were joined by new immigrants. The single proprietor farm kept labor requirements at a minimum and employed improved techniques as rapidly as they became available. The large transportation requirement for wheat created external economies beneficial to other industries (e.g. mining in Laurentian Shield). The multiplier-accelerator spread the benefits and impact of the new income to stimulate development of new manufacturing in the prairies, British Columbia and the Central Provinces (e.g. farm machinery manufacturing). The boom also attracted large amounts of foreign capital which in turn induced further domestic investment.

¹Bertram, op. cit., p.180.

TABLE 18

CANADIAN GROSS RESIDENTIAL CAPITAL FORMATION AND INDEXES
OF BUILDING ACTIVITY 1872-1915

Year	Houses Com- pleted (000)	Average House Value (\$)	Value of Com- pletions (\$m)	Error in Valu- ations (\$m)	Adj. Val. of Comple- tions (\$m)	Major Alter. and Improv. (\$m)	Gross Res. Cap. Forma. (\$m)	Index of Permits New Bldg. Per capita (1900 = 100)	Nat. In- dex of Urban Bldg.
	(1)	(2)	(3) (1 x 2)	(4)	(5) (3 - 4)	(6)	(7) (5 - 6)	(8)	(9)
1872	27.7	2,310	64.8	1.0	63.8	5.6	69.4		73.8
1873	38.5	2,340	90.9	1.9	90.0	5.3	95.3		82.5
1874	29.8	2,180	65.0	1.3	63.7	6.6	70.3		86.2
1875	23.1	1,910	44.1	1.2	42.9	6.0	48.9		74.2
1876	19.9	1,790	35.6	0.8	34.8	4.5	39.3		46.9
1877	17.7	1,650	29.2	0.6	28.6	3.4	32.0		34.4
1878	15.4	1,560	24.0	0.4	23.6	2.9	26.5		25.1
1879	15.1	1,570	23.7	0.6	23.1	3.4	26.5		24.3
1880	14.5	1,720	24.9	0.5	24.4	3.1	27.5		21.2
1881	17.7	1,630	28.9	0.6	28.3	3.2	31.5		25.2
1882	16.1	1,660	26.7	2.3	24.4	3.8	28.2		23.4
1883	12.9	1,590	20.5	1.8	18.7	3.0	21.7		26.4
1884	14.0	1,470	20.6	0.4	20.2	2.5	22.7		32.2
1885	18.0	1,420	25.6	1.6	24.0	2.6	26.6		43.5
1886	20.0	1,420	28.4	1.9	26.5	3.2	29.7	89.3	70.9
1887	20.3	1,490	30.2	2.2	28.0	3.6	31.6	80.3	123.2
1888	16.2	1,580	25.6	2.3	23.3	3.7	27.0	114.9	112.2
1889	15.2	1,580	24.0	2.0	22.0	3.2	25.2	142.3	125.6
1890	14.2	1,550	22.0	1.9	20.1	3.1	23.2	122.8	115.3

1891	12.4	1,500	18.6	1.7	16.9	2.9	19.8	111.8	111.1
1892	17.6	1,510	26.6	-	26.6	2.9	29.5	86.8	104.1
1893	14.0	1,490	20.9	-	20.9	3.1	24.0	77.7	97.5
1894	12.4	1,480	18.4	-	18.4	2.9	21.3	67.3	66.2
1895	11.1	1,440	16.0	-	16.0	2.6	18.6	61.6	68.7
1896	10.5	1,440	15.1	-	15.1	2.5	17.6	67.5	55.2
1897	11.2	1,380	15.5	-	15.5	2.4	17.9	55.1	64.1
1898	12.9	1,400	18.1	-	18.1	2.7	20.8	88.4	92.7
1899	15.5	1,450	22.5	-	22.5	3.1	25.6	108.0	110.7
1900	17.7	1,570	27.8	-	27.8	3.9	31.7	100.0	100.0
1901	18.0	1,550	27.9	-	27.9	4.2	32.1	139.8	120.3
1902	25.5	1,630	41.6	2.0	39.6	5.1	44.7	210.6	136.5
1903	30.6	1,750	53.6	2.5	51.1	5.9	57.0	271.0	192.7
1904	31.0	1,780	55.2	2.6	52.6	6.1	58.7	322.7	249.5
1905	37.8	1,810	68.4	3.3	65.1	7.8	72.9	379.4	332.8
1906	48.3	1,900	91.8	4.8	87.0	9.3	96.3	418.0	409.4
1907	43.1	1,980	85.3	4.8	80.5	9.3	89.8	438.9	388.2
1908	39.9	2,090	83.4	4.1	79.3	8.8	88.1	425.3	299.0
1909	45.9	2,080	95.5	4.7	90.8	10.0	100.8	472.1	467.2
1910	58.1	2,090	121.4	5.9	115.5	10.3	125.8	548.1	608.3
1911	70.2	2,190	153.7	7.3	146.4	11.4	158.8	586.4	797.4
1912	85.2	2,240	190.8	-	190.8	10.0	200.8	496.7	1,106.3
1913	82.6	2,310	190.8	-	190.8	11.9	202.7	450.5	817.7
1914	69.4	2,230	158.8	-	154.8	9.3	164.1	438.0	520.8
1915	41.3	2,160	89.2	-	89.2	9.5	98.7	288.9	183.5

Note: The classification used in columns 8 and 9 is broader than that used for the first seven columns.

Source: James Pickett, *CJEPS*, XXIX, (February, 1963), p. 51; and Kenneth Buckley, Capital Formation in Canada, 1896-1930, p. 140-1.

Table 7 shows the growth in the inflow of foreign capital. In 1900 \$36 million entered Canada. By 1905 this had risen to \$82 million, hit \$100 million in 1913 and then went down to \$290 million in 1914. The total inflow, 1900-14, on the basis of Hartland's estimates, was \$2.6 billion. This estimate is slightly lower than that prepared by Viner.¹ British investment was about \$1.7 billion. By 1914 United States investment in Canada was \$867 million, according to Cleona Lewis' estimate in Table 19. United States capital went especially in to mining and smelting and manufacturing.

Money was tight and interest rates high in Canada 1900-14 and it seems highly likely that this was a leading cause of the inflow of funds.² The return on home investment was falling in Great Britain in the years following 1904. Agricultural prices in world markets were rising and Canada's elasticity of supply was high (especially for land).³ The large inflow of capital from abroad enabled Canadian expansion to continue unimpeded. This rapid economic growth caused rises in real prices and money income and brought about structural shifts in the economy.

¹J. Viner, Canada's Balance of International Indebtedness 1900-1913. Cambridge: Harvard University Press, 1924, p. 139. Hartland's estimates cover 1900-14 while Viner's are for 1900-13.

²G. M. Meier, "Economic Development and the Transfer Mechanism: Canada 1895-1913," CJEPS, XIX (February, 1953), pp. 1-19; J. C. Ingram, "Growth in Capacity and Canada's Balance of Payments," American Economic Review, XLVII, No. 1, pp. 93-104.

³A. K. Cairncross, Home and Foreign Investment 1870-1913. Cambridge: University Press, 1953, p. 42.

TABLE 19
 UNITED STATES INVESTMENT IN CANADA, SELECTED YEARS,
 1897-1919
 (\$ millions)

	1897	1908	1914	1919
Trading companies and sales agencies	10.0	15.0	27.0	30.0
Mining and smelting	55.0	136.0	159.0	200.5
Oil Production	6.0	15.0	25.0	30.0
Agriculture ^a	18.0	25.0	101.0	50.0
Manufacturing - pulp and paper	20.0	55.0	74.0	100.0
other manufacturing	35.0	100.0	147.0	300.0
Railroads	12.7	51.4	68.9	75.8
Public utilities	2.0	5.0	8.0	15.0
Other	1.0	3.0	8.5	3.0
Total direct investment	159.7	405.4	618.4	814.3
Total direct and portfolio investment	189.7	697.2	867.2	1,542.8

^aIncludes speculative holdings of land holdings and timber lands not held by pulp and paper companies.

Source: Cleona Lewis, American's Stake in International Investments, pp. 575-607.

Approximately three-fourths of the foreign capital entering Canada was British. After 1904 Canada raised many of the foreign loans by floating security issues in the London market. Part of the receipt of sterling proceeds was used for direct imports and servicing of debt. The rest of the sterling was sold to Canadian banks. With the proceeds additional expenditures for consumption and investment were made.

These expenditures reinforced the multiplier-accelerator process which had already been "touched off" by the earlier increases in investment associated with development.¹

The rapid additions to population (immigrants as a group had a high rate of labor force participation) and the money supply enabled continued expansion. The passive trade balance grew larger as demand for exports expanded. Growing direct American investment added to the expansionary bias.

Canada's net barter terms of trade improved after 1908. Increasing real income gave incentive to further imports. In spite of growing exports, the trade deficit continued because imports grew even more rapidly.

¹Meier, op. cit., p. 17.

CHAPTER IV

SUMMARY AND CONCLUSIONS

At least four significant factors have shaped and influenced economic growth in Canada. The people, institutions and much of the capital which have built the Canadian economy came from Europe. Foreign trade, especially with Europe, has been of vital importance to Canada's economic development. Canadian economic development has been based on the exploitation of a series of staples - fish, fur, timber, wheat, newsprint, minerals, etc., The climate and geography have both influenced the type and timing of staple exploitation. The type of transportation available as well as ability to arrange balanced two-way cargoes were of real importance in the various periods of Canada's development.

The impulse to form a Confederation of the British North America colonies came from a variety of sources; The adoption by Great Britain of a policy of free trade and greater autonomy for the colonies; proximity to the United States; the threat of further territorial expansion by United States settlers; the promise of economic progress by expanded market opportunities; and technological advances enabling better transportation and communication.

The national policy which took form after 1850 focused the nation's attention on economic development and provided a framework for the development of a nation-wide railroad system, tariff

protection for new industries, political and economic integration, and finally the opening up of the prairies to settlement.

The problem which this study attempts to resolve is whether the growth of the Canadian economy during the years 1849-1900 can be explained in terms of expansion of the export base and the changes induced by export industries.

The dating of the study is in some respects artificial and arbitrary. Timber became Canada's major export about 1820 when Canada became the United Kingdom's major supplier of timber. For the next 70 years forest products played a critical role in Canadian economic development - inducing diversification and expansion in other sectors of the economy.

The year 1849 marks the highwater point for timber as Canada's major staple export. In that year British protection was lifted. Although timber and lumber products remained the most important class of exports for another forty years after 1850, the relative decline began at mid-century. Throughout the period 1849-1900 total exports were growing and there was increasing diversification of the export base.

The center of Canada's economy shifted to the Quebec-Ontario region. The production of timber stimulated the settlement of more people in Canada. (As a result of lack of return cargo on lumber ships, the shipping companies encouraged people to migrate to Canada.) Many of these new immigrants devoted themselves to agriculture. In some respects agriculture and lumber were

complementary. The land had to be cleared for farming and the logging camps required food supplies. By the 1840s Canada was already exporting some grain from the Ontario region.

Firestone's investigations show that residentiary industries (i.e., industries serving the regional market) already contributed an important part of total manufacturing output by 1851. After 1851 the sector of the economy which grew most rapidly was the service sector.

The data presented in Chapter II indicate that exports grew only slightly less rapidly than Gross National Product during the period 1870-90 (GNP was an estimated \$459 million in 1870, \$581 million in 1880 and \$803 million in 1890. Exports as a percent of GNP averaged about 14.4 percent during 1870-90 and about 15.7 percent for the years 1860-1900.) All manufacturing showed a faster rate of growth for the decade 1880-90 than for the 1870-80 period, but it was the more rapid expansion in primary manufacturing which enabled this accelerated rate of growth (actually growth in the secondary manufacturing sector slowed some during the 1880s).

The growth in primary manufacturing was based on increased processing of timber and food products. United States demand for forest products, which was increasing during the 1870-90 period, turned more and more toward lumber and pulp. The lumber industry, consequently, became more capital intensive and the average size of the firm doubled after 1870.

Similarly there was growing demand for more highly processed

animal products. This class of exports made the greatest growth of all the classes of exports during the 1880s and 1890s.

Agricultural exports (i.e., principally grain) did not expand during this period. For example, wheat exports in 1880 increased somewhat over the total for 1870, but the exports of wheat in 1890 were down from the 1880 level. Nearly all of Canadian grain produced during 1870-90 was in the Ontario-Quebec region.

Transportation facilities were of decisive importance to Canada's economic growth. The building of railroads was financed by large inflows of foreign capital as well as by domestic investment. Completion of the transcontinental railroad in 1885-86 opened the way for later settlement of the prairies. Increasing amounts of capital also were invested in the staple producing and processing industries. Approximately \$380 million of this was direct and private investment by United States and British individuals and companies.

Information on the disposition of income among the Canadian population is not available. However, it is generally assumed that the marginal propensity to import was high. The list of the ten most important items imported (i.e., ranked according to value) changed little over the period under study. During the same period the list of the ten leading exports shows much greater change over time. The important types of imports were capital goods and manufactured goods such as textiles. Canadians enjoyed a fairly high standard of living.

This study has focused on the period 1849-1900 in the belief that, as Bertram has pointed out,¹ this period has been overshadowed and incorrectly interpreted because of the more dramatic wheat boom which took place after 1900. Certain writers have taken the position that the growth during the period - especially after 1870 - was based on the expansion of manufacturing industries and building of the railroads; and that, therefore, staples per se were of little significance. But the source of this growth must be specified. A part of the problem lies with the narrow way in which "staple" is sometimes defined (e.g., wheat is a staple but processed goods derived from wheat are not).

This study shows the development of a region which was initiated by foreign demand for a product in which it had a comparative advantage. Gradually the export base broadened as new demand induced the production of other staple products and as new industries based on the processing of the staples were established. Residentiary and services industries serving the regional market quickly developed. Investment in social overhead capital was undertaken by both government and private enterprise.

The locus of growth in the Canadian economy throughout the period 1849-1900 was the Central Provinces, especially Ontario. During this period the process of expansion and diversification proceeded at an accelerating pace. Agriculture became commercially oriented, manufacturing began developing (particularly that based on staple processing) and services expanded. The most rapid

¹Bertram, op. cit., p. 172.

manufacturing growth, as has been shown, took place in primary manufacturing industries.

Timber, the leading export staple during the first half of the nineteenth century, remained a substantial percent of total exports until 1890. Timber, agricultural products and animal products were the major sources of exports during the period under study.

Although wheat was recognized as a potentially important staple export, it did not achieve this role until after 1900. The prairie provinces did not constitute a separate economic region until after 1890. The prairie economy did develop very quickly once transportation facilities were built, population moved in and the world market became very favorable for the production of wheat.

Canada was in a favorable position to benefit from world economic conditions during the last two decades of the nineteenth century. The countries of western Europe, Great Britain and the United States were further advanced industrially than Canada. Canada was able to produce the raw materials needed by these countries at a time when the prices of raw materials were falling less rapidly than the prices of manufactured goods.

Canadian government encouraged private enterprise to carry out development but the government also actively initiated and implemented development when private enterprise found the task too large and risky. This active role on the part of government also made Canada a more favorable investment opportunity for

foreign investors.

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APPENDIX

TABLE A-1
RURAL-URBAN DISTRIBUTION OF POPULATION
(thousands)

Year	Manitoba			Saskatchewan			Alberta			Total Prairies	Total Canada
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total		
1871	--	--	25	--	--	48 ^a	--	--	-- ^a	73	3,689
1881	--	--	62	--	--	56 ^a	--	--	-- ^a	118	4,325
1891	112	41	153	--	--	99 ^a	--	--	-- ^a	252	4,833
1901	185	70	255	77	14	91	54	19	73	419	5,371
1911	261	200	461	361	131	492	237	138	374	1,327	7,217
1921	349	262	610	539	219	758	366	223	588	1,956	8,788
1931	384	316	700	631	291	921	453	279	732	2,363	10,377
1941	408	322	730	601	295	869	480	307	796	2,422	11,507
1951	337	440	777	579	252	831	490	450	940	2,548	11,009
(percentage distribution)										Prairies as % of Canada	
1871										1.98	
1881										2.7	
1891	73.1	26.8		n/a	n/a		n/a	n/a		5.2	
1901	72.4	27.6		84.4	15.6		74.6	25.4		7.8	
1911	56.6	43.4		73.3	26.7		63.2	36.8		18.4	
1921	57.1	42.9		71.1	28.9		62.1	37.9		22.1	
1931	54.9	45.1		68.5	31.5		61.9	38.1		22.7	
1941	55.9	44.1		67.0	33.0		61.5	38.5		21.0	
1951	43.4	56.6		69.6	30.4		52.1	47.9		18.2	

^aFigures for Saskatchewan and Alberta combined.

Source: Canada Year Book.

TABLE A-2
 POPULATION OF PRAIRIE PROVINCES BY AGE GROUP
 1881-1956
 (thousands)

Manitoba							
	Total	0-14		15-64		65-	
1881	62	24	28.7%	37	59.6%	1	1.7%
1891	153	57	37.2	94	61.4	2	1.3
1901	255	98	38.3	151	59.6	6	2.5
1911	461	167	36.2	283	61.4	11	2.4
1921	610	224	36.7	367	60.2	19	3.1
1931	700	219	31.3	450	64.3	31	4.4
1941	730	191	26.2	493	67.5	46	6.3
1951	777	223	68.7	489	62.9	65	8.4
1956	850	264	31.0	510	60.0	76	9.0

Saskatchewan							
	Total	0-14		15-64		65-	
1901	91	36	40.0	53	58.0	2	2.0
1911	492	167	34.0	317	64.0	8	2.0
1921	758	301	40.0	441	58.0	16	2.0
1931	922	326	36.0	565	61.0	31	3.0
1941	896	268	30.0	583	65.0	45	5.0
1951	832	256	31.0	509	61.0	67	8.0
1956	880	287	33.0	514	58.0	79	9.0

Alberta							
	Total	0-14		15-64		65-	
1901	73	24	39.6	43	58.9	1	1.5
1911	374	120	32.0	248	66.3	6	1.7
1921	588	214	36.4	360	61.2	14	2.4
1931	732	238	32.5	467	63.8	27	3.7
1941	796	229	28.7	525	65.9	42	5.4
1951	940	287	30.5	585	62.2	68	7.3
1956	1,123	373	33.2	668	59.4	82	7.4

Source: Census of Canada, 1941, 1951; Canada Year Book.

TABLE A-3

WHEAT PRICES AT WINNIPEG AND COST OF TRANSPORTING
WHEAT REGINA TO LIVERPOOL)
(cents per bushel)

Year	Winnipeg Prices	Regina to Liverpool	Year	Winnipeg Prices	Regina to Liverpool	Year	Winnipeg Prices	Regina to Liverpool
1870	107		1899	71	26.7	1928	146	30.3
1871	127		1900	75	26.7	1929	124	28.2
1872	127		1901	75	21.6	1930	124	27.6
1873	123		1902	73	21.6	1931	64	29.1
1874	114		1903	79	20.4	1932	60	28.5
1875	103		1904	92	20.4	1933	54	
1876	108		1905	90	20.4	1934	68	
1877	137		1906	76	20.8	1935	81	
1878	101		1907	88	20.8	1936	84	
1879	107		1908	104	20.8	1937	122	
1880	120		1909	109	20.8	1938	131	
1881	126		1910	100	21.1	1939	62	
1882	121		1911	96	21.2	1940	76	
1883	111		1912	97	25.7	1941	74	
1884	100		1913	88	26.0	1942	76	
1885	89		1914	100	24.3	1943	94	
1886	81	35.2	1915	128	44.7	1944	135	
1887	83	33.4	1916	138	62.4	1945	143	
1888	93	33.4	1917	220	128.3	1946	175	
1889	99	33.4	1918	222	165.9	1947	175	
1890	85	33.4	1919	221	58.2	1948	175	
1891	93	31.5	1920	263	67.5	1949	183	
1892	80	31.5	1921	165	45.6	1950	183	
1893	73	27.9	1922	121	34.6	1951	185	
1894	61	27.9	1923	110	33.6	1952	182	
1895	72	27.9	1924	107	33.1	1953	185	
1896	65	26.7	1925	168	31.8	1954	156	
1897	79	26.7	1926	151	33.1	1955	165	
1898	93	26.7	1927	146	32.3	1956	160	

Source: W.A. Mackintosh, Economic Problems of the Prairie Provinces, pp. 283-5, for 1870-1932; Canada Year Book, 1940, 1950, 1956, for 1933-1956.

TABLE A-4

MILES OF RAILROAD BEGINNING OF YEAR AND MILES ADDED

Year	Miles	Miles Added	Year	Miles	Miles Added
1850	68	93	1891	113,838	726
1851	159	46	1892	14,564	441
1852	205	301	1893	15,005	622
1853	506	258	1894	15,627	350
1854	764	113	1895	15,977	273
1855	877	537	1896	16,270	280
1856	1,414	30	1897	16,550	320
1857	1,444	419	1898	16,870	380
1858	1,863	131	1899	17,250	407
1859	1,994	71	1900	17,657	483
1860	2,065	81	1901	18,140	574
1861	2,146	43	1902	18,714	274
1862	2,189	0	1903	18,988	443
1863	2,189	0	1904	19,431	1,056
1864	2,189	51	1905	20,487	886
1865	2,240	38	1906	21,353	1,099
1866	2,278	0	1907	22,452	514
1867	2,278	-8	1908	22,966	1,148
1868	2,270	254	1909	24,114	617
1869	2,524	93	1910	24,731	669
1870	2,617	78	1911	25,400	1,327
1871	2,695	204	1912	26,727	2,577
1872	2,899	933	1913	29,304	1,491
1873	3,832	499	1914	30,795	1,087
1874	4,331	473	1915	34,882	2,103
1875	4,804	414	1916	36,985	1,384
1876	5,218	564	1917	38,369	-117
1877	5,782	444	1918	38,252	77
1878	6,226	632	1919 ^a	38,329	166
1879	6,858	336	1919 ^b	38,495	310
1880	7,194	157	1920	38,805	386
1881	7,331	1,366	1921	39,191	167
1882*	8,697	880	1922	39,358	296
1884	10,273	500	1923	39,654	405
1885	10,773	20	1924	40,059	291
1886	11,793	391	1925	40,350	0
1887	12,184	-21	1926	40,350	220
1888	12,163	465	1927	40,570	452
1889	12,628	523	1928	41,022	358
1890	13,151	687	1929	41,380	667
*1883	99,577	696	1930	42,047	223

^aAs at June 30 for this and previous years. ^bAs at December 31 for this and later years.

Source: Canada Year Book.

TABLE A-5

STEAM RAILWAY STATISTICS, 1871-1915
(five-year averages)

Year/Period	Miles in Operation (thousands)	Total Train Miles (millions)	Millions of Passengers	Tons of Freight (thousands)	Gross Earnings (\$m)	Working Expenses (\$m)	Ratio of Expenses to Receipts	Capital Investment Beginning of Decade (\$m)
1871								257.0
1875	4.8	17.7	5.2	5.7	19.5	15.8	81.02	
1876-80	6.2	20.0	5.7	8.0	20.4	16.0	78.9	
1881								284.4
1881-85	9.3	30.5	9.1	13.4	31.1	23.3	74.5	
1886-90	12.4	36.2	11.3	17.5	40.4	29.2	72.0	
1891								632.0
1891-95	15.0	43.2	13.3	22.0	49.5	35.1	70.9	
1896-00	16.9	45.9	16.8	28.9	58.7	37.3	67.2	
1900								816.1
1901-05	19.1	59.3	21.9	45.1	92.0	65.9	71.5	
1906-10	23.1	78.3	32.5	65.2	147.6	104.6	70.9	
1911								1,528.6
1911-15	29.4	101.0	41.5	92.9	221.5	158.1	71.3	
1921								2,164.6

Source: Canada Year Book, 1916-17, p. 434.

TABLE A-6

THE NET VALUE OF PRODUCTION OF MANUFACTURES - CANADA
(millions of dollars)

	Totals for Establishments with Five Hands and Over	
	1900	1910
Textiles	32.9	67.3
Clothing	20.0	43.7
Wool Textiles	4.0	4.4
Cotton Textiles	6.5	13.0
Iron and Steel Products	35.0	106.3
Agricultural Implements	5.5	10.7
Rail Rolling Stock	5.2	25.2
Boilers, Tanks and Engines	2.8	7.6
Bridge and Structural Steel Work	0.7	2.8
Wire and Wire Goods	0.8	2.2
Primary Iron and Steel	3.1	14.9
Rubber Products	0.6	3.4
Tobacco	8.1	13.2
Boots and Shoes	7.6	16.0
Furniture	4.3	8.0
Liquor	5.3	18.7
Flour and Grist Mill Products	5.5	25.3
Glass Products	1.0	3.1
Chemicals	3.9	12.2
Electric Light and Power	<u>2.0</u>	<u>12.9</u>
Total of Above Manufacturing	106.2	286.4
All Other Manufacturing	<u>108.3</u>	<u>278.1</u>
Grand Total	214.5	564.5

Source: Royal Commission Report on Dominion-Provincial Relations,
Book I, p. 73.

TABLE A-7

MANUFACTURES OF PRAIRIE PROVINCES, 1900, 1905 AND 1910

	Manitoba			Saskatchewan			Alberta			Canada		
	1900	1905	1910	1900	1905	1910	1900	1905	1910	1900	1905	1910
Establishments ^a	.3	.3	.4	.1 ^c	.0	.1	— ^c	.1	.2	15	16	19
Capital ^b	7.5	27.5	44.9	1.6	3.9	7.0	— ^c	5.5	29.5	446.9	846.5	1,247.5
Employees ^a	5	10	17	1	1	3.2	— ^c	2	6.9	339	393	515
Salaries/Wages ^b	2.4	5.9	10.9	.4	.7	1.9	— ^c	1.1	4.3	113.2	165.1	241.0
Raw/Partly Manufactured Materials ^b	7.9	—	30.5	1.1	—	2.7	— ^c	—	9.9	266.5	—	601.5
Value of Products ^b	12.9	28.1	53.6	1.9	2.5	6.3	— ^c	5.1	18.7	481.0	718.3	1,165.9

^aThousands. ^bMillions of dollars. ^cInformation for Saskatchewan and Alberta for 1900 combined.

Sources: Canada Year Book, 1915 and 1916-17.

TABLE A-8
CHANGES IN PRICE AND COST TRENDS, 1870-1913

	Percentage Increase	Percentage Increase
	1870-75 average to 1896	1896 to 1909-13 Average
General level of Canadian wholesale prices	-35	48
Canadian Selling Prices:		
Exports	-4	32
Grains and Flour	-40	62
Wheat - Liverpool	-46	33
Canadian Costs:		
Imports	-35	24
Imports of Iron-Steel Products	-34	6
Prices of Manufactures		
Ocean Freights	-47	7
Interest Rates*	-23	28

*Yield on U. K. Consols

Source: Royal Commission Report on Dominion-Provincial Relations, Book I, p. 67.

TABLE A-9

VALUES OF FARM PROPERTY
(Millions of dollars)

	1901	1911	1921	1931	1941	1951
Manitoba						
Land and buildings*	113	310	381	200	157	529
Farm implements	12	28	68	55	59	232
Livestock	<u>45</u>	<u>59</u>	<u>76</u>	<u>45</u>	<u>51</u>	<u>156</u>
Total	<u>180</u>	<u>463</u>	<u>637</u>	<u>388</u>	<u>339</u>	<u>917</u>
Saskatchewan						
Land and buildings*	28	583	1,060	765	505	1,183
Farm implements	4	58	177	186	142	526
Livestock	<u>12</u>	<u>110</u>	<u>196</u>	<u>98</u>	<u>96</u>	<u>283</u>
Total	<u>44</u>	<u>827</u>	<u>1,650</u>	<u>1,273</u>	<u>896</u>	<u>1,992</u>
Alberta						
Land and buildings*	17	345	611	534	373	1,015
Farm implements	2	24	99	116	116	390
Livestock	<u>16</u>	<u>78</u>	<u>137</u>	<u>82</u>	<u>104</u>	<u>384</u>
Total	<u>35</u>	<u>493</u>	<u>968</u>	<u>869</u>	<u>711</u>	<u>1,789</u>
Acres in farms						
Manitoba		12.1	14.6	15.1	16.8	17.7
Saskatchewan		28.0	44.0	55.6	59.9	61.6
Alberta		17.0	29.0	39.0	43.0	44.4

*Land and buildings combined value, 1901 and 1951.

Source: Canada Yearbook, 1913; Census of Prairie Provinces, 1936; and Canada Census, 1951.

TABLE A-10

RELATIVE EXPANSION OF LAND AND LABOR IN PRAIRIE AGRICULTURE

Year	A. Land					
	No. of farms		Occupied Acreage		Improved Acreage	
	All Canada	Prairies	All Canada	Prairies	All Canada	Prairies
	(No.)	(% of total)	(Thousands of acres)	(% of total)	(Thousands of acres)	(% of total)
1881	464,025	2.2	45,358	5.9	21,866	1.3
1901	511,073	10.8	63,422	24.3	30,166	18.5
1911	682,389	29.2	108,969	52.9	48,734	47.1
1921	711,090	36.0	140,888	62.4	70,770	63.4
1931	728,623	39.5	163,114	67.3	85,732	69.8

Year	B. Labor			
	Persons Occupied in Agriculture (thousands)			
	Prairie Provinces	% of Total	Other Provinces	Total
1881	15	2.2	647	662
1891	48	6.7	687	735
1901	79	11.0	638	717
1911	283	30.0	651	934
1921	376	36.0	666	1,042
1931	444	39.0	688	1,132

Source: Kenneth Buckley, Capital Formation in Canada, 1896-1930, p. 11.

TABLE A-11

THE TEN LEADING ITEMS OF IMPORT - CANADA, 1890-1920
(\$ millions)

Commodity	1890	1900	1910	1920
Coal	8.0	11.0	27.5	60.0
Rolling mill products	5.6	11.9	15.6	39.9
Fruits	2.4		8.3	33.4
Sugar and products	6.4	8.6	14.9	73.6
Grain and grain products	3.0	8.2		
Cotton goods	3.7	6.3	17.9	49.0
Woollen goods and carpets	10.9	9.4	20.7	45.5
Cotton, raw	3.5	4.2	9.3	33.8
Tea	3.0			
Silk goods	2.6	3.8		31.3
Hides and skins, raw		4.2		22.6
Machinery, except farm		5.1	14.6	36.7
Wood, unmanufactured			8.3	
Settlers' effects			10.2	

Source: Canada Year Book, 1940, p. 519.

TABLE A-12
 INVESTMENTS OF FOREIGN COUNTRIES IN CANADA, 1900-1913*
 (THOUSANDS OF DOLLARS)

Year	British	American	Other Countries	Total
1900	10,068	17,907	3,745	31,720
1901	15,085	18,338	3,745	37,169
1902	11,916	23,358	7,060	42,334
1903	28,833	22,093	3,745	54,671
1904	29,500	25,780	6,618	61,898
1905	76,398	32,408	3,745	112,551
1906	68,453	29,510	7,293	105,256
1907	65,251	25,992	3,845	95,088
1908	181,404	32,744	7,982	222,130
1909	212,725	36,153	4,522	253,400
1910	218,457	72,664	22,065	313,186
1911	244,427	76,143	27,840	348,410
1912	214,830	81,735	24,550	321,115
1913	375,771	134,968	35,960	546,699
Total	1,753,118	629,794	162,715	2,545,627

*Flow of Capital

Source: J. Viner, Canada's Balance of International Indebtedness, 1900-1913. Cambridge: Harvard University Press, 1924, p. 139.

Typed by Mrs. Dorothy Burnett