

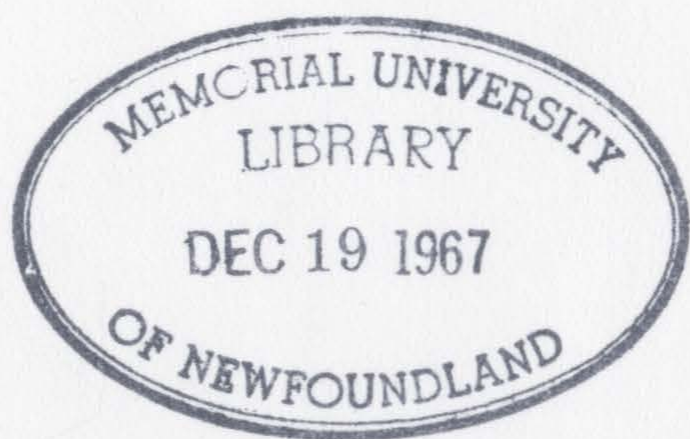
THE ROLE OF PUBLIC FINANCE IN THE ECONOMIC
DEVELOPMENT OF NEWFOUNDLAND, 1949-64

CENTRE FOR NEWFOUNDLAND STUDIES

**TOTAL OF 10 PAGES ONLY
MAY BE XEROXED**

(Without Author's Permission)

D. H. HAMDANI



131987

C.1

THE ROLE OF PUBLIC FINANCE IN
THE ECONOMIC DEVELOPMENT OF
NEWFOUNDLAND, 1949-64

Daood Ul Hasan Hamdani, B.A. (Honours)

Submitted in partial fulfilment of the
requirements for the degree of Master of Arts
Memorial University of Newfoundland,
March, 1966.

Abstract

The purpose of this study is to analyze the role of public finance in the economic development of Newfoundland since 1949. The thesis starts with a discussion of some of the imminent economic problems of the Province and a description of those features ~~and~~ of its economy which have bearing on public revenue and expenditure. A short history of public finance in the Island is sketched from the second half of the 19th century highlighting the financial features which culminated in Confederation in 1949. A survey of public revenue and public expenditure is presented with a view to show how conducive the structure of revenue and pattern of expenditure is to the development of Newfoundland. The accuracy of revenue is discussed and the elasticity of individual tax revenues is calculated. Finally capital formation is discussed in relation to fiscal policy and comparison is made between public and private capital formation.

Some of the principal findings of this thesis are:

1. Although the revenue from provincial sources has increased rapidly yet the federal aid remains the biggest source of revenue.
2. The common argument that conditional grants distort the provincial priorities does not apply in the case of Newfoundland.
3. Revenue raised from provincial sources suffers from a high degree of rigidity due to earmarking of funds for certain uses and due to low elasticity ~~and~~ of tax revenue

4. The revenue estimates suffer from a bias towards under-estimation and there is no definite evidence of improvement in them.

5. While public expenditure on material and supplies has been increasing over the years, social welfare has remained the the top priority despite the inadequacy of social capital.

6. Public capital formation accounts for a high share of total capital formation and the gross rate of public capital accumulation has been much higher than that of the private.

PREFACE

In completing this study I am most grateful to my supervisor, Professor N. Hurwitz. He suggested this title to me, and read the entire manuscript at a time when he was busy with his own research. I thankfully acknowledge the assistance rendered by E. Gallant, Director, Federal-Provincial Relations Division, Department of Finance, Government of Canada, who provided me some very useful material which was not available in St. John's. I should also like to thank Ronald Robertson, Director of the Canadian Tax Foundation, who was very kind to send me some publications of the Foundation free of cost. I appreciate the help and co-operation of the staff of the library of the Memorial University in general and Miss Agnes O'Dea of Newfoundlandia in particular. Finally, all the views expressed in this thesis are my own.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Economic Features	2
Gross Provincial Product	4
Sectoral Distribution of Income	6
Composition of Personal Income	14
Population	16
Age Composition	16
Geographical Distribution	20
Economic Problems	23
Unemployment	23
Income Leakages	28
Lack of Secondary Manufacturing Industry	30
Shortage of Capital	32
II. FINANCIAL ASPECTS OF CONFEDERATION	34
Importance of Fishery	34
The Financial Difficulties	38
Financial Terms and the Issue of Confederation .	45
Financial Terms of 1949	47
Federal Aid in Perspective	50
III. PUBLIC REVENUE	56
Federal Payments	61
Conditional Grants	62
Unconditional Grants	63
Provincial Sources of Revenue	84
Taxation	87
Public Goods and Services.....	94
Fees and Royalties	95
Miscellaneous	96

CHAPTER	PAGE
Revenue Structure and Economic Development	97
IV. PUBLIC EXPENDITURE	105
Functional Purposes of Expenditure	111
General Government	112
Law and Order	112
Resource Development	113
Municipal Development	113
Public Welfare	114
Public Services	116
Composition of Expenditure	120
The Public Debt	123
Public Spending and Economic Development	127
V. ACCURACY AND FLEXIBILITY OF THE REVENUES	130
Accuracy of the Revenue Estimates	131
A Measure of Estimating Error	133
Changes in the Quality of Estimates	139
Evidence of Bias in Estimates	139
Elasticity of Tax Revenue	143
VI. PUBLIC CAPITAL FORMATION	150
Volume and Composition of Capital Formation	152
Rate of Capital Formation	155
Composition of Public Investment	158
Direct Investment	160
Economic Development Expenditure	162
Social and Cultural Investment	163
Development Loans	163
VII. SUMMARY	166
BIBLIOGRAPHY	171

LIST OF TABLES

TABLE	PAGE
1-1 Provincial Product of Newfoundland: 1949-63	5
1-2 Net Value of Commodity Production, By Industry: 1951 and 1961	8
1-3 Distribution of Labour Force, By Industry: 1951 and 1961	9
1-4 Total Current Income, By Components: 1949-63 ...	15
1-5 Population Distribution, By Age Group: 1951 and 1961	18
1-6 Labour Force Participation Rates: 1949-63	19
1-7 Rural and Urban Population Changes: 1951 and 1961	21
1-8 Unemployment Rates for Newfoundland and Selected Regions of Canada: 1950-62	24
3-1 Public Revenue, By Current and Capital Account: 1949-64	58
3-2 Public Revenue, By Level of Government: 1949-64.	59
3-3 Federal Aid as Percentage of Provincial Revenue: 1949-64	60
3-4 Federal Grants, By Components: 1949-64	64
3-5 Composition of Unconditional Grants: 1949-64 ...	67
3-6 Tax Rental Payments, By Components: 1957-64	79
3-7 Tax Equalization Payments to Newfoundland: 1957- 64 (Per capita)	80
3-8 Natural Resource Revenue of Canada, By Province: 1961-64 (Average)	83
3-9 Current Public Revenue, By Source: 1949-64	85
3-10 Public Revenue from Provincial Sources: 1949-64 (Percentage Shares)	86

TABLE	PAGE
3-11 Tax Receipts, By Source: 1949-64	90
4-1 Current Account Expenditure, By Function: 1949-64	108
4-2 Current Account Expenditure, By Function: 1949-64 (Percentage Shares)	109
4-3 Breakdown of Public Services: 1949-64	119
4-4 Total Public Expenditure, By Payment: 1952-64 ...	121
4-5 Total Net Direct and Indirect Debt: 1949-64	125
5-1 Mean Percentage Deviation of Revenue Estimates: 1949-64	136
5-2 Annual Percentage Error of the Revenue Estimates: 1949-64	138
5-3 Annual Percentage Error of the Tax Revenue Estimates: 1949-64	140
5-4 Annual Percentage Error of the Revenue Estimates: 1951-62 (5 year moving average)	142
5-5 Elasticities of Tax Revenues: 1951-61	145
6-1 Total Capital Formation, By Public and Private Sector: 1951-63	154
6-2 Gross Rate of Capital Formation, By Public and Private Sector: 1951-63	157
6-3 Composition of Public Investment: 1951-64	161
6-4 Composition of Development Loans; 1951-64	165
APPENDICES	
A-1 Imports and Exports, By Value: 1928-45	53
A-2 Public Revenue, By Major Components: 1930-46	54
A-3 The Financial Surplus of Newfoundland, 1949	55
B-1 Public Revenue, Estimates and Actual: 1949-64 ...	147

TABLE

PAGE

B-2	Annual Changes in Selected Tax Yields and Personal Disposable Income: 1951-61	148
B-3	Indices of Tax Receipts and Personal Disposable Income: 1951-62	149

CHAPTER I

INTRODUCTION

It is generally accepted now that the economic development of a country is a major responsibility of its government. This has been shown by the experience of Japan, and of Western Europe in the 1940's, not to speak of the 'peoples' democracies'. This study, therefore, attempts to discuss and assess the share of government in the development of Newfoundland. Since Confederation was a turning point in the financial and economic history of the Island, emphasis has been laid on the period after 1949. Although the motive of Newfoundland in joining the Dominion of Canada was amalgamation (that is, the hope of some general economic advantage) yet it is not proposed to analyze the economic effects of the Union; this would involve, among other things, a study of the trade creation and trade diversion effects or inter-region and inter-commodity substitution which is outside the scope of this work. Nor does it purport to assess the role of federal payments separately although the impact of federal payments on the budgetary policy of the Province is alluded to here and there. Public finance is treated as such, regardless of the level of government, and we have attempted to bring out the effects of the composition of revenue and pattern of expenditure on the economic development of Newfoundland.

ECONOMIC FEATURES

The fiscal policy of a country reflects the economic views and aspirations of its citizens and it sheds light on the social, cultural and political institutions of the country. But these considerations lie outside the domain of economics. From the point of view of this study, therefore, attention is concentrated on the economic factors only. The generalizations arrived at in this work are bound to be of limited usefulness for policy planning for the reason that, under the surface of the conclusions based on only economic factors, lurks a multitude of political, social and cultural factors. On the revenue side, the economic structure shapes the tax system and determines the tax potential of the economy. On the expenditure side, the economic structure dictates the unit cost of providing public services, and influences the economic, as against non-economic, productiveness of government expenditure.

✓ The important factors which determine the tax potential of the economy are the level of income, composition of income, sectoral distribution of income, participation rates and the efficiency of the tax administering authority. For example, the tax potential of a country where a large portion of the income is concentrated in the hands of the wealthy group is likely to be greater than of a country where the ratio of concentration is low. The obvious reason for this is that

most of the income of the low income group is expended on necessities and thus escapes or only partially becomes subject to taxation. Sectoral distribution of income is important because if the share of the primary sector is relatively large in income and employment the public revenue will be less because of the seasonal nature of employment. The degree of concentration in business enterprises is also of importance for the same reason as the concentration of income. The high rate of saving in pre-War Japan was due mainly to the concentration of wealth and enterprises.¹

Some of the significant factors on the expenditure side are the rate of growth, age composition and the geographical distribution of population. A fast rate of growth of population will require an even faster increase in expenditure to provide public services at the same level. A high proportion of non-productive age group will demand adequate provision for health, welfare and education. A sparse and widely scattered population will necessitate a higher unit cost of providing social overhead capital.

In the following we discuss some of the main economic characteristics of Newfoundland which are relevant to the study of public finance. The latter part of this chapter

¹ Willian N. Lockwood, The Economic Development of Japan. (Princeton: Princeton University Press, 1954), pp. 271-80.

contains a brief discussion of some imminent economic problems, and the subsequent chapters are devoted to see how far the fiscal policy has been able to alleviate the economic strains and to contribute to the economic development of the Province.

Gross Provincial Product

The gross provincial product has been used as an indicator of the performance of the economy. Measured with this yardstick, Newfoundland has developed quite rapidly. The gross provincial product trebled at current prices and more than doubled in terms of 1949 prices, and the per capita income in 1949 prices increased by one and a half times. On the average, per capita increased at an annual growth rate of 2.3 per cent. In 1954, 1957 and 1963 the growth rate declined. In 1954 and 1957 the growth in real gross provincial product was offset by a higher growth rate of population which caused a decline in the real per capita income. In 1963, there was only 0.9 per cent rise in the gross provincial product at current prices. This rise was counter-balanced by a rise in the price index and a greater increase in the population growth. The growth rate in the real income per capita compares very favourably with the Maritimes in particular and Canada in general, especially in view of the fact that the growth rate of population during all these years has been much higher in Newfoundland than in Canada as a whole.

Table 1-1

PROVINCIAL PRODUCT OF NEWFOUNDLAND: 1949-63
(In million dollars)

	NPP Current		GPP Current		GPP Constant *		GPP Constant *	
	Amount	%Rise	Amount	%Rise	Amount	% Rise	Per capita Amount	% Rise
1949	170.2	-	213.3	-	213.3	-	618.2	-
1950	189.4	11.3	242.4	14.1	235.1	10.2	669.7	8.3
1951	215.2	13.6	280.8	14.8	246.1	4.7	681.5	1.8
1952	235.9	9.6	318.2	12.7	265.6	7.9	710.2	4.2
1953	255.6	8.3	339.6	6.7	282.3	6.3	737.1	3.8
1954	272.2	6.5	357.1	5.8	289.8	2.7	733.5	-0.5
1955	294.2	8.1	391.7	9.6	316.4	9.2	779.3	6.2
1956	330.5	12.3	432.4	10.1	336.8	6.4	811.5	4.1
1957	342.7	3.7	448.6	3.4	339.1	0.7	799.8	-1.4
1958	353.1	3.0	465.6	4.4	346.6	2.2	802.3	0.3
1959	357.7	6.4	502.7	7.6	363.7	4.9	824.7	2.8
1960	404.1	7.6	555.2	11.3	395.4	8.7	882.6	7.0
1961	437.9	8.4	618.6	11.3	437.8	10.7	955.9	8.3
1962	468.6	7.0	714.0	15.9	497.2	13.6	1057.9	10.7
1963	507.4	8.3	725.0	0.9	495.2	-0.4	1029.5	-2.7

Source: G. N. Yunnopoulis, Development of Newfoundland Economy Since Confederation, Unpublished Ph.D. Dissertation, London School of Economics, 1964.

* In 1949 prices.

Sectoral Distribution of Income

The sectoral distribution of the provincial product is given in Table 1-2; Table 1-3 presents the proportionate share of the labour force absorbed by major industries.

A. Resource Industries

Resource industries are by far the most important in the economy of Newfoundland. They accounted for 74.1 per cent of the net provincial product and employed 33.9 per cent of the total labour force in 1951. Their share in the provincial product decreased to 52.5 per cent during the decade 1951-61 and their share of the labour force also declined to 23.6 per cent. The absolute product value of the primary industries, however, increased whereas the total number of persons employed in the sector declined over this decade. This indicates an upward physical shift in the production function of the primary sector. The primary sector includes forestry, fishing and mining which are discussed in some detail below.

1. Forestry

Pulp and paper and logging are the most important forest industries of Newfoundland. The forest industries contributed 42.6 per cent of the total net provincial product and absorbed 15.7 per cent of the labour force in 1951. A decade later in 1961, their share in the gross provincial product declined to 23.2 per cent, and in the labour force to 10.4 per cent. The large share of the forestry industries in 1951 was accounted

for by the pulp and paper mills. The two pulp and paper mills, the Price Pulp and Paper Ltd., in Grand Falls and the Bowater's Newfoundland Pulp and Paper Ltd., in Corner Brook, contributed roughly one-fourth of the total commodity production in 1951. The relative importance of the forest industries could not maintain its rank in 1961 partly because the production of paper mills expanded only slightly and partly because the absolute contribution of logging and saw-milling shrank. The market value of the pulp and paper product increased only from \$48 million to \$69 million in the decade 1951-61, and this increase was largely due to rise in prices rather than production.

2. Fishery

Until recently fishery has been of predominant importance in the economic life of the province. Even after years of diversification, the fishery produced 14.0 per cent of the total production and employed 20.0 per cent of the labour force in 1951; in 1961, these shares shrank to 8.8 per cent and 11.0 per cent respectively. The fall in the commodity production of the fishery is due mainly to the inefficient methods used in catching. This was pointed out clearly in the Report of the South Coast Commission which suggested that a five-fold increase in output per worker in the fisheries would be required to bring a fisherman's income upto a level comparable with that in other occupations. This would

Table 1-2

NET VALUE OF COMMODITY PRODUCTION: BY INDUSTRY
1951 and 1961
(In thousand dollars)

	1951		1961		(2) as % of (1)
	Amount (1)	%	Amount (2)	%	
Total Production	148,850	100.0	261,637	100.0	179.4
1. Resource Industries	107,952	74.1	137,181	52.5	127.1
a. Forest Industries	62,126	42.6	60,316	23.2	99.7
Logging	26,597	18.2	20,265	7.7	76.2
Saw milling	1,354	0.9	826	0.3	61.0
Pulp and paper	34,175	23.5	39,225	15.1	114.8
b. Fishery	20,531	14.1	23,066	8.8	112.3
Fishing	13,500	9.3	14,922	5.7	110.5
Fish processing	7,031	4.8	8,144	3.1	115.8
c. Mining	25,295	17.4	53,753	20.5	212.5
2. Secondary Manu- facturing	10,130	6.9	21,815	8.3	215.4
3. Others	27,768	19.0	102,641	39.2	369.6
a. Electric power	2,668	1.8	10,725	4.1	402.0
b. Construction	25,100	17.2	91,916	35.1	366.2

Source: Dominion Bureau of Statistics, Survey of Production, 1926-57, 1961.

Dominion Bureau of Statistics, National Accounts: Income and Expenditure, 1956 and 1961.

Table 1-3
DISTRIBUTION OF LABOUR FORCE, BY INDUSTRY
1951 and 1961

	No. (1)	1951 %	No. (2)	1961 %	(2) as % of (1)
All Industries	106,540	100.0	112,310	100.0	105.4
1. Resource Industries	45,662	42.9	29,969	26.7	65.6
a. Agriculture	3,525	3.3	1,641	1.5	46.6
b. Forest Industries	16,728	15.7	11,701	10.4	69.9
Logging	10,534	9.9	6,891	6.1	65.4
Saw milling	1,625	1.5	1,311	1.2	80.5
Pulp and paper	4,569	4.3	3,499	3.1	76.6
c. Fishery	21,391	20.1	12,334	11.0	53.1
Fishing	18,148	17.1	8,389	7.5	46.2
Fish processing	3,243	3.0	3,945	3.5	121.6
d. Mineral Industries	3,706	3.5	4,293	3.8	115.8
2. Secondary Mfg.	5,143	4.8	3,203	2.8	63.4
3. Others	7,933	7.4	9,735	8.7	122.7
a. Electricity etc.	642	0.6	210	0.2	32.7
b. Construction	7,291	6.8	9,525	8.5	130.6
4. Tertiary Industry	46,441	43.6	65,915	58.7	141.9
a. Transportation and communication	10,018	9.4	15,213	13.6	151.9
b. Wholesale Trade	3,835	3.6	4,287	3.8	111.8
c. Retail Trade	10,416	9.8	14,641	13.0	140.6
d. Finance & Insurance	610	0.6	1,432	1.3	234.8
e. Community Services	6,515	6.1	9,776	8.7	150.0
f. Govt. Services	9,483	8.9	12,579	11.2	132.6
g. Commercial Services	5,564	5.2	7,987	7.1	142.5

Source: Census of Canada, 1951 and 1961.

necessitate an 80.0 per cent reduction in the number of fishermen.²

Fishing, however, still employs a considerable portion of the labour force. The employees in this industry accounted for 20.1 per cent of the labour force in 1951 and 11.0 per cent in 1961. This fall in the fishery's share in the labour force is a healthy sign. Fishery is a seasonal industry and the workers employed in catching fish (who accounted for 7.5 per cent out of the 11.0 per cent) go out of employment during winter and are placed on unemployment insurance benefits. This harms the economy in two ways: first, the economy suffers due to the price it pays in the form of the seasonal nature of employment and thus the tax potential is reduced; second, the much needed public revenue for development drains into such unproductive use as able-bodied relief.

3. Mining

Among the resource industries mining is the only one which has gained in importance. Its absolute value product doubled, and its percentage share increased from 17.4 to 20.5 between 1951 and 1961. Mining has mainly been financed by foreign capital. In 1962 approximately \$250 million were provided to finance the Wabush Mines. The mining industry employed 3.5 per cent of the labour force in 1951 and 3.8

² Government of Newfoundland, South Coast Commission, Report. (St. John's, 1957).

per cent in 1961 (Table 1-3). Although the percentage of people employed directly in mining is low because of the capital intensive nature of the industry yet it yields enormous benefits through its strong backward and forward linkage effects.

B. Secondary Manufacturing

Secondary manufacturing has been rather unimportant in Newfoundland. Besides the pulp and paper industry and fish processing, there are few secondary enterprises in the province.³ It contributed 6.9 per cent of the total net value of commodity production in 1951 and 8.3 per cent in 1961. The growth of this industry has been retarded for two main reasons. Firstly, the Province has a serious locational disadvantage in the supply of raw materials. Secondly, the instrument of protective tariffs which the Province had used earlier was no more available after Confederation. Severe competition with the Mainland industries thwarted the growth of secondary industry. Several enterprises were shunted out of business after Confederation.⁴ The labour force employed in the secondary industry declined from

³ For details on secondary industry in Newfoundland see F. E. Lounsbury, Secondary Manufacturing in the Atlantic Provinces. (Fredericton, N.B. Atlantic Provinces Economic Council, 1961).

⁴ P. Copes, St. John's and Newfoundland, An Economic Survey. (St. John's, Newfoundland: Newfoundland Board of Trade, 1961), p. 110.

4.8 per cent to 2.8 per cent during 1951 to 1961. It may be noted that in 1957 a quarter of Ontario's labour force and 21.0 per cent of Quebec's labour force was employed in secondary industry.

C. Construction

The construction industry is treated here separately because of its importance. Its share of net value product doubled in the decade 1951-61 and it became the single most important industry in 1961 by accounting for 35.1 per cent of the net value of commodity production. The construction boom started in 1951 with all types of building - residential, industrial, road, power and railway and communication. It was the result of the low level of public services and private housing prevailing at the time of Confederation and was made possible by help from the Federal Government which was intended to assist Newfoundland in catching up with other provinces. With 1950 as the base year, the index number of employment in construction reached the peak of 801.8 in 1953 and stood at 542.8 in 1962. The index number for the industrial sector as a whole was only 133.2 in 1962. The labour force employed in construction rose from 6.8 per cent to 8.5 per cent between 1951 and 1961. Here again the seasonal nature of industry tends to harm the public revenues and development expenditure. The construction activity is likely to continue at a fast pace because of the wide gap which still exists between Newfoundland and the other provinces in the provisions

of social capital and residential housing.

D. Tertiary Industry

Colin Clark has tried to establish a relationship between occupational distribution and economic development: he argues that the higher stages of development are associated with a greater number of workers employed in the service industry.⁵ Prima facie, this may sound true of Newfoundland where the development of the economy has seemingly been associated with the growth of services such as transportation and communication, and finance and trade. But this is hardly so; the high percentage share of the labour force employed in the service industry cannot be taken as a mark of a high stage of development but is rather a mark of an immature economy in the case of Newfoundland.⁶

In summary, Tables 1-2 and 1-3 show that the economy is becoming more and more diversified. Despite the shift away from forestry and fishing, logging and saw-milling, fishing and construction still employ approximately one-quarter of the total labour force. These industries are highly seasonal

⁵ Colin Clark, The Conditions of Economic Progress. (London: MacMillan and Co. Ltd., 1940), p. 182. Also A. A. B. Fisher, Economic Progress and Social Security. (London: MacMillan and Co. Ltd., 1945), p. 5-6

⁶ Cf. P. T. Bauer and B. S. Yamey, "Economic Progress and Occupational Distribution", Economic Journal, December, 1951. pp 741-55.

in nature. The important implication of this, from the point of view of public finance, is that such a high proportion of the labour force in the seasonal industry leads to a drain of the public resources into able bodied relief and unemployment insurance benefits.

Composition of Personal Income.

Table 1-4 presents the components of total personal income; while the total income trebled, government transfer payment increased more than four fold. Income from no other source registered such a rapid increase (Table 1-4). It should be noted, however, that on the average, nearly 70.0 per cent of the government transfer payments came from the Federal Government. Since 1953 they have been the second most important component of personal income, and their share has been increasing ever since, reaching a peak of 20.0 per cent in 1960. After 1960, however, their percentage share has tended to remain below 20.0. The share of earned income has increased but that of proprietor's income declined which reflects partly the redistribution of income in favour of salaried people. Although the government transfer payments are a useful built-in stabilizer, yet in recent discussions of the functions of public finance, the emphasis has shifted from income redistribution to economic development which both cannot necessarily be achieved simultaneously. Besides, that the transfer payments are a good stabilizer in Newfoundland

Table 1-4

TOTAL CURRENT INCOME, BY COMPONENTS
1949-63
(In million dollars)

	Total Personal Income	Earned Income		Proprietor's Income		Property Income		Transfer Payments	
		Amount	%	Amount	%	Amount	%	Amount	%
1949	163	106	63	28	18	8	5	19	12
1950	177	116	64	29	16	11	6	22	12
1951	205	138	64	32	16	11	5	27	12
1952	219	151	64	29	13	12	5	30	13
1953	242	170	66	28	12	13	5	35	13
1954	258	177	67	30	12	16	6	38	15
1955	277	191	67	31	11	17	6	42	15
1956	311	215	68	35	11	18	6	47	14
1957	329	226	69	37	11	18	5	50	16
1958	343	222	66	36	10	19	6	67	19
1959	363	236	66	40	12	22	6	67	17
1960	395	260	66	43	8	23	6	73	20
1961	429	286	66	43	8	25	7	78	19
1962	460	309	65	47	10	26	6	82	17
1963	495	336	65	49	10	29	6	85	16

Source: Dominion Bureau of Statistics, National Accounts: Income and Expenditure.

can be conceded only with reservations; the largest bulk of such payments goes into social welfare allowances, such as old age assistance, blind and disabled persons' allowances, mothers' allowances, child care etc., which are fixed.

POPULATION

The important aspects of population from the point of view of this study are the age composition, growth and the rate of urbanization. Newfoundland has experienced the highest rate of natural increase through a high birth rate and low death rate. The average rate of natural increase during 1949-63 was 26.7 per thousand people. The birth rate declined from 37.5 per thousand in 1950 to 32.1 per thousand in 1963. The death rate fell from 9.0 per thousand in 1950 to 6.6 in 1963. The high birth rate can be largely attributed to the great increase in income since Confederation and the low death rate reflects the improvement in hygiene and health.

Age Composition

Table 1-5 shows the age distribution of the Newfoundland population according to the censuses of 1951 and 1961. It can be observed from this table that the pyramid of population is very broad in its base. Children under 4 years of age comprise the major portion of population (16.3 per cent). After a decade it stood at 14.8 per cent due to fall in the birth rate. If 15-69 is regarded as the earning group then

in 1951 43.1 per cent of the total population was in the category of non-earning group. Of the non-earning group, 4.0 per cent belonged to the above 69 age group and the rest 39.1 per cent to the below 15 age group. After a decade the situation worsened in 1961: the earning group had fallen to 54.4 per cent of the population and the children under 15 years rose to 41.9 per cent.⁷ The corresponding figures for Canada, as a whole, were 61.1 per cent and 33.9 per cent respectively.

In 1962 the index of population with 1950 as the base year, was 133.9, and the index of the labour force lagged behind at 120.2. To aggravate the position the participation rate fell from 29.6 per cent in 1950 to 26.9 per cent in 1962. It follows from Table 1-6 that between 1949 and 1962 the proportion of population gainfully employed was never more than 29.9. It implies that 70 to 75.0 per cent of the population consisted of young children, unemployed and old people. It means that the unemployed have to be provided with unemployment insurance benefits and able-bodied relief fund, children with family allowances and the old people with

⁷ David Kamerschen suggests that if the unproductive population exceeds the productive population, the country is over populated. Productive population is comprised of people in the 20 - 65 years range. See his "Over Population in the Underdeveloped Countries", Economic Development and Cultural Change Vol. XIII No. 2. January, 1965. According to this, Newfoundland was overpopulated in 1951 and the situation grew worse in 1961. See Table 1-5

Table 1-5

POPULATION DISTRIBUTION, BY 5 YEAR AGE GROUP
1951 and 1961

	1951		1961		1961	
	Newfoundland No.	%	Newfoundland No.	%	Canada No.	%
0- 4	58,831	16.3	67,695	14.8	2,256,401	12.2
5- 9	46,433	12.8	64,404	14.1	2,079,522	11.4
10-14	36,126	10.0	59,464	13.0	1,855,999	10.2
15-19	30,403	8.4	43,829	9.6	1,432,559	7.9
20-24	36,718	7.4	<u>30,238</u>	6.6	1,183,646	6.5
25-34	48,871	13.5	52,290	11.4	2,481,107	13.6
35-44	41,417	11.5	48,964	10.7	2,389,885	13.1
45-54	27,883	7.7	39,343	8.6	1,878,504	10.3
55-64	21,244	5.9	24,731	5.4	1,289,470	7.0
65-69	9,071	2.5	9,684	2.1	487,102	2.7
70 above	14,419	4.0	17,211	3.7	904,052	5.0
0-19		47.5		51.5		41.8
20-64		46.0		42.7		50.5
65 above		6.5		5.8		7.7

Source: Census of Canada, 1951 and 1961.

Table 1-6

LABOUR FORCE PARTICIPATION RATES, 1949-63

	Population	Population	Labour	Labour	Participa-
	Index	Index	Force	Force	tion Rates
	(000)	(000)	(000)	Index	
1949	345	-	n.a.	-	n.a.
1950	351	100.0	105.0	100.0	29.9
1951	361	102.8	101.5	96.7	28.1
1952	374	106.5	101.0	96.2	27.0
1953	383	109.1	102.0	97.1	26.6
1954	395	112.5	99.8	95.0	25.3
1955	406	115.7	103.6	98.6	25.5
1956	415	118.2	107.0	101.9	25.7
1957	424	120.8	110.7	105.4	26.1
1958	432	123.1	110.7	105.4	25.6
1959	441	125.6	115.4	109.9	26.2
1960	448	127.6	117.9	112.3	26.3
1961	458	130.5	122.0	116.2	26.6
1962	470	133.9	126.2	120.2	26.9
1963	481	137.0	n.a.	-	n.a.

Source: G. N. Yunnopoulos, Development of Newfoundland Economy Since Confederation. Unpublished Ph.D. Dissertation, London School of Economics, 1964.

old age assistance. A high proportion of such people in the population necessitates the apportionment of more funds to unproductive uses with the exception of education and health. It may be pointed out, however, that there are many future advantages of a young population.

Geographical Distribution

The geographical distribution of the population in Newfoundland is largely influenced by historical trends and the location of fishing grounds. The most important criterion for early settlement was the nearness of rich and fertile fishing grounds. In this context isolation was an advantage because it carried with it the prospects of undisturbed use of the fishing ground. Isolation was also advantageous because it offered protection from the ruthless enforcement of the British law against colonisation of Newfoundland. The result is the dispersion of population into approximately 1300 small settlements spread along a coastline of 6,000 miles.

The majority of people have concentrated on the east coast for reasons which are entirely historical. Before colonisation was permitted the east coast was the favourite refuge of the fishing vessels, and as soon as the ban on colonisation was lifted, this part was the first to be settled. Lack of facilities of communication and transportation, and prolonged dependance on fishery for earning a livelihood

along with social and cultural factors, acted as strong deterrents on population movements. Since Confederation, however, diversification of the economy and spread of infra-structures, supplemented by incentives offered jointly by the Provincial and Federal Governments to people in out-ports to move out, have led to a population movement to the urban areas. In 1951, 42.7 per cent of the population was living in urban areas. A decade later in 1961, this figure rose to 51.9 per cent as shown in the following table.

Table 1-7

RURAL AND URBAN POPULATION CHANGES
(1951-61)
Percentages

Year	Newfoundland		Canada	
	Rural	Urban	Rural	Urban
1951	57.3	42.7	37.1	62.9
1956	55.4	44.6	33.4	66.6
1961	48.1	51.9	28.9	71.1

Source: Dominion Bureau of Statistics, Census of Canada, 1951, 1956 and 1961

In 1961 the city of St. John's accounted for 53,000 residents or 14.6 per cent of the total population of the Island. In 1961 the cities of St. John's and Corner Brook together accounted for almost 20.0 per cent of the total population. In the same year there were 39 other towns which absorbed

18.4 per cent of total population. The rest of the 60.0 per cent was scattered in small settlements called outports. Apart from that, the population is most unevenly distributed among the census division. Division I (the Avalon Peninsula) accounts for two-fifths of the population, giving a density of 52.2 persons per square mile. Division 10, on the otherhand, contains less than 3.0 per cent of the population, giving a density of 0.1 person per square mile (Chart I). Density of population in Newfoundland as a whole is 3.1 per square mile compared with 5.2 for Canada. Low density coupled with a high degree of dispersion of population raises the cost of providing social overhead capital because the marginal cost of social overhead capital is much higher than their average cost due to indivisibility and large units.

ECONOMIC PROBLEMS

The previous section has been devoted to outlining those aspects of the economy which are relevant to the study of public finance. However, to ascertain the role of public finance in the development of Newfoundland it is necessary to recognize some of Newfoundland's economic problems and see how public finance has helped to alleviate them.

Unemployment

The rate of unemployment is an important indicator of underdevelopment and the Federal Government has used it to

Table 1-8
UNEMPLOYMENT RATES FOR NEWFOUNDLAND AND
SELECTED REGIONS OF CANADA: 1950-62

	Ont.		Nfld.		Maritimes		Canada	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1950	2.4	n.a.	n.a.	n.a.	7.8	n.a.	3.9	n.a.
1951	1.7	n.a.	7.8	n.a.	3.4	n.a.	2.4	n.a.
1952	2.2	n.a.	6.9	n.a.	4.0	n.a.	2.9	n.a.
1953	2.3	n.a.	5.9	n.a.	5.4	n.a.	3.0	n.a.
1954	3.8	n.a.	6.0	n.a.	6.7	n.a.	4.6	n.a.
1955	3.2	n.a.	6.7	n.a.	6.6	n.a.	4.4	n.a.
1956	2.3	3.2	6.5	10.6	5.8	10.4	3.4	5.0
1957	3.4	6.2	9.9	19.4	7.9	13.8	4.6	8.6
1958	5.4	6.0	18.0	28.8	10.9	11.9	7.1	8.2
1959	4.5	5.7	19.1	24.8	8.7	10.8	6.0	8.1
1960	5.4	7.3	17.8	25.4	8.7	12.3	7.0	9.6
1961	5.5	5.5	20.5	24.3	8.9	11.3	7.2	7.6
1962	4.3	4.8	17.5	21.5	8.9	10.9	5.9	7.3

Source: Dominion Bureau of Statistics, The Labour Force.

T. Wilson, Financial Assistance with Economic Development, 1964, p. 73.

Notes:

(1) Annual unemployment rate

(2) Unemployment rate for winter months only, November through April.

designate the depressed areas. Unemployment has two significant aspects from the standpoint of public finance. It means loss of production and income and hence a low tax potential. It also diverts the government revenue to able bodied relief and unemployment insurance benefits.

The unemployment rates in Newfoundland, Ontario, the Maritimes and Canada are presented in Table 1-8. Even in the year of peak employment in 1953, Newfoundland's unemployment rate (5.9) was twice as high as that of Canada as a whole. 1953 was the year of boom activity especially in construction as shown above.⁸ The rate of unemployment began to rise in 1957 recording a sharp rise in 1958, and continued to go up in the following years. The reason for these unusually high rates of unemployment all over Canada was the recession that started in 1957. In 1958, while in Canada unemployment rose by 3.5 per cent and in Ontario by 2.0 per cent, it rose by 8.1 per cent in Newfoundland. In the later years of recession the rate of unemployment in Newfoundland was considerably higher than in Canada in general and in Ontario in particular. It may be inferred from this that the depression in Canadian economy hurt Newfoundland more than other regions, and this is perhaps due to the high dependence of the Island's economy on the Canadian Mainland.

⁸ See p. 12

However, the persistence of high rates of unemployment throughout the period is an indication of the existence of structural unemployment in the economy.

Because of the high degree of reliance on fishery and other primary industry, Newfoundland's economy suffers from considerable seasonal unemployment. The gravity of the situation can be ascertained from Table 1-8. The average rate of seasonal unemployment during the winter months, November through April, stood as high as 28.8 per cent in 1958. In primary fishing in 1958/59, unemployment insurance benefits and able-bodied relief constituted 42.0 per cent of the total participation income. The figure for 1962/63 was 33.0 per cent.⁹

The loss inflicted by unemployment of resources is significant. In its memorandum to the Royal Commission on Taxation in 1963, the Atlantic Provinces Economic Council submitted that, assuming that unemployment in the Atlantic provinces was no higher than in Canada as a whole, the loss attributed to the unemployment of the labour force came to \$455 million over the years 1953-61. Newfoundland's loss was the greatest because its unemployment rate averaged 12.3 per cent per annum in comparison with 7.7 per cent of the

⁹ P. Copes, "Government Assistance, Productivity and Income in the Fishing Industry of Newfoundland". A paper presented to the 1964 Conference of the Canadian Political Science Association. Table 24.

Maritimes for that period.

Emmigration provides the safety valve in an explosive situation like this. But does this solve the problem? The Special Committee of the Senate on Manpower and Employment, referring to the problems of the Atlantic region wrote: "Over the long run there are only two solutions: either the people move out to better opportunities elsewhere, or better opportunities are made available to them where they are. The massive migration of the population is neither socially not economically desirable, and we reject this possibility".¹⁰ The fact is that migration has not helped much in the past,¹¹ and even if migration were the answer there is not much scope to absorb the unemployed labour force of Newfoundland elsewhere in Canada. Allowing for 3.0 per cent unemployment as inevitable, no region in Canada (except perhaps the Prairie Provinces with 3.9 per cent unemployment rate) could claim full employment upto 1962. In fact, the Maritimes, Quebec and British Columbia had considerable unemployment that year, and still higher rates in the years prior to that.¹² Thus if the labourers did leave Newfoundland for job opportunities,

¹⁰ Special Committee of the Senate on Manpower and Employment, Report. (Ottawa: Queen's Printer, 1961), p. 6.

¹¹ T. N. Brewis et al., Canadian Economic Policy. (Toronto: MacMillan Company, 1965), pp. 322-23.

¹² T. Wilson, Financial Assistance with Regional Development. (Fredericton, N.B., Atlantic Provinces Economic Council, 1964), p. 73.

many of them have to migrate to the neighbouring United States. Thus the loss is harmful to the Province and to Canada. In 1956 the Newfoundland Board of Trade estimated that it costs \$10,000 in current prices to rear and educate a child.¹³ Thus a policy of regional development can contribute to national growth: by providing more employment opportunities within the province the national loss of the labour force can be avoided.

Income Leakages

Regional development has recently become the focus of attention and economists have developed models to explain and resolve the regional differences in economic activity. Regional disparities do exist even in countries boasting the highest standards of living but they do pose problems of a special nature in countries with a federal system of government. The advantage of joining a federation is to share in the affluence of a united country, but the act of union of a lagging region with developed areas tends to intensify regional disparities through the polarization effects which are stronger than the spread effects. This problem has clearly been recognized in the legislation that created the Economic Council of Canada and which specifically directs

¹³ Newfoundland Board of Trade, Submission to the Royal Commission on Canada's Economic Prospects. (St. John's, Newfoundland, 1957), p. 14 (mimeographed).

the Council "to study how national economic policies can best foster the balanced economic development of all areas of Canada".

It has been suggested, notably by Raul Prebisch, that free trade between the centre and the periphery bestows the advantages on the former. It follows that the gap between the advantages derived from free trade will tend to be greater the greater is the value of trade between the centre and the periphery. Newfoundland and mainland Canada are a good example of this.

The economy of Newfoundland relies heavily on the export of its main products, pulp and paper, fishery products and minerals. Half of its total production (by value) is exported and 90.0 per cent of its exports are accounted for by forestry, fishery and mining. For virtually everything, even the basic necessities of life, it leans heavily on imports; 90.0 per cent of the food marketed is imported.¹⁴ After Confederation, open and free trade with mainland Canada has exposed Newfoundland to polarization effects.¹⁵

¹⁴ P. Copes, St. John's and Newfoundland, An Economic Survey. (St. John's Newfoundland: Newfoundland Board of Trade, 1961), pp. 16, 97.

¹⁵ On the basis of a sample survey of construction projects, the Newfoundland Board of Trade revealed in 1956 that 40.0 to 50.0 per cent of the total expenditure on the major projects is made outside the Province. The other portion is spent on purchases within Newfoundland but the commodities purchased

Income leakages coupled with migration of population tend to widen the regional disparities because the income of the recipient region increases via the multiplier and accelerator.

Lack of Secondary Manufacturing Industry

While discussing the problem of unemployment above it was suggested that migration was not the solution nor had it helped in the past. The secondary manufacturing industries are useful to relieve the situation because they can be labour intensive. The Canadian experience bears out this fact: Between 1928 and 1953, 30.0 per cent of the total additional jobs created were in the manufacturing industries and 70.0 per cent of these jobs were provided in the protected industries.¹⁶ Secondary manufacturing is still in its early stages in Newfoundland. It absorbed only 21.0 per cent of the labour force in 1951 and this share dropped to 19.0 per cent in 1961. In absolute terms its share remained stationary.

are imported (20.0 per cent from mainland Canada and 20.0 per cent from U.S.A. and U.K.). The following example will make it clear:

1. Total cost of Project	\$1,000,000
2. Portion spent in mainland Canada	400,000
3. Portion spent in Newfoundland	600,000
a. Purchases of goods made in Canada	325,000
b. Purchases of goods made in U.S.A. and U.K.	80,000
c. Salaries and wages to Newfoundlanders ...	65,000
d. Saving	130,000

¹⁶ C. L. Barber, "Canadian Tariff Policy", Canadian Journal of Economics and Political Science, November 1955, p. 522.

Economies of scale are important in the secondary manufacturing industries: marginal costs decline as the scale of operation is expanded upto an optimum size. But an optimum size plant cannot be established unless the market is sufficiently large both in terms of income and population. The size of the market disqualifies Newfoundland from creating the base for a large and sound secondary manufacturing sector. The personal income per capita in Newfoundland is less than the Canadian average and only half of that of Ontario. The population is small and sparse and distribution of the products thus becomes difficult and expensive.

These handicaps can, however, be overcome by finding export markets. It requires competitive prices to capture a market and here again Newfoundland is at a disadvantage. It is neither material-oriented nor market-oriented. Agriculture is virtually non-existent. The cost of transportation is high relative to other parts of Canada. Located in the middle of the most specialized economies of Western Europe and North America, it faces severe competition in secondary industry. The manufacturing industry which existed in Newfoundland before 1949 was protected and inefficient. This was proved when, with the dawn of Confederation, a dozen or so of them went out of business. Some of these industries are still protected by the heavy cost of transportation involved in importing products from mainland.

Shortage of Capital

Newfoundland has always faced a shortage of domestic capital. There are few large enterprises which were established with purely local capital. This is due mainly to the low level of personal income. No reliable data are available for the period prior to Confederation. But in 1949 per capita income was \$472 which was half of the Canadian average. The low levels of income are generally associated with high marginal propensities to consume and therefore low capacities to save. Besides, much of this money income was discounted by a high cost of living which was approximately 20.0 per cent higher than that of mainland Canada. Although the per capita income has more than doubled since 1949, the cost of living index has also risen and thus the real income tends to remain low.

It should be noted that a low level of real income is only a part of the reasons for small capital formation. Some of the increase in the marginal propensity to consume can be safely attributed to the change in the pattern of consumption due to Duesenbury's demonstration effect. The experience of Latin American countries provides evidence for this.¹⁷ This is partly true of United States also. Nurkse wrote: "Remember: the reason why even in the United States

¹⁷ Raul Prebisch, The Economic Development of Latin America and Its Principle Problems. (New York: U.N., 1950), pp. 5, 37.

75.0 per cent of the people are saving nothing is not that they cannot afford to save, or do not want, but that they live in an environment which makes them want new consumption goods even more".¹⁸ Newfoundland has been abundantly exposed to this. Before Confederation high tariffs kept Newfoundland in isolation of the new and superior consumption goods produced and consumed abroad. Union with Canada removed the tariff barriers, and commodities, new and superior, moved freely from Canada.

The shortage of social overhead capital is equally apparent in the Province. Even after the tremendous assistance from the Federal Government (Tables 3-2 and 3-3), Newfoundland lagged behind other provinces in public utilities. Parts of the province are still without roads. The ratio of miles of surfaced road per thousand people was 9.3 in 1961 corresponding to 15.9 for Canada.

¹⁸ Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries. (Oxford: Basil Blackwell, 1960), p. 67.

CHAPTER II

FINANCIAL ASPECTS OF CONFEDERATION

IMPORTANCE OF FISHERY

The Newfoundland Royal Commission of 1933 summarized the financial and economic difficulties of the Island in these words: "We cannot indeed emphasize too strongly that recurring visitations of pauperism necessitating large payments for relief have always been a feature of the Island's economic history and must continue to be so, while the fishery is conducted on its present basis and remains the mainstay of the country".¹

Foreign trade had been very important in the economy of Newfoundland. For almost everything, even the bare necessities of life, the Island relied on foreign markets. Its main exports were fish and pulp and paper. The most important implication of reliance on foreign trade, from the point of view of public finance, was its significance for public revenue. Even during the relatively prosperous year of 1944/45, the average rate of duty on all imports was 25.0 per cent and the custom contributed more than half of the total government receipts. (Table A-2)

¹ Newfoundland Royal Commission, 1933 Report. (London: His Majesty's Stationery Office, 1933), p. 50

The fishery was not only a large component of the exports of Newfoundland contributing 45.0 per cent of the total value, (Table A-1) but was also important as a means for livelihood and employment for a large number of people. Such reliance on fish and fish products as a main source of income, employment and exports, was economically very unsound. This industry is subject to violent fluctuation which are absolutely beyond human control and it is subject to the vagaries of nature. It is a 'common property' resource where inter-temporal optimum use is difficult to achieve and where one's share is purely a function of capital-intensive techniques. Lack of both placed Newfoundland at a gross disadvantage in comparison with other countries. Above all, it is a highly seasonal industry where a bad or good catch can cause fluctuations in income and employment in the island. Consequently, from the second quarter of the nineteenth century upto 1949, the year of Confederation, the fishing industry has been a destabilishing element, although determining the course of the economy.

The disadvantages of dependance on fishery for export earnings are equally formidable. Its income elasticity of demand, is low and its price elasticity of demand high due to high elasticity of substitution. The exogenous factors such as retaliation in the case of tariff and wars are equally important in this regard. The effects of the

dominant position of the fishery in the economy of Newfoundland are briefly outlined below.

In Newfoundland before Confederation, the years of low income and high rate of unemployment were closely associated with the failure of the fishery. The dangers inherent in an economy based on fish and fish products had become manifest by 1890 when the government made the first serious effort to diversify the economy. The early years of responsible government (which was granted in 1855) were relatively prosperous but they were not to last long. In 1860 the fishery failed and in the following two years it was not quite successful. Consequently, unemployment became rampant and the population began to migrate to Canada and the United States. A state of semi-starvation prevailed and 33.0 per cent of the public revenue drained into able-bodied relief. Good seasons of fishery started in 1869 and culminated in 1874 with a record catch. In that year half of the population was engaged in catching and curing fish, the public revenues were at their peak and the balance of payment showed a surplus. The fishery failed in 1875 but this time soaring prices came to the rescue.

In 1894 the credit system on which the fishermen and merchants carried on their dealings led to a financial crisis which bankrupted two banks, and the failure of the Government Savings Bank to honour its obligations.

Attempts had been underway since 1890 to diversify the economy by opening up the remote areas with the spread of the railway system. A large proportion of the workers was absorbed by the construction of railways and the discovery of mines in Tilt Cove. The period 1895 to 1933 can, therefore, be designated as a relatively prosperous one. The most important factor, however, in drawing labour away from the fishery was the outbreak of World War I. Newfoundlanders worked on the American, British and Canadian military bases, and many of them left the country on war services. Nonetheless, one-fourth of the total population was still engaged in catching and curing fish in 1921. The war had brought employment as well as higher incomes caused by upward price trends especially those of fish.

The end to the prosperity generated by the War came with the onset of the depression of 1930's. The fishery was left in such a state of ruination that a commission, the Fishery Investigation Commission, was instituted in 1934. Conditions did improve somewhat in the later years but still upto one-sixth of the population on the average lived on relief. The main reason for the persistent high rates of unemployment was the passivity of foreign markets and the stiff competition from the development of fishery in Norway. Between 1928/29 and 1939/40 the export value of fish had decreased from \$16.0 million to \$8.0 million. Thereafter fish exports began

to rise and continued until 1944/45 when their export value stood at \$21.8 million. Expansion in the export earnings of fishery was due to World War II which shot up prices.

In summary, the fishery which employed a quarter of the total population and constituted half of the total export value, was entirely dependant on the vagaries and vicissitudes of nature at home and economic and political conditions abroad. Thus the most important sector of the economy was being controlled by exogenous forces. "It is this preponderant dependence", wrote the Royal Commission, "on the outside world for the sale of a single product which chiefly explains the Island's economic and financial difficulties in the past".²

THE FINANCIAL DIFFICULTIES

The financial history of Newfoundland reads like a long tale of chaos, crisis and improvident policy. From the end of the 19th century upto the 1940's the Island experienced continual financial crisis.

In 1894, two years after a fire had destroyed the city of St. John's, Newfoundland was hit by a severe financial crisis: that year the firm of Messrs. Prowse, Hall and Morris, the London agents of the firms exporting fish to European countries, refused to honour the bills drawn by the Commercial

² Report on the Financial and Economic Condition of Newfoundland. (London: His Majesty's Stationery Office, 1946), p. 3.

Bank of St. John's. As a result, the Commercial Bank was closed down. The people lost confidence in the banking institutions and made a run on the other two banks, the Union Bank and the Government Savings Bank, both of which were forced to refuse payments. The country was left not only without banks but also without currency because the notes of these banks were the currency of the colony.

The crisis had far more implications than such crises normally have. An interest of \$225,000 on the external public debt was falling due in London on the first of January 1895. The government, being unable to meet this obligation, had made arrangements with the Union Bank to pay it: the creditworthiness of the government was at stake. Help was sought from England, and an immediate grant eased the situation temporarily. In order to service the debt the government wanted to float a new loan and requested England to guarantee the interest. England refused and the only alternative left was to revive the issue of Confederation. For reasons, which will be explained in the next section, Confederation failed once again. So badly had the credit of the government been hurt that the attempts to raise a loan in the money markets of Montreal and New York failed. The Bank of Montreal and the Bank of Nova Scotia which had branches in the colony also declined to help. It is ironical, at the same time suggestive of the financial position of the Government of

Newfoundland, that Mr. Bond the Colonial Secretary, was able to raise a loan of \$150,000 on his personal credit. Later, however, a loan was floated in the London market and was over-subscribed. The cause of this crisis was said to be the credit system on which fishing was conducted. Thus The Times wrote: "the true origin and cause of this terrific financial wreck lay much deeper and further back. It was unsound trade that injured Newfoundland on this fatal 'Black Monday'. We know now that for several years past the Newfoundland fish trade has been conducted, with some exceptions, wholly on credit. A business whose sole basis rests on such a frail foundation is liable to sudden overthrow".³

The distrust engendered by the bank failures and the delicate position of government in paying off the interest on the public debt lingered on for a number of years among the public. The people were reluctant to invest in business and government securities. Of the total public debt, hardly 5.0 per cent was held in Newfoundland. The reason was not, it must be pointed out, lack of savings as much as distrust and habits of the people.⁴

The financial crisis of 1895, which was blamed on the

³ Cited in the Newfoundland Royal Commission, 1933 Report. (London: His Majesty's Stationery Office, 1933), p. 28.

⁴ Ibid. p. 29.

credit system that ruled the fishery transactions and the earlier failure of fishery, had brought home with cruel severity that it was imperative to diversify the economy. To achieve this, the government undertook a programme of railway construction in the last decade of the 19th century. It is not without significance to note that this was also the period in which the government was facing serious financial difficulties.

In 1893 the government found it impossible to pay a sum of \$7.8 million which it owed Robert Reid who had constructed the railways on contract. In lieu thereof, the government decided to pay 5,000 acres of land per mile of railway built. The cost thus came to 2.5 million acres. As a result of a few more subsequent contracts, Robert Reid received from the government approximately 4,220,000 acres of land, \$42,000 annually for the carrying of the mails, and the vast areas of land near Grand Lake where coal reserves had been discovered. He also received an additional subsidy of \$100,000 per annum for a period of thirty years, \$10,000 per annum for six years and another amount of \$450,000. More important than this was the hold that the contractor held on the economy. These contracts gave him the right to construct, own and operate the whole railway and telegraph and postal system of the Island, and the electric street railway in the city of St. John's. He owned and operated

steamers in all large bays, the St. John's dry dock and the coal mining interests around Grand Lake. He also owned 4.0 million acres of land with free rights to all minerals. In return for all this the government received a paltry sum of \$1.0 million. This shows to what desperate lengths the government was driven financially. Thus the Secretary of State for the Colonies wrote to the Governor of Newfoundland that the "contract is essentially the sale of a million and a quarter acres for one million dollars". He further noted that "such an abdication by a government of some of its most important functions is without parallel. The colony is divested for ever of any control or power of influencing its own development, and of any direct interest in or direct benefits from that development".⁵

In 1900, however, the ownership of the railway, the postal and telegraph system was transferred to the government for the payment of \$2.5 million. Progress with the railway construction continued while the development of mining at Bell Island and the outbreak of World War I contributed to the development of the Island. Due to war expenditure, the public debt amounted to \$43.0 million in 1920.

The period 1920-32 was marked by deficit budgets. Misled by the temporary prosperity generated by the high prices of

⁵ United Kingdom Parliamentary Papers. C 8867. Nos. 8, 22, 26, 1898.

exports after World War I, and by the defence expenditure on the American, British and Canadian bases in the Island, the Government undertook vast capital expenditure. Consequently, during the twelve year period the public debt more than doubled to reach \$97.6 million in 1931/32.

The public revenue began to decline in 1930/31, reflecting the onset of depression. A large percentage of the people engaged on railway construction was left jobless and could not be absorbed in the fishery due to lack of fishing gear and a bad fishery harvest. As a result, 12.5 per cent of the total revenue in 1931/32 went into able-bodied relief.

Although the financial condition of the Island had been improving after the War, the government could not raise a loan of \$8.0 million in 1931, partly because of low savings and partly because of the fear created by improvident government policies. Despite the urgent appeal from government, the public hesitated to subscribe even a small loan of \$500,000. However, the government was able to get a loan of \$2.2 million from a syndicate of Canadian banks and \$2.5 million from the Imperial Oil Company, the latter being known as the Prosperity Loan of 1932. The bank loan required that the government earmark its custom revenues (which comprised 75.0 per cent of the public revenue) for the payment of interest. The Prosperity Loan involved granting the Imperial Oil Company the exclusive right to import, manufacture and sell

all petroleum products, including gasoline, kerosene and lubricating oil for an annual payment of \$300,000. The government was placed in such a tight situation that out of a current public expenditure of \$6.2 million in 1932/33, a sum of \$5.1 million was paid in interest on the public debt.

So improvident had been the financial policies that the government was suspended in 1934 and the Commission of Government took over in February of that year. The period from 1933 onwards was marked by significant improvements in the economic and financial conditions of the economy. The reasons for this were numerous. In 1932, a system of treasury control was established to control expenditure and to keep an eye on the financial condition of the Island. The Commission of Government effected some other financial reforms. Above all, World War II again brought prosperity through high prices and defence expenditure.

In the early years of this period, however, the budget showed a deficit because the volume of revenue was still limited by a low yield from the fishery. Customs duties though their rate was considerably reduced, remained the mainstay of public revenue; the average rate of custom duties was cut from 36.5 per cent in 1933/34 to 25.5 per cent in 1944/45.

The budget did not show a surplus until the outbreak of World War II. The defence expenditure in the Island provided

employment opportunities for a large number of people. In addition, about 7,000 Newfoundlanders volunteered for war services.⁷ Income and employment increased via the multiplier. These effects are manifest in the sharp increase in the government receipts (Table A-2), and a surplus budget after a prolonged period of time.

In summary, it may be said that there is one theme that permeates the financial and economic history of Newfoundland upto Confederation: it always took a benevolent act of nature or a war to bring relief to low incomes, mass unemployment and disguised unemployment. It was impossible for such an economy to sustain itself.

FINANCIAL TERMS AND THE ISSUE OF CONFEDERATION

The people of Newfoundland faced the issue of Confederation for the first time in 1869. It became the main issue in the election of that year, and the Federal Party (which was in favour of Confederation) suffered a humiliating defeat. Many reasons, such as vagueness of terms, inadequate provision for a mail steamship service and the fear of neglect of the fishery, have been put forward. It is not, however, without significance to note that 1869 was the most prosperous

⁷ For a detailed description of war expenditure, see, Report on the Financial and Economic Position of Newfoundland. (London: His Majesty's Stationery Office, 1946). Appendix A, p. 33.

year for the Island since the grant of responsible government. Able-bodied relief, which Newfoundlanders had come to regard as a private right, had been discontinued in the previous year, and the fishery was extraordinarily good. The anti-Confederate Party took advantage of this ephemeral prosperity and told the electors the "wild tales of conditions on the mainland and of the miserable fate that would be theirs if they once allowed themselves to come under Canadian domination". The Royal Commission went on to observe that "it was the telling effect of these tactics that completed the ruin of the Federal Party".⁸

The second time when the issue of Confederation came up was in 1895. This was the year of Black Monday --- the day Newfoundland was left not only without banking institutions but also without currency. It may be pointed out that eight years earlier an attempt to reopen the issue of Confederation had failed. After England refused to guarantee a loan that the Government of Newfoundland needed desperately, thoughts were turned to union with Canada as a means of resolving the financial difficulties. But the negotiations were deadlocked on financial terms. The total public debt of Newfoundland in 1895 was \$15,829,834. Canada was willing to assume

⁸ Newfoundland Royal Commission, Report. (London: His Majesty's Stationery Office, 1933), p. 16

\$10,350,000 calculated on the basis of \$50 per capita, this being the per capita public debt of Canada. The Government of Canada suggested that His Majesty's Government assume the remaining \$5,479,834, but England did not agree to this and the matter was dropped.⁹

Confederation was accomplished in 1949. By this time the prosperity generated by war had begun to wane. It must not be inferred, however, from the consummation of Union that the financial terms were to the entire satisfaction of Newfoundland. It had, in fact, placed high hopes in the clause (Term 29) providing for the revision of the financial position of the Island within eight years.¹⁰

FINANCIAL TERMS OF 1949

The financial arrangements between the Governments of Canada and of Newfoundland consequent upon Confederation are set out in clauses 23-29 of the Terms of Union. These are briefly discussed below.¹¹

Term 23: The Government of Canada agreed to assume the

⁹ For details, see ibid, Appendix E, pp. 243-45.

¹⁰ J. R. Smallwood, Our Case. (St. John's: Government of Newfoundland, 1966).

¹¹ See Department of External Affairs, Report and Documents Relating to the Negotiations for the Union of Newfoundland with Canada. (Ottawa: King's Printer, 1949), pp. 16-17.

stock issued on the security of Newfoundland pursuant to the Loan Act, 1933, of Newfoundland and to take over the sinking fund established under that Act. The public debt of Newfoundland stood at \$54,813,000 on the 1st of April, 1949. The Government held sinking fund securities of the order of \$7,216,000 leaving a net debt of \$47,597,000 which became the liability of the Government of Canada. The remaining portion of the public debt which amounted to \$4,835,470 remained the responsibility of the Provincial Government.

Under Term 24 Newfoundland would retain any financial surplus* subject to three conditions. First, one-third of the surplus would be deposited with the Government of Canada and it would be made available to the Government of Newfoundland for the purpose of maintaining and improving its public services. If any balance remained with Canada at the expiry of eight years that would be placed at the disposal of the Government of Newfoundland without any restrictions. Second, the remaining two-thirds would be available to Newfoundland only for the purpose of developing its resources and providing public services within the Province. Third, Newfoundland would not use any portion of the surplus to subsidize the production or sale of products in unfair competition with other provinces. It was free, of course, to advance loans to any industries on reasonable terms.

This term also provided for an interest of 2 5/8 per cent

* See pp. 57, 55.

per annum on one-third of the surplus which was to be deposited with the Government of Canada for a period not exceeding ten years from the date of Union.

Newfoundland, by Term 25, would retain any interest on loans and securities arising from or attached to loans of public funds made prior to the date of Union. This would not apply to loans or advances taken over by Canada.

Under Term 26 Newfoundland would receive all those subsidies paid to other provinces as provided for in the British North America Act, in addition to a special subsidy in recognition of its special geographical problems.

According to Term 27 Canada would offer Newfoundland a tax rental agreement whereby Newfoundland would not impose income tax, corporation income tax and succession duties. In return Newfoundland would receive subsidies. Newfoundland accepted and received \$6,570,222 during the first year.

Term 28: In order to help Newfoundland achieve the status of a Province of Canada and to develop its revenue producing services, Canada would give Newfoundland a grant of \$42,750,000 spread over a period of twelve years and expiring at the end of 1961/62. Newfoundland could keep this amount or any part on deposit with Canada and receive interest at $2 \frac{5}{8}$ per cent per annum for a period not exceeding ten years. No amount has been on deposit with Canada.

Term 29 provided for the appointment of a Commission to reassess the financial needs of Newfoundland within eight years of Union.

FEDERAL AID IN PERSPECTIVE

Two main reasons account for the vast disparities which existed between Newfoundland and the rest of Canada in 1949. Newfoundland, as has been noted above, did not pursue a policy of development. Again, at the time when it was passing through the severe strains of recurrent financial crises, the provinces of Canada were reaping the fruit of the development policy of the Federal Government. It is this second aspect which we intend to describe to show what Newfoundland lost by refusing to enter Confederation in 1869.

At the time of Confederation in 1867 "development of resources and potential of Canada was the first and major task of the New Federal Government".¹² This concern is reflected in the functions assumed by the federal government. The model adopted for economic development was the United States and likewise the emphasis was placed on spreading the network of transportation. This continued to be the focus of attention, and enormous federal expenditure was incurred upto 1913: railways, \$600 million; canals, \$105 million;

¹² Newfoundland Board of Trade, Submission to the Royal Commission on Canada's Economic Prospects, 1956 (mimeographed). p. 2.

harbour improvement, \$22 million; docks and terminals, \$3 million; public buildings, \$13 million, and harbour commission, \$30 million. Besides, 30.0 per cent of the current expenditure in the ordinary budget in the decade preceeding World War I was used to subsidize steamship and other transportation.

By the time World War I broke out the resources of the country had been fairly well exploited. Resource development called for the growth of services such as education and health. This was a provincial responsibility but the provincial revenues were found to be insufficient to meet the needs. Consequently, the conditional grants were increased and the emphasis shifted to public services.

The year 1939 brought fear of another war, and defence expenditure, which had hitherto been much less important than resource development and social services, became top priority. Newfoundland joined Canada in this era and has absorbed only a negligible amount of defence expenditure.

The conclusion emerges that the lagging provinces shared in the wealth of developed areas via the federal mechanism of income redistribution as well as its resource development policy. The industrial areas were greatly helped by the policy of protection which had the trade creation effect. This policy was particularly helpful in establishing

secondary manufacturing industry which absorbs the largest proportion of the labour force: 70.0 per cent of the total additional jobs created between 1928 and 1953 in Canada were in the protected industries.¹³

The preceeding discussion suggests that federal aid had benefited the Canadian provinces substantially since 1867. Newfoundland was unfortunate not to receive the advantages of the federal development policy during that period. Again, the circumstances in which Newfoundland entered the Confederation of Canada clearly indicated its hope of some of general economic advantage.

¹³ C. L. Barber, "Canadian Tariff Policy", Canadian Journal of Economics and Political Science. November, 1955, p. 522.

Table A-1
IMPORTS AND EXPORTS, BY VALUE: 1928-45
(In million dollars)

Year	Imports (1)	Exports (2)	Fish Exports (3)	(3) as % of (2)
1928/29	29.2	36.7	16.0	43.6
1929/30	31.8	40.0	14.9	37.2
1930/31	25.2	33.5	10.4	31.0
1931/32	18.1	26.6	6.3	23.7
1932/33	15.2	24.5	n.a	-
1933/34	16.3	26.8	n.a	-
1934/35	19.2	27.2	8.2	30.1
1935/36	20.7	28.9	7.3	25.2
1936/37	23.9	28.1	6.8	24.2
1937/38	27.9	34.9	7.4	21.2
1938/39	24.5	32.0	7.4	33.6
1939/40	28.4	33.4	8.0	23.9
1940/41	35.5	37.3	9.7	26.0
1941/42	64.6	39.4	12.6	32.0
1942/43	52.4	30.9	12.0	38.8
1943/44	62.5	44.4	18.4	41.4
1944/45	65.8	48.7	12.8	44.8

Source: Newfoundland Royal Commission, 1933 Report.
Report on the Financial and Economic Position
of Newfoundland, 1946.

Table A-2

PUBLIC REVENUE, BY MAJOR COMPONENTS: 1930-46
(In thousand dollars)

	Total		Taxes		Customs and Duties	
		Amount	%		Amount	%
1930/31	9,656	68	0.7		7,465	77.3
1931/32	7,931	77	1.0		5,787	73.0
1932/33	8,086	78	1.0		5,710	70.6
1933/34	8,720	824	9.4		6,406	73.5
1934/35	n.a	n.a	-		n.a	-
1935/36	9,830	1,090	11.1		6,784	69.0
1936/37	n.a	n.a	-		n.a	-
1937/38	12,272	1,188	9.7		8,683	70.7
1938/39	n.a	n.a	-		n.a	-
1939/40	12,571	1,566	12.4		8,785	69.9
1940/41	16,196	2,107	13.0		11,354	70.1
1941/42	23,314	3,142	13.5		16,803	72.1
1942/43	19,540	2,091	10.7		14,462	74.0
1943/44	28,601	7,410	25.9		15,066	52.7
1944/45	33,342	9,406	28.2		17,971	53.9
1945/46	33,428	9,516	28.5		18,280	54.7

Sources: Newfoundland Royal Commission, 1933 Report.
Report on the Financial and Economic
Position of Newfoundland, 1946.

Table A-3

THE FINANCIAL SURPLUS OF NEWFOUNDLAND, APRIL 1949

Cash	\$18,760,886	
Loan to U. K. Government ..	\$ 9,139,769	
Other current assets	\$16,414,050	
Total	\$44,314,705	
Less		
Accounts payable	\$ 2,452,400	
Trustee stock outstanding ...	\$3,525,013	
less redemption reserve	\$3,361,777	
	\$	163,236
Accrued sinking fund and public debt charges	\$	139,500
Saving certificates out- standing and interest thereon	\$	1,258,260
Other liabilities	\$	18,162
Total	\$44,031,558	
Financial Surplus		\$40,283,147

Source: Public Accounts of Newfoundland, 1950.

CHAPTER III

PUBLIC REVENUE

The public revenues of Newfoundland are set out in Table 3-1. The index of government receipts rose to 329.5 in 1963/64 with 1949/50 as the base year. Most of this increase is, of course, attributable to the growth of the economy, increase in tax rates and ever increasing sale of public goods and services. There are two other contributing factors which merit some attention: the taxable capacity of the Province was very low because of the low level of income and consumption; this was aggravated by the fact that a large segment of the economy i.e. fishery was non-monetized and prior to 1949 the transactions were mainly conducted by means of barter.¹ The flow of money stream after Confederation in the form of family allowances and unemployment insurance benefits from the Government of Canada not only enhanced the taxable capacity by raising the incomes, but also made it possible to exploit the existing capacity more effectively by the monetization of the fishery sector. To this must be added the contribution of structural changes in the fiscal system which took place since 1949. The Government of Newfoundland derived from 50.0 per cent to 75.0 per cent of

¹ Newfoundland Royal Commission, 1933 Report. (London: His Majesty's Stationery Office, 1933), pp. 79-80.

its revenue from custom duties on the necessities of life. On joining the Dominion of Canada it was deprived of its biggest source of revenue overnight.

The index of revenue fell below 100 in the three years following the base year, 1949/50. Nevertheless, the figures in Table 3-1 reveal that the receipts on current account, in fact, continuously increased over these years. The explanation of this contradictory statement is to be found in the pre-Union surplus. At the time of Confederation in 1949, Newfoundland had a surplus of some forty million dollars. This sum had to be deposited with the Federal Government, and the Provincial Government could withdraw two-thirds of it for developing its natural resources and improving and extending the public services. The Government of Newfoundland withdrew \$17.0 million in 1949/50, \$3.0 million in 1950/51 and \$2.0 million in 1951/52; the amounts withdrawn in subsequent years were negligible. Even though the revenue on current and capital accounts increased by 37.0 per cent in 1950/51, 60.0 per cent in 1951/52 and 70.0 per cent in 1952/53 above the level of 1949/50, this increase was less than the funds drawn from the pre-Union surplus.

The abrupt rise in the total receipts in 1958/59 was the result of an increase in the federal grants which jumped to \$50.3 million from \$24.0 million in the previous year as is evident from Table 3-2. This table gives the total public

Table 3-1

PUBLIC REVENUE, BY CURRENT AND CAPITAL ACCOUNT
(In thousand dollars)
1949-64

	Current	Capital	Total*	Index of Revenue
1949/50	20,433	n.a.	37,769	100.0
1950/51	28,061	n.a.	31,491	83.4
1951/52	30,941	n.a.	33,040	87.5
1952/53	33,532	1,028	34,560	91.5
1953/54	36,066	1,829	38,062	100.8
1954/55	38,562	2,731	41,642	110.2
1955/56	39,754	3,063	43,026	113.9
1956/57	44,059	1,958	46,079	122.0
1957/58	49,207	2,286	51,493	136.3
1958/59	75,328	6,684	82,012	217.1
1959/60	75,184	8,933	86,116	228.0
1960/61	79,699	7,085	86,784	229.8
1961/62	86,127	8,142	94,269	249.6
1962/63	95,450	24,256	119,706	316.9
1963/64	103,532	20,926	124,458	329.5

Source: Public Accounts of Newfoundland,
1950-64

*Total also includes amounts drawn from financial surplus.

Table 3-2

PUBLIC REVENUE, BY LEVEL OF GOVERNMENT: 1949-64
(In thousand dollars)

	Provincial		Federal		Total
	Amount	%	Amount	%	
1949/50	n.a.		n.a.		37,769
1950/51	10,590	34.0	20,801	66.0	31,491
1951/52	n.a.		n.a.		33,040
1952/53	14,453	41.8	20,107	58.2	34,560
1953/54	17,901	47.0	20,161	53.0	38,062
1954/55	21,321	51.2	20,321	48.8	41,642
1955/56	22,540	52.4	20,486	47.6	43,026
1956/57	24,078	52.3	22,001	47.7	46,079
1957/58	27,467	53.4	24,026	46.6	51,493
1958/59	31,698	41.5	50,314	58.5	82,012
1959/60	36,994	43.0	49,123	57.0	86,116
1960/61	36,592	42.2	50,192	57.8	86,784
1961/62	43,033	45.7	51,235	54.3	94,269
1962/63	69,236	57.8	50,470	42.2	119,706
1963/64	70,632	56.8	53,826	43.2	124,458

Source: Public Accounts of Newfoundland, 1950-64

Table 3-3

FEDERAL AID AS PERCENTAGE OF PROVINCIAL REVENUE
1949-64

	As % of Total Provincial Revenue	As % of Current Provincial Revenue
1949/50	n.a.	n.a.
1950/51	66.0	74.0
1951/52	n.a.	n.a.
1952/53	58.2	61.0
1953/54	53.0	67.0
1954/55	48.8	52.6
1955/56	47.6	51.5
1956/57	47.7	49.9
1957/58	46.6	48.8
1958/59	58.5	66.8
1959/60	57.0	65.3
1960/61	57.8	63.0
1961/62	54.3	59.5
1962/63	42.2	52.9
1963/64	43.2	52.0

Source: Tables 3-1 and 3-2.

receipts by level of government. Though the federal grants have fallen in importance yet they are still the largest source of the provincial revenues. Their percentage share is shown in Table 3-3. Even when the federal share was at its lowest in 1962/63 it accounted for 42.0 per cent of the revenues. Federal contribution is higher if considered in relation to the revenue on current account only. Except for two years 1956/57 and 1957/58, the federal payments contributed more than half of the current public revenue of Newfoundland, reaching a peak of 74.0 per cent in 1950/51.

In order to understand the variations in the total revenues, therefore, it is necessary to analyze the provincial sources of the public revenue and the components of the federal payments.

FEDERAL PAYMENTS

On joining the Dominion of Canada in 1949 Newfoundland became a party to all those fiscal and financial arrangements which existed between the Government of Canada and the other Provincial Governments. As stipulated in these agreements, Newfoundland refrained from exercising its taxing powers in certain field, and in return, was entitled to receive compensatory as well as some other grants and subsidies from the Federal Government. The amount of these grants is generally determined in the Federal-Provincial Conferences

which are held from time to time, and in exceptional cases, on the recommendations of the commissions appointed for this specific purpose. The criteria underlying these grants have varied from provincial needs to fiscal equity, and economic growth has been conspicuous by its absence.² Whatever the criterion used, the amount of these grants has depended, within limits, on political pressure that could be brought to bear in the Federal-Provincial Conferences. Thus the Atlantic Provinces Grant was not instituted until these provinces made a combined effort towards this end.

Newfoundland receives federal grants under two categories; conditional grants or grants-in-aid and unconditional grants. Their respective shares are shown in Table 3-4. Although the conditional grants increased eighteen-fold and the unconditional grants only roughly three-fold during the period under review, yet the latter contribute the bulk of the federal payments.

Conditional Grants

The share of the conditional grants in the revenue from federal sources has been continuously rising over the

² For a brief statement of these criteria see D.V. Smiley, Conditional Grants and Canadian Federalism. (Toronto: Canadian Tax Foundation, 1963). For a critique of these criteria see John F. Graham, A. W. Johnson and J. M. Andrews, Inter-governmental Fiscal Relationship. (Toronto: Canadian Tax Foundation, 1964), pp. 7-31.

years. These are given for specific purposes only and the Provincial Government cannot reallocate these monies to any other uses. In order to qualify for such grants the province must reach and maintain a certain minimum standard of public services.³ The grant is equal in amount to the expenditure incurred by the provincial government for specified purposes.

The specific areas of expenditure to be covered are decided upon by the Federal Government, and the utmost consideration is given to their national importance. These grants can be conditional but not contingent upon provincial expenditure such as health grants, grants for vocational training, unemployment insurance benefits, and grants for reclamation and protection of forests, or conditional but contingent upon provincial expenditure viz., highway and hospital construction, technical education, old age pension etc. Certain grants such as family allowances are given directly to individuals without the involvement of the provincial government.

Unconditional Grants

The unconditional grants increased by 300 per cent during the decade 1949/50 to 1958/59. The revenue from this source doubled between 1957/58 and 1958/59. The latter

³ Report of the Royal Commission on Dominion-Provincial Relations, Book I. (Ottawa: King's printer, 1939), p. 257.

Table 3-4

FEDERAL GRANTS, BY COMPONENTS: 1949-64
(In thousand dollars)

	Conditional Grants	Unconditional Grants	Total
1949/50	n.a.	13,825	n.a.
1950/51	n.a.	15,760	20,801
1951/52	n.a.	15,802	n.a.
1952/53	1,750	18,357	20,107
1953/54	1,807	18,354	20,161
1954/55	2,065	18,256	20,321
1955/56	3,125	17,361	20,486
1956/57	4,163	17,838	22,001
1957/58	4,781	19,245	24,026
1958/59	9,467	40,847	50,314
1959/60	12,037	37,086	49,123
1960/61	12,356	37,836	50,192
1961/62	13,861	37,374	51,235
1962/63	16,215	34,255	50,470
1963/64	18,213	35,613	53,826

Source: Public Accounts of Newfoundland, 1950-64

year was also the peak year. The transitional grants declined from \$6.5 million in 1949/50 to a meagre amount of \$1.0 million in 1958/59. This reduction was more than offset by the introduction of additional grant and the Atlantic Provinces grant. Together they contributed \$21.0 million in 1958/59, that is more than the total federal grants in any one year until 1955/56. In the following years the share and amount of the transitional grants dwindled continuously and eventually stopped in 1961/62. Although the Atlantic provinces grant increased by \$3.0 million in 1962/63, the unconditional grants could never reach the peak of 1958/59.

In the three years following 1958/59 the revenue from this source remained steady till it declined once again in 1962/63 and 1963/64. This decline was not due to a fall in the contribution of the federal government but to a change in the method of accounting. The practice of placing the standard tax yield under the unconditional grants was changed in 1962/63 to include it in the revenue from taxation. Had the old practice continued the revenue on account of unconditional grants would have amounted to \$42.9 million for 1962/63 and \$43.3 million for 1963/64.⁴ The reasons for reclassification will become evident in this chapter.

The components of unconditional grants are given in

⁴ The standard tax yield amounted to \$8.7 million in 1962/63 and to \$7.7 million in 1963/64.

Table 3-5 and are discussed below in some detail.

1. Statutory Subsidies

Newfoundland receives statutory subsidies as provided for in the British North America Act of 1907. These are intended for local purposes and for the support of government and legislature. Besides, it receives a special grant in view of the special problems it faces by reason of its geography and sparse population. Thus the statutory subsidies are composed of:

Population Grant	\$ 260,000
Government and Legislature	\$ 180,000
Special Grant	\$1,100,000

The population grant is calculated at the rate of \$0.80 per person. The population figure used in 1949/50 was that reported in the census of 1941 when the population of Newfoundland was 325,000. Provision was made in the Terms of Union for revising the population grant in the light of population changes as reported in the decennial censuses.⁵

The sum of the three components cited above comes to \$1,540,000. The figure for 1949/50 is high because the subsidies are calculated for the calendar year instead of the fiscal year: the amount received for the fiscal year 1949/50 included an additional amount of \$385,000 for the

⁵ Department of External Affairs, Reports and Documents Relating to the Negotiations for the Union of Newfoundland with Canada. (Ottawa: King's Printer, 1949), pp. 18-19.

Table 3-5

COMPOSITION OF UNCONDITIONAL GRANTS: 1949-64
(In thousand dollars)

	Statutory Subsidies	Transitional Grant	Additional Grant	Atlantic Prov Grant	Tax Rental Payments	Total
	(1)	(2)	(3)	(4)	(5)	(6)
1949/50	1,925	6,500	-	-	4,860	13,825
1950/51	1,540	6,500	-	-	7,720	15,960
1951/52	1,569	6,500	-	-	7,733	15,802
1952/53	1,569	5,650	-	-	10,722	18,357
1953/54	1,569	4,800	-	-	11,742	18,354
1954/55	1,569	3,950	-	-	12,470	18,256
1955/56	1,569	3,100	-	-	12,414	17,361
1956/57	1,569	2,250	-	-	13,642	17,838
1957/58	1,569	1,400	-	-	16,275	19,245
1958/59	1,569	1,050	13,550	7,500	17,178	40,847
1959/60	1,569	700	7,300	7,500	20,017	37,086
1960/61	1,569	350	7,650	7,500	20,767	37,836
1961/62	1,656	-	8,000	7,500	20,218	37,374
1962/63	1,656	-	8,000	10,500	13,329	34,255
1963/64	1,656	-	8,000	10,500	14,985	35,613

Source: Public Accounts of Newfoundland, 1950-64

quarter of January to March, 1949. Since population is the only variable, movements in the amount of the statutory subsidies are caused by changes in the population. The amount increased in 1951/52 and again in 1961/62 because of the rise in population to 361,416 and 457,853 as recorded by the decennial censuses.

2. Transitional Grant

This grant is popularly known as the Term 29 Award. As is apparent from its name, this grant was provided for in the Terms of Union. The purpose of this grant is to help Newfoundland in developing its public services without placing extra burden on the tax payer. The grant was spread over a period of twelve years with the amounts payable on a decreasing scale. This scale is set out in the Terms of Union.⁶ It was paid at the rate of \$6.5 million per year for the first three years following Confederation. It was reduced by \$850,000 every year for the six years from 1952/53 to 1957/58 and by an amount of \$350,000 every year for the last three years. 1960/61 was the last year of payment.

3. Additional Grant

The additional grant was instituted in 1958/59 and is an extension of the transitional grant. In 1949 when the

⁶ Ibid. p. 20.

transitional grant was awarded to Newfoundland, there was no time nor enough statistical information to determine the fiscal needs of the province. Therefore, the amount of the transitional grant was reached in a random manner. Provision was made, however, in Term 29 of the Union which called for a reassessment of the financial needs within eight years of the Union. In pursuance of this provision, a commission, called the Royal Commission on Newfoundland Finances (which is commonly known as the McNair Commission) was appointed in 1957 to report on the financial needs of the Government of Newfoundland. The McNair Commission reported that at the then existing tax rates, Newfoundland could not raise enough revenue in 1957/58 to maintain that level and standard of public services which prevailed in 1956/57. The criterion of measuring the level and standard of public services was the public expenditure per capita (both ordinary and capital) on health, hospital care, transportation, communication and public works, education and welfare payments to individuals. On this basis the Commission concluded that Newfoundland would need an additional grant of \$8,102,000 per annum inclusive of the transitional grant.⁷

The payment of the additional grant was to begin in 1957/58 but it was postponed until 1958/59 because the grant

⁷ Royal Commission on Newfoundland Finances, Report. (Ottawa: Queen's Printer, 1958), pp. 38-40.

had not been enacted into law until July, 1959. The figure for 1958/59 also includes an amount of \$6.7 million for 1957/58. Since the additional grant is arrived at by deducting the transitional grant of the corresponding year from an amount of \$8.0 million, the additional grant increases as the transitional grant decreases. Although the Newfoundland Additional Grant Act, 1959 made no provision for the period after 1961/62 Newfoundland continues to receive the grant.

4. Atlantic Provinces Grant

This grant was instituted in 1958/59 after the Atlantic provinces jointly made representation to the Federal Government. The grant was made in view of the vast disparity of personal income per capita and revenue from provincial and municipal resources between the Atlantic region and the rest of the country. This is apparent from the variables used in computing the amount of the grant. The manner of computation can be expressed in the form of the following formula:

$$APG = \frac{NPI}{RPM_c} (k \cdot API_c - API_a) N_w$$

Where

APG is the Atlantic Provinces Grant

RPM_c is the total revenue from the provincial and municipal resources for the country as a whole

NPI is the national personal income

k is a constant equal to 85.0 per cent

API_c and API_a stand for the personal per capita income of the country and Atlantic region respectively

N_w is the total labour force of the Atlantic region in the age group of 15 to 69 years.

In other words, the Atlantic Provinces Grant is equal in amount to the difference between eighty-five per cent of the national income per capita and the income per capita of the Atlantic region multiplied by the labour force of the Atlantic region and the three-year average ratio of the provincial and municipal revenues for the country as a whole to the national personal income.

The Atlantic provinces agreed among themselves that of the Atlantic provinces grant Prince Edward Island would receive 10.0 per cent and Newfoundland, New Brunswick and Nova Scotia 30.0 per cent each.⁸ The total amount of the grant was \$25.0 million in 1958/59 of which Newfoundland received \$7.5 million. In 1962/63 the Federal Government raised the grant to \$35.0 million. The respective shares of the provinces, however, remained the same. Newfoundland's share, as a result rose to \$10.5 million in 1962/63.

5. Tax Rental Payments

The Wartime Tax Agreements which were concluded in

⁸ John F. Graham has attempted to arrive at the method which the Governments of the Atlantic provinces may have used in dividing this grant among themselves. See his "The Special Atlantic Provinces Adjustment Grant, A Critique", Canadian Tax Journal, February, 1960.

1941 deprived the Canadian provinces of their power to levy personal and corporation income taxes. This pressed heavily upon the revenues of the provinces because these taxes were the main source of government receipts. To compensate the provinces for this loss the Federal Government agreed to pay them the so called tax rental payments.

The tax rental payments are, by far, the most important component of the unconditional grants given to Newfoundland, and they have gained in relative importance over the years. Their share increased from about 33.0 per cent in 1949/50 to 63.0 per cent in 1963/64. Their contribution reached as high as 83.0 per cent in 1957/58 as is shown in Table 3-5.

Before proceeding to discuss the components of the tax rental payments some attention is given to their method of calculation. There has been a good deal of controversy over the choice of the method employed, yet in 1949, when Newfoundland joined Canada, the following arrangements were in force: as compensation to the provinces for the loss of personal and corporation income taxes, Canada offered them, as a minimum, the greater of a choice of A and B whichever is the greater.

A. Sum of the following:

- i) \$12.75 per capita on the 1942 population of the province;
- ii) 50.0 per cent of the revenue of the province from

personal and corporation income taxes for the year ending nearest to December 31, 1940;

iii) the amount of the statutory subsidies payable to the province in 1947.

B. Sum of the following:

- i) \$15.00 per capita on the 1942 population of the province;
- ii) the amount of the statutory subsidies payable to the province in 1947.⁹

Newfoundland agreed to this and chose option B. The receipts on this account increased by one and a half times between 1949/50 and 1951/52. This increase reflects rises in the population and the gross domestic product of the province because the payment in every year is adjusted by the indices of population and the gross domestic product per capita with 1942 as the base year. In order to smooth out any sudden movements the amount paid in a particular year was the average of the amount so determined for the three preceeding years. These yearly payments were liable to deduction of the statutory subsidies payable in the year in question and 5.0 per cent of the corporation tax accruing from within the province.

These payments, as is evident from their components,

⁹Department of Finance, Review of Dominion-Provincial Arrangements. (Ottawa, 1962), p. 21 (mimeographed).

bore no relation whatsoever to the tax field surrendered by the province. In 1952 new arrangements were introduced and the guaranteed minimum payment was to be a sum of:

- i) the yeild of personal income tax at 5.0 per cent of the 1948 federal tax rates applied to 1946 income in the province;
- ii) the yield of 7.0 per cent corporation income tax and 1.5 per cent on account of the special corporation taxes of 1948;
- iii) the average revenue of the past two years prior to the suspension of succession duties;
- iv) the statutory subsidies payable in 1948.

The new arrangements were beneficial to Newfoundland and this is borne out by the fact that the increase between 1951/52 and 1952/53 was of the order of \$3.0 million; after that the rise in the tax rental payments was slow and steady upto 1955/56. However, the increase cannot be attributed entirely to the new arrangements, for some of it would have occurred even if the previous arrangements had prevailed.

The tax rental payments recorded a slight fall in 1955/56 over 1954/55. The reason was that the gross provincial product declined in 1954 reducing the tax components of the payments. This fall was reflected a year later in 1955/56 because the payments for a particular year are based upon the data of the previous year.

There was a sudden rise once again in 1957/58 and this marked the beginning of the Tax Sharing Arrangements. Under the new arrangements the payments were linked more closely to the tax fields taken over by the Federal Government. It will be useful to look into the tax sharing arrangements in some detail because they throw light on the behaviour of the tax base and its impact on economic activity. They also yield a rough measure of comparison with two of the richest provinces, Ontario and British Columbia, between 1957/58 and 1961/62, and with the national average during 1962/63 and 1963/64. These payments comprise the standard tax yield and the tax equalization payments which are discussed below.

a. Standard Tax Yield

In 1957/58 the standard tax yield consisted of 10.0 per cent of the federal personal income tax obtained from the province excluding the old age security tax, 9.0 per cent of the corporation income tax and 50.0 per cent of the federal duties on succession in the province.

The share of the standard tax yield in the tax rental payments is shown in Table 3-6. It increased by 50.0 per cent in 1961/62 and by 100.0 per cent in 1962/63 above the level of 1957/58. The whole of this increase must not be misconstrued as resulting from the widening of the tax base or rise in the tax rates. The tax rates changed very little during this period; some of the increase did result from

higher incomes but most of it was the result of an increase in the percentage share of Newfoundland in the personal income tax. Thus the personal income tax component of the standard tax yield was raised to 13.0 per cent in 1958/59, 16.0 per cent in 1962/63 and 17.0 per cent in 1963/64. The rise between 1961/62 and 1962/63 was the highest in a single year, and it reflects a 3.0 per cent increase in the personal income tax component.

It will be useful for a better understanding of the tax equalization payments which are discussed below to describe the changes brought about in the components of the standard tax yield in 1962/63. In that year it consisted of 16.0 per cent of the personal income tax less old age security tax, 9.0 per cent of the corporation income tax, 50.0 per cent of the inheritance tax and 50.0 per cent of a three year moving average of the gross revenue from the natural resources of the province. The last item was added to even out the vast differences which exist in the revenues derived by the provinces from their natural resources. The natural resources, for example, contributed 50.0 per cent of the public revenue of Alberta and 0.2 per cent of those of Prince Edward Island in 1957/58.¹⁰ It should be noted that the natural resource component was not to be given to

¹⁰ A. S. Abell, "Federal Provincial Tax Arrangements", Report 1961 Conference. (Toronto: Canadian Tax Foundation, 1961), p. 305.

the province in the standard tax yield but it was included only for the purpose of calculating the tax equalization payments. Therefore, whether or not the new arrangements were favourable to Newfoundland would be indicated by the consequential variations in the tax equalization payments.

b. Tax Equalization Payments

The purpose of these payments is to bridge the vast gap between the taxable capacity of the provinces. These were initiated in 1957/58 in order to bring the per capita standard tax yield of Newfoundland, as of other provinces, up to the level of the average of the per capita standard tax yield of Ontario and British Columbia. The method of arriving at the amount of the equalization payments can be expressed algebraically as follows:

$$E_n = \left[\left(\frac{STY_o}{P_o} + \frac{STY_b}{P_b} \right) / 2 - \left(\frac{STY_n}{P_n} \right) \right] P_n$$

Where

E_n is the equalization payment to Newfoundland,

STY_o , STY_b and STY_n represent the standard tax yield of Ontario, British Columbia and Newfoundland respectively

P_o , P_b and P_n denote the population of Ontario, British Columbia and Newfoundland respectively.

It is clear then that the movements in the tax equalization payments to Newfoundland are influenced by changes in its own standard tax yield per capita as well as in that of

Ontario and British Columbia. Furthermore, changes in the per capita standard tax yield call for a study of the taxable capacity as well as changes in the population.

The standard tax yield and the tax equalization payments are shown in Table 3-6. In order to understand the rise in the tax equalization payments Table 3-6 should be studied with Table 3-7 which compares the per capita standard tax yield of Newfoundland with that of the average of Ontario and British Columbia.

As is evident from Table 3-6 there have been no wide fluctuations in the amount of the tax equalization payments except in 1959/60 when it increased by more than \$2.0 million. Ignoring the year 1963/64 for the time being when the method of computing such payments was different, the year 1959/60 was also the peak year in respect of the weighted average of the standard tax yield of Ontario and British Columbia (See Table 3-7). It means that the gap between the standard tax yield of Ontario and British Columbia and that of Newfoundland widened over the previous year. The standard tax yield of Newfoundland did increase but at a slower rate than that of the former and this can be seen in the columns (2) and (4) of Table 3-7: the rise was 2.8 per cent for Newfoundland and 11.3 per cent for Ontario and British Columbia. The total and per capita amounts dwindled in 1960/61 because of a 4.0 per cent fall in the per capita

Table 3-6

TAX RENTAL PAYMENTS, BY COMPONENTS: 1957-64
(In thousand dollars)

	Standard Tax Yield	Tax Equalization Payment	Total
1957/58	4,449	11,579	16,028
1958/59	4,464	12,049	16,713
1959/60	5,485	13,672 ^a	19,157
1960/61	5,143	15,314 ^a	20,456
1961/62	6,991	13,087	20,078
1962/63	8,746	13,329	22,346
1963/64	7,450	14,985	22,454

Source: Public Accounts of Newfoundland, 1958-64

Notes:

^aTax equalization payments, according to the Federal Department of Finance, are \$14,610,564 and \$12,737,569 in these years respectively.

Table 3-7

TAX EQUALIZATION PAYMENTS TO NEWFOUNDLAND: 1957-64
(Per capita)

	STY_{ob}/P_{ob}	Index of (1)	STY_n/P_n	Index of (3)	E_n/P_n
	(1)	(2)	(3)	(4)	(5)
1957/58	\$38.73	100.0	\$10.85	100.0	\$27.88
1958/59	40.87	105.5	11.79	108.6	29.17
1959/60	45.24	116.8	12.09	111.4	33.15
1960/61	43.68	112.7	15.33	141.2	28.35
1961/62	44.47	114.8	15.56	143.4	28.91
1962/63	45.14	116.5	16.00	147.4	29.14
1963/64	49.96	128.9	21.13	194.7	28.83

Source: Department of Finance(Federal), Federal-Provincial Division, Tax Equalization Payments to Provinces, 1957-64

Notes:

STY_{ob}/P_{ob} is the weighted average of the per capita standard tax yield of Ontario and British Columbia;

STY_n/P_n is the per capita standard tax yield of Newfoundland;

E_n/P_n is the per capita equalization payment to Newfoundland.

standard tax yield of Ontario and British Columbia and a 30.0 per cent rise in that of Newfoundland.

As has been pointed out above the method of calculating the tax equalization payments was altered in 1962/63 so as to diminish the disparities in the provincial revenues from the natural resources. Although the natural resource revenue of the Government of Newfoundland was much below the national average, the new arrangements did not contribute any noteworthy increase in its tax equalization payment. The formula under the new arrangements was:

$$E_n = \left(\frac{STY_c}{P_c} - \frac{STY_n}{P_n} \right) P_n - (APG_n + ADG_n)$$

Where

E_n stands for equalization payment to Newfoundland,

STY_c and STY_n denote the standard tax yield of Canada Newfoundland respectively,

P_c and P_n are the population of Canada and Newfoundland respectively,

APG_n and ADG_n represent the Atlantic Provinces Grant and the Additional Grant to Newfoundland.

It is apparent from the formula that there were two forces working in the opposite directions, one to increase and the other to decrease the amount of the equalization payments. The first force consisted of two elements. Firstly, the personal income tax component was increased to

16.0 per cent in 1962/63 and 17.0 per cent in 1963/64. Secondly, 50.0 per cent of three year moving average of the gross revenue from the natural resources was included for the purpose of calculation. In this respect, Newfoundland was the third largest beneficiary after Prince Edward Island and Nova Scotia. On the basis of 1961-64 figures Newfoundland received \$14.23 per capita on this account alone (See Table 3-8).

Factors which tended to reduce the equalization payments were as follows. Firstly, the basis of computing these payments was changed from the weighted average of the standard tax yield of Ontario and British Columbia to the national average. In 1962/63 the standard tax yield under the previous calculation amounted to \$57.43 per capita and under the new calculation \$45.13; for 1963/64 these figures were \$64.17 and \$49.18 respectively.¹¹ Secondly, the Atlantic provinces grant and the additional grant were deducted from the equalization payments. Thus the factors which tended to increase and those which tended to decrease the equalization payments almost balanced each other. The slight increase that took place may well have occurred under the old formula also.

¹¹ The sense in which we are talking of the standard tax yield here does not include the natural resource revenue component. This is to show that the switch from Ontario and British Columbia to national average hurt Newfoundland.

Table 3-8

NATURAL RESOURCE REVENUE OF CANADA, BY PROVINCE
(50% of three year average, 1961-64)

	Total (000)	Per Capita	Deviation from national average per capita
Newfoundland	\$1,806	\$3.21	-14.23
Prince Edward Island	16	0.15	-17.29
Nova Scotia	1,397	1.87	-15.57
New Brunswick	3,794	6.26	-11.18
Quebec	35,735	6.66	-10.78
Ontario	42,105	6.64	-10.80
Manitoba	4,670	4.99	-12.45
Saskatchewan	27,067	29.12	11.68
Alberta	137,907	100.74	83.30
British Columbia	69,013	41.55	24.11
National Average	-	17.44	-

Source: Department of Finance (Federal), Federal-Provincial Division, Tax Equalization Payments to Provinces.

PROVINCIAL SOURCES OF REVENUE

The revenue from provincial sources increased from \$10.6 million in 1950/51 to \$70.6 million in 1963/64 and their share in the total public revenue increased from 34.0 per cent to 56.8 per cent. From Table 3-2 we can see that the share of the provincial sources increased upto 1957/58, it fell sharply next year, recovery began in 1959/60, and in 1962/63 it surpassed the previously highest level of 1957/58. These fluctuations were due to the federal payments, which payments doubled to reach \$50.0 million in 1958/59, whereas the corresponding increase from the provincial sources was only \$4.0 million. The large disproportionate increase in the federal payments lowered the share of the provincial sources from 53.4 per cent in 1957/58 to 41.5 per cent in 1958/59. After that the federal payments remained in the vicinity of \$50.0 million, whereas the revenue from provincial sources increased gradually. The sharp rise of \$26.2 million in 1962/63 was partly the result of a change-over from the Tax Rental Agreement to the Tax Sharing Agreement. It meant that the funds which Newfoundland was receiving from the Federal Government as 'standard tax yield' would thenceforth be classified under provincial taxation. This amount, which was \$8.7 million in 1962/63 and \$7.7 million in 1963/64, was a windfall gain to the revenue from provincial sources. Failing this change-over the share of the

Table 3-9

CURRENT PUBLIC REVENUE, BY SOURCE: 1949-64
(In thousand dollars)

	Taxes	Goods and Services	Licences and Fees	Other	Total Prov. Sources
1949/50	1,079	2,541	906	n.a.	n.a.
1950/51	2,222	3,050	690	1,298	7,260
1951/52	4,782	3,635	1,304	4,114	12,834
1952/53	6,598	3,917	1,537	2,397	14,449
1953/54	8,059	5,219	1,517	1,110	15,905
1954/55	9,282	5,299	1,465	2,195	18,241
1955/56	10,470	5,688	1,708	2,402	19,267
1956/57	12,051	6,229	2,274	1,504	22,058
1957/58	12,437	8,616	3,020	1,081	25,154
1958/59	13,317	6,753	3,219	1,725	25,014
1959/60	14,830	7,206	2,573	1,452	26,061
1960/61	17,071	7,158	3,676	1,603	29,507
1961/62	20,781	8,392	4,029	1,690	34,891
1962/63	30,357	8,073	4,643	1,908	44,980
1963/64	33,137	9,439	4,870	2,258	49,704

Source: Public Accounts of Newfoundland, 1950-64.

Table 3-10
PUBLIC REVENUE FROM PROVINCIAL SOURCES,
BY MAJOR SOURCES: 1949-64
(Percentage Shares)

	Taxes		Goods and Services		Licence Fees		Other	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
1949/50	-	5.2	-	12.4	-	0.4	-	-
1950/51	30.6	7.9	42.0	10.8	0.9	0.2	26.5	4.6
1951/52	37.2	15.4	28.3	11.7	10.1	0.4	24.4	13.3
1952/53	45.6	18.9	27.1	11.1	10.6	0.4	16.7	6.7
1953/54	50.6	22.3	32.8	14.5	9.5	0.4	7.2	3.0
1954/55	50.9	24.1	29.0	13.7	8.0	0.4	12.0	5.7
1955/56	54.3	26.3	29.5	14.3	8.8	0.4	12.4	6.0
1956/57	54.6	27.3	28.2	14.1	10.3	0.5	6.8	3.4
1957/58	49.4	25.2	34.2	17.5	12.0	0.6	4.3	2.2
1958/59	53.2	17.7	27.0	8.9	12.8	0.4	6.9	2.3
1959/60	56.9	19.7	27.6	9.6	9.9	0.3	5.5	1.9
1960/61	57.8	12.4	24.2	9.0	12.4	0.4	5.4	2.0
1961/62	59.5	24.1	24.0	9.7	11.5	0.5	4.8	2.1
1962/63	67.5	31.8	17.9	8.4	10.3	0.5	4.2	2.0
1963/64	66.6	32.0	19.0	9.1	9.8	0.5	4.5	2.2

Source: Tables 3-1 and 3-90.

Notes: (1) As percentage of current revenue from provincial sources only;
(2) As percentage of total current revenue.

provincial sources would have been 50.0 per cent in 1962/63 and 51.0 per cent in 1963/64.

The composition of current revenue from provincial sources is shown in Table 3-9. Tax revenue is the most important component followed by the sale of goods and services. The percentage share of taxes rose from 5.2 per cent to 32.0 per cent while that of goods and services fell from 12.5 per cent to 9.1 per cent during the period studied. The revenue from permits and licences increased four-fold but its relative share remained the same (Table 3-10).

Taxation

Nowhere was the impact of constitutional change in the status of Newfoundland felt more than in its fiscal system. Before Confederation import duties (and most of the imports consisted of necessities) enjoyed paramount importance in the public revenue, and trailing far behind were the personal and corporation income taxes. Import duties alone contributed between two-thirds and three-fourths of government receipts.¹² After Confederation the taxing powers of Newfoundland were defined in terms of Section 92 of the British North America Act of 1867: "In each Province, the Legislature may exclusively make Laws in relation to Matters coming within the Classes

¹² See Table A-2, p. 54.

of Subjects next hereinafter enumerated; that is to say, Shop, Saloon, Tavern, Auctioneer and other licences in order to the Raising of a Revenue for Provincial, Local or Municipal purposes (2) Direct taxation within the Province in order to the Raising of a Revenue for Provincial Purposes" Thus Confederation spelt the loss of all sources of revenue except licence fees and direct taxes. Even the direct taxes had either been rented by the Federal Government or shared by it under various agreements after 1949. Grants and subsidies received in return were felt to be far short of the provincial needs. It was but logical in these circumstances to explore new possibilities of raising public revenue.

According to the British North America Act of 1867 the sales tax, being an indirect tax, was considered outside the provincial jurisdiction. But Newfoundland, following the example of the other provinces, levied a sales tax on the ground that it was a direct tax on the consumer and that the vendor was merely a collecting agent for the Government.¹³

In Newfoundland the sales tax is levied under the Social Security Act of 1949. By law the revenue raised from this source is spent on social security such as pensions for

¹³ For a history of evolution of sales tax as direct tax see John F. Due, Provincial Sales Tax. (Toronto: Canadian Tax Foundation, 1964), pp. 17-34. It should be noted, however, that in economic theory sales tax is an indirect tax.

the aged and the blind, mothers' allowances, dependents' allowances, health and social services, social assistance, assistance to hospitals and eleemosynary institutions, and charitable grants.

The sales tax was enacted in 1949 but it did not become effective until November, 1950. The law exempts producers goods such as electricity and fuel used in manufacturing, railway rolling stock, commercial fishing equipment, farm tools and livestock. Food was exempted in 1960.

The original tax rate in 1950 was 3.0 per cent on a purchase of 17 cents and more. In 1952 the tax was extended to food also. In 1960, however, food was dropped from the list of taxable commodities and the tax rate was increased to 5.0 per cent. The same rate applies to tobacco and alcoholic beverages.

The sales tax is the single most important component of the public revenues from provincial sources. It increased from \$3.1 million in 1951/52 to \$16.1 million in 1963/64 but its share declined from 55.8 per cent to 49.0 per cent. The sales tax receipts contributed 3.5 per cent of the total personal income which is the highest in Canada. The per capita yield from this source was \$31.24 in 1962/63 which is excelled only by British Columbia with \$61.30 and Saskatchewan with \$42.99. It should be observed, however, that the high

Table 3-11

TAX RECEIPTS, BY SOURCE: 1949-64
(In thousand dollars)

	Gasoline Tax	Sales Tax	Insurance ¹ Companies Tax	Entertain- ment Tax	Total
1949/50	1,006	-	-	-	1,078 ²
1950/51	1,252	712 ³	257	-	2,221
1951/52	1,514	3,167	100	-	5,680
1952/53	1,795	4,534	169	-	6,498
1953/54	2,138	5,650	186	-	7,974
1954/55	2,599	6,337	195	153	9,282
1955/56	3,362	6,719	211	179	10,470
1956/57	3,922	7,774	214	141	12,051
1957/58	4,096	7,751	472	117	12,437
1958/59	4,694	8,033	468	120	13,316
1959/60	5,029	9,132	572	97	14,830
1960/61	5,796	10,665	505	83	17,049
1961/62	6,734	13,317	543	87	20,781
1962/63	7,507	14,308	634	80	31,274 ⁴
1963/64	9,043	16,113	663	105	33,373 ⁵

Source: Public Accounts of Newfoundland, 1950-64.

- Notes: 1 Also includes fire insurance premium tax;
 2 Includes \$72,000 on account of Cables Tax;
 3 For three months only;
 4 Includes \$8,745,624 on account of 'shared taxes';
 5 Includes \$7,449,541 on account of 'shared taxes'.

figures for British Columbia and Saskatchewan indicate not a higher tax rate but a high level of consumption.

The increase in the sales tax receipts was primarily the result of a rise in the level of consumption as well as a change in the pattern of consumption. Personal income per capita rose from \$472 to \$1,000 and population from 345,000 to 481,000 during the period under review. Increase in the income of the low income groups with high marginal propensity to consume was another factor which raised aggregate consumption; the share of government transfer payments in the total personal income increased from 12.0 per cent in 1949/50 to 16.0 per cent in 1963/64 reaching as high as 20.0 per cent in 1960 (Table 1-4). The consumption expenditure of the middle and high income groups on quasi-luxuries and luxuries increased due to the demonstration effect. The number of registered motor vehicles per thousand persons increased from 34.3 in 1955 to 161.9 in 1961 while the Canadian average only doubled during the same period.

Some of the rise in the sales tax revenue may also have come from increased efficiency in administration. Firstly, during the first four years of Confederation upto 1952/53 there were no government auditors to check the records of the vendors. Therefore, the tax authorities accepted whatever sales tax revenue the vendors reported. Four auditors were appointed in 1952/53 and their number has increased since then.

Secondly, information gathered from the Department of Finance showed that the book-keeping practices made proper auditing difficult in the early years. Besides, many vendors did not keep any records at all.

The above mentioned factors tended gradually to raise the revenue from this source. But there was a sharp rise of about \$3.0 million in 1961/62. This resulted from raising the tax rate to 5.0 per cent in 1960/61.

One of the first major steps taken in evolving the new tax system was the replacement of the custom duty on gasoline by a gasoline tax. Since the custom duty on gasoline was one of the main sources of revenue the new tax rate was kept quite high, 14 cents per gallon in 1949/50. It was subsequently raised to 15 cents in 1954, 17 cents in 1956 and 19 cents in 1960. There is an additional 1 cent per gallon tax on gasoline used for heating. The same rates apply to diesel also.

The gasoline tax revenue rose from \$1.0 million in 1949/50 to \$9.0 million in 1963/64. While some of this increase was caused by an upward revision of the tax rates as stated above, most of it was due to rapidly increasing consumption of gasoline. During the period covered in this study the number of automobiles increased six and a half times and commercial vehicles four times.

The 'shared taxes' are another important component of the tax revenue. They include personal income tax, corporation income tax and succession duties.

The Tax Sharing Agreement of 1962 marked a significant change in the Federal-Provincial relations from the point of view of fiscal policy. The authority of levying the personal and corporation income tax was transferred to Newfoundland. It was arranged, however, that to save the province the expenses involved in administering and collecting the tax, the Federal Government would collect it on behalf of the Provincial Government. The agreement provided that Newfoundland would receive 16.0 per cent of the total personal income tax collected from the province in 1962/63 and 17.0 per cent in 1963/64.

In Newfoundland the tax rates remain to be those determined by the Federal Government. All incomes except family allowances, unemployment insurance benefits and veterans' disability pensions are taxable. Exemptions are allowed up to an amount not exceeding 3.0 per cent of income for medical allowance and 10.0 per cent for charitable donations.

Of the corporation income tax collected from within the province Newfoundland receives 9.0 per cent. It also receives 50.0 per cent of the succession duties. Contrary to personal and corporation income taxes, the right of

determining the succession duties was not delegated to Newfoundland. In 1958 the Federal Government substituted estate tax for succession duties. Estate tax is regarded as an indirect tax which is exclusively the right of the Federal Government.

Public Goods and Services

The sale of public goods and services is the second most important source of government revenue from provincial sources (Tables 3-9 and 3-10). Of the several items included in this category, sale proceeds of the Board of Liquor Control, medical services and other hospital charges, and the revenue of the Northern Labrador Operations are more important. Together they contributed approximately 90.0 per cent of the total sale of public goods and services, and the Board of Liquor Control alone contributed over 50.0 per cent.

The Board of Liquor Control which enjoys the monopoly of the sale of spirits and wine was established in 1949. Of the \$2.5 million earned from the sale of goods and services in 1949/50, liquor sales contributed \$2.0 million. Revenue on this account increased four fold between 1949/50 and 1963/64. Since the liquor prices remained constant during this period, the rise in the revenue can be attributed to a rise in population and in the level of income.

There was no significant increase in the medical fees and hospital charges. However, the proceeds from the Northern Labrador Operations doubled during the period covered. These operations involve the sale of goods of general necessities to the residents of Northern Labrador (Coast of Labrador north of Caper Harrison) and these were taken over by the Government of Newfoundland in 1942 after the Hudson's Bay Company stopped operating in that area. As in the case of the liquor revenue, the increase in the revenue from this source is an indication of the rising level of income and consumption.

Fees and Royalties

Fees and royalties include the revenue obtained from vehicle registration, drivers' licences and natural resource levies. The natural resource levies include timber rentals and royalties, taxation of mining operations and rentals from leasing the use of water power sites.

The fees and royalties increased five fold but their relative share in the total revenues remained the same (Tables 3-9 and 3-10). Fees from vehicle registration and drivers' licences rose from \$392,000 to \$3,100,000 between 1949 and 1964. The number of drivers' licences issued during this period increased from 18,438 to 87,900, automobiles from 9,022 to 58,900 and commercial vehicles from 4,431 to

16,400. The sharp rise in the use of motor vehicles was made possible by an increase in the personal income per capita and the expansion of the road system.

The main source of natural resource revenue is the tax on income derived from mining operations.¹⁴ The natural resource revenue declined in 1953/54 and 1959/60 due to the downward revision in the timber rentals and disappearance of the sale of beaver pelts.

In spite of a considerable expansion in the timber and mining operations the revenue from this source has been declining since 1958/59. The reason for this is quite obvious. A large volume of capital invested in the natural resources is foreign: faced with shortage of capital at home and compelled by the drive to embark on development, the Government gave liberal fiscal concessions to investors.

Miscellaneous

Main items comprising this category are court fines, interest charges and teachers' pension fund. While the teachers' pension fund and fines increased considerably, interest

¹⁴ The mining income tax is levied at the rate of (a) 20.0 per cent in the case of iron ore mines, but not in any event to exceed the amount that would be paid if the tax was levied at the rate of 10 cents a ton on the first 1,500,000 tons of ore and 8 cents a ton on each additional ton of iron ore recovered; (b) 5.0 per cent in the case of all other mines.

earnings were marked by variations, and declined on the whole. The main source of interest earnings was the pre-Union surplus which was deposited with the Federal Government. The Provincial Government drew heavily upon this surplus and had exhausted it by 1955/56. Upto that year interest earnings remained, more or less, at the same level and then began to fall.

REVENUE STRUCTURE AND ECONOMIC DEVELOPMENT

Discussion has thus far been limited to the composition of and trends in the public revenues. This section sets out to study the implications of the structure of revenue for economic development.

It has been shown above that on the average one half of the public revenues of Newfoundland is contributed by the Federal Government in the form of conditional and unconditional grants. This heavy reliance on a source the certainty of which is difficult to predict creates rigidity in the revenue and thwarts long term budgetary policy. The Premier of Prince Edward Island remarked that the conditional grants reduced the budgetary flexibility by introducing uncertainties regarding federal action in embarking on new programmes or extending existing ones. The Premier of Saskatchewan also attacked the rigidities involved in the narrow definition of activities included in the conditional grants. The same

opinion has been voiced by some other Premiers also.¹⁵

There is no doubt, however, that federal grants play a very important role in the development of Newfoundland. They are a federal device of achieving economic balance over space. Nevertheless, it has been objected that the federal grants tamper with the optimum allocation of resources by inhibiting the mobility of the factors of production from the areas of low marginal productivity to the areas of high marginal productivity. This implies that regional development pursued through the mechanism of federal transfer payments reduces the growth rate of national output. Anthony Scott argued that federal grants tended to retard labour mobility and thus "prevent the maximisation of national production".¹⁶ The validity of this generalization must be judged in the light of the activities financed by federal payments, and in Newfoundland these are mainly education, health, roads and highways, and unemployment insurance benefits. It is important, therefore, to see whether the development of these activities distorts or corrects the allocation of resources.

Buchanan, on the basis of the U. S. data, asserts that

¹⁵ R. M. Burns, "Co-operation in Government", Canadian Tax Journal, January-February, 1959, pp. 5-15.

¹⁶ A. D. Scott, "A Note on Grants in Federal Countries", Economica, November, 1950, p. 419.

the higher the school leaving age the larger is the proportion of population which migrates. He goes further and argues that the people with higher education migrate over longer distance. This is due to the fact that the better educated people are better aware of the opportunities available elsewhere and they are more fully cognizant of the advantages of higher real income available elsewhere.¹⁷ But Kari Levitt's study of the Atlantic provinces has revealed that there is no necessary relationship between the level of education and migration. She has further stated during the decade 1941-51 New Brunswick experienced a higher rate of out-migration of people with less than five years of schooling than of persons with higher schooling.¹⁸ These conclusions can be accepted only with reservations. Out-migration from New Brunswick was mainly from low income rural areas where the general level of education was low. It is conceivable that the rate of out-migration could have been higher if the level of education were higher. Furthermore, these conclusions are of no relevance to Newfoundland.¹⁹

¹⁷ J. M. Buchanan, "Federal Grants and Resource Allocation", Journal of Political Economy, 1952, pp. 212-13.

¹⁸ Kari Levitt, Population Movements in the Atlantic Provinces. (Halifax: Atlantic Provinces Economic Council, 1960), p. 34.

¹⁹ No study has been done of the relationship between education and migration into and out of Newfoundland. During the summer of 1965 and 1966, however, the author worked as a

The location theory has brought to the fore the importance of transport costs in establishing industry. There is no doubt that a good system of transport and communication greatly helps in the optimum allocation of resources especially in the case of Newfoundland where forestry and fishery are important industries. Absence of good means of transportation kept Newfoundland isolated from the Canadian mainland. It will not be unfair to say that many of the Newfoundlanders who migrated to the United States would have migrated to mainland Canada had there been better and cheaper means of transportation. It can be concluded, therefore, that federal grants on roads and highways cannot be expected to inhibit factor mobility.

The same can be said of health services. It is not unreasonable to think that an improvement in the health standard will increase productivity and mobility of labour.

In summary, it can be said that federal grants to Newfoundland which are expended on public services will tend to enhance factor mobility, and thus will have a corrective effect on the nation-wide allocation of resources.

research assistant on a study of labour mobility in Newfoundland undertaken by Professor Hurwitz. The results of the study are not available yet, but my impression after having gone through the files of the Employment Office was that, while the better educated and better skilled persons expressed willingness to accept employment anywhere in the province, the less educated preferred to stay at home.

Taxation revenue is the second biggest source of public receipts. In an economy where private saving is low, taxation has a crucial function to perform. This opinion was first expressed by Bentham in the beginning of the 19th century: "By raising money, as other money is raised, by taxes (the amount of which is taken by individuals out of their expenditure on the score of maintenance), government has it in its power to accelerate to an unexampled degree the augmentation of the mass of real wealth. By a proportionable sacrifice of present comfort, it may make any addition that it pleases to the mass of future wealth, that is, to the increase of comfort and security".²⁰ The same opinion has been expressed by numerous contemporary economists, notably Kaldor.²¹ The most outstanding example of this is Japan where the State used a tight land tax to provide capital for public works and capital expansion.²²

In Newfoundland taxes provide 32.0 per cent of the total revenue (Table 3-10), and it is the lowest in Canada, with the exception of Alberta. Of this, half is contributed by the sales tax and one-fourth by the gasoline tax.

²⁰ Cited in F.A. von Hayek, "A Note on the Development of the Doctrine of Forced Saving", Quarterly Journal of Economics, November, 1932, p. 124.

²¹ N. Kaldor, Essays on Economic Policy I. (London: Gerald Duckworth and Co., 1964), pp. 124-25.

²² Bruce F. Johnston, "Agricultural Productivity and Economic Development", Journal of Political Economy, Dec. 1951.

According to the Social Security Assessment Act under which the sales tax is levied, the sales tax proceeds are to be used only for social welfare. Thus half of the tax revenue is not at all available for development programmes. The other half is available for public capital accumulation but half of it which consists of the gasoline tax, is earmarked for road and highway construction. Earmarking revenue by legislation creates rigidities in the expenditure programme. In the event of a reduction in revenue, welfare benefits and old age pensions cannot be cut down. Therefore, the shocks will have to be absorbed by the development expenditure; it also results in a misuse of revenue. An example of this is furnished by Trinidad where in the 1950's the revenue from import duties was set aside by legislature to subsidize cocoa production. At a time when cocoa prices stood well above their pre-war level and other countries like Ghana and Nigeria were taxing the cocoa farmers, Trinidad was dutifully subsidizing them merely because legislature had set aside revenue for this purpose.²³ It should be made clear that it is the earmarking of the sales tax revenue for social security and not the gasoline tax for road construction which is criticised. Whereas the number of families and persons receiving social benefits has not increased much, the sales tax revenue, with its sixteen-fold increase over the period

²³ A. R. Prest, Public Finance in Underdeveloped Countries. (New York: Frederick A. Praeger, 1963), p. 123.

studied, has been expended on social security. The family and other allowances have been increasing with the increase in the sales tax revenue, and the pertinent question is how far they will increase. Earmarking revenue provides the temptation of spending in one direction simply because the revenues are allocated to that item regardless of the urgency for spending in other direction.

In the zest for public savings, however, other aspects of taxation such as incentive and incidence must not be overlooked. Consumption taxes have the disadvantage of having a disincentive effect on productive effort especially when they fall on commodities with high income elasticities. They are also regressive in nature. Some of the regressiveness can be eliminated by levying a higher tax on those commodities which have a high income and low price elasticity, such as liquor and tobacco. This possibility has not fully been explored in Newfoundland. While the monopoly price of liquor can be regarded as a form of taxation, tobacco is subject to the same tax rate as the necessities of life. The advantage of a consumption tax is that the government can bring about changes of greater magnitude in income by manipulating the consumption tax rates. The reason is that the indirect tax multiplier $(-c/1-c)$ is greater than the direct tax multiplier $(-1/1-c)$. It means that if the government desires to raise the disposable income by

\$100 million and c, the marginal propensity to consume, is 0.8 it will require a cut of \$20 million in indirect taxes and \$25 million in direct taxes.²⁴

The prospects of increasing revenue by raising tax rates do not seem to be promising in Newfoundland . Its sales tax and gasoline tax rates are already among the highest in Canada. The rates of income tax can be revised upwards but that would yield very small additional revenue because the share of the income tax which the Province receives from the Federal Government is so small.

²⁴ For derivation of the formulae see F. S. Brooman, Macroeconomics. (London: George Allen and Unwin Ltd., 1964), pp. 191-95.

CHAPTER IV

PUBLIC EXPENDITURE

A survey of public revenues was presented in Chapter III. This chapter purports to discuss government expenditure, its expansion, composition and trends.

A note of warning is in order on the accuracy and relevance of the data used. In the budget estimates which are presented in the legislature for approval, total expenditure is classified into ordinary expenditure and development expenditure: the latter is the outlay incurred on what are designated as development programmes. This classification is as vague and ambiguous as the distinction between productive and unproductive expenditure drawn by the classical economists. Ordinary and development expenditures are bound to overlap to a fairly large degree, and there are no hard and fast rules to separate them.

The second distinction is made between current and capital expenditure in the Public Accounts. Even with extra care and caution such a distinction is misleading. This distinction is of dubious relevance in the large area of the public sector, especially that relating to economic development. Though it has been a general practice yet no-one has satisfactorily explained why the expenditure on

school construction and not teachers' salaries should be included in the capital budget; or what is the appropriate basis for depreciation allowance on the House of Assembly. The data presented in this chapter are full of such vague distinctions. Since capital formation is reserved for a later chapter, here we present current expenditure only. First expenditure is analyzed according to its functional purpose. But to reduce the errors incorporated in the data due to the distinction between current and capital expenditure, we have also related expenditure to the subject of spending. None of these forms, however, satisfies the needs of this study which aims to look at expenditure from the development point of view. Since compilation of data to suit our needs is not always feasible, the government distinction of current and capital expenditure has been accepted. Nevertheless, it should be noted that capital expenditure is mainly financed by public borrowing. The distinction, therefore, between current and capital expenditure boils down to the distinction between expenditure financed by public revenue and expenditure financed by public borrowing.

A comprehensive breakdown of public expenditure is presented in Table 4-1. The most important facts revealed in this table are the expansion in the volume of public expenditure and the increasing share of the public services. Total public expenditure rose from \$22.0 million in 1949/50

to \$103.0 million in 1963/64. This rise of 368.0 per cent appears to convey the impression of a vastly increased share of government in economic activity. However, that is not the case. Much of the expansion can be attributed to the rise in the price index and to the increase in government apparatus, and wages and salaries of government employees. Therefore, in order to arrive at the real expenditure we have to deflate the total expenditure by the index of government salary and wage rate, and the price index of wholesale food prices. Since none of these indexes are available presently, it is not possible to say how much of the rise in money expenditure can be imputed to inflation.

The second important reason for the increase in expenditure is the growth of population. It is quite obvious that this has repercussions on the needs for roads, housing and other public services. As the population rises rapidly, due to high birth rates and low death rates, the proportion of children of school age and old people also increases. This necessitates more schools and teachers and more hospitals and health facilities. Newfoundland has been experiencing the highest birth rate and the lowest death rate in Canada, and hence the highest rate of natural increase. In the decade 1951-61 the proportion of the age group below 19 years increased from 47.5 per cent to 51.5 per cent (Table 1-5). During the same period the ratio of population

Table 4-1

CURRENT ACCOUNT EXPENDITURE, BY FUNCTION: 1949-64
(In thousand dollars)

	Gen. Govt.	Law & Order	Res. Dev.	Social Welfare	Public Services	Total
1949/50	1,520	1,566	9900	7,888	10,367	22,022
1950/51	1,286	1,131	1,138	n.a.	15,146	20,842
1951/52	1,545	1,196	1,362	n.a.	18,484	24,142
1952/53	2,341	1,390	1,268	6,275	18,554	28,563
1953/54	2,619	1,631	2,498	6,928	17,214	36,065
1954/55	2,808	1,762	1,705	7,535	20,091	38,528
1955/56	2,906	1,938	1,656	8,019	21,774	39,812
1956/57	3,290	2,005	2,035	8,856	23,323	43,892
1957/58	3,553	2,246	1,940	11,103	26,966	51,510
1958/59	3,652	2,482	2,652	15,173	33,147	63,888
1959/60	4,080	2,674	2,372	16,278	37,617	70,024
1960/61	5,030	2,897	2,761	16,479	42,409	77,897
1961/62	7,114	3,013	2,998	17,762	45,369	85,927
1962/63	7,601	3,148	2,293	19,514	49,550	94,109
1963/64	5,858 ^a	3,385	3,568	20,876	56,452	102,982

Source: Public Accounts of Newfoundland, 1950-64.

Notes: ^a Expenditure on hire-purchase of buildings was transferred to capital account.

Table 4-2

CURRENT ACCOUNT EXPENDITURE, BY FUNCTION: 1949-64
(Percentage Shares)

	Gen. Govt.	Law & Order	Res. Dev.	Social Welfare	Public Services
1949/50	6.9	7.1	4.9	35.1	47.0
1950/51	6.2	5.4	5.5	n.a.	63.1
1951/52	6.4	4.9	5.6	n.a.	76.1
1952/53	8.2	4.9	4.4	22.0	47.3
1953/54	7.3	4.5	6.9	19.2	47.6
1954/55	7.3	4.6	4.4	19.6	52.0
1955/56	7.3	4.9	4.2	20.1	54.5
1956/57	7.5	4.5	4.6	20.2	53.2
1957/58	6.9	4.4	3.8	21.5	52.3
1958/59	5.7	3.9	4.1	23.8	51.9
1959/60	5.8	3.8	3.4	23.3	53.7
1960/61	6.5	3.7	3.5	21.2	54.4
1961/62	8.3	3.5	3.5	20.7	52.8
1962/63	8.1	3.3	3.5	20.7	52.7
1963/64	5.7	3.3	3.5	20.3	54.7

Source: Table 4-1.

living in the urban areas increased from 42.7 per cent to 51.9 per cent (Table 1-7). Of importance and often overlooked by economists is local opinion. The level of public expenditure in Newfoundland was low in the early years and the level and quality of public services was much below the Canadian average. Pressed by the demands for better public services and assisted by federal payments, Government launched the campaign of 'catching up' with the rest of Canada.

In fine, population growth and the desire to reach the Canadian standard in public services accompanied by a high income elasticity of demand for social services account for the expansion in government expenditure.

The period under review can be divided into two parts: 1949/50 to 1957/58 and 1958/59 to 1963/64. The latter period is characterized by a sharper increase in current expenditure than the former. It is of interest to note that this latter was also associated with increased assistance from the Federal Government. The sharpest increase of more than \$12.0 million which took place between 1957/58 and 1958/59 coincides with a doubling of the federal grants between these years (Table 3-2). In 1957/58 Canada suffered a recession and this began to have an impact on the economy of Newfoundland. Newfoundland experienced its highest unemployment rates during this period. The index of employ-

ment, with 1949 as the base year, had begun to decline in 1958 in every sector of the economy. The public works programme was accelerated and the number of government employees increased substantially. This period was also characterized by an upward revision in the wages and salaries of government employees. The rapid rise in prices also inflated public expenditure.

FUNCTIONAL PURPOSES OF EXPENDITURE

Government expenditure has been grouped into major categories which are intended to reflect the principal functions of government. Table 4-1 is designed for this purpose. The data have been compiled from the Public Accounts of Newfoundland and represent actual disbursements.

Of importance, from the point of view of economic development which emerges from Table 4-1, is the premier place assigned to public services, followed by social welfare and general government expenditure. In terms of trend, public services have maintained their top priority in fund allocation and increased their share of public expenditure. Although social welfare retained its second position yet its share declined over the years. In other categories, the share of public debt charges increased, and that of resource development decreased. A brief discussion of these various items of expenditure follows.

General Government

General government includes salaries and general office expenses, pensions and gratuities, expenses on elections and commissions appointed by the government, maintenance of offices and costs of fuel and light and power. This expenditure increased from \$1.5 million to \$7.6 million over the period under review and its percentage share rose from 6.9 to 8.1. The low figure for 1963/64 is accounted for by the fact that that year the expenditure on hire-purchase of office buildings was transferred to capital account.

Law and Order

This item refers to outlays on law enforcement, police protection, St. John's fire department and the department of civil defence. The costs of operating penitentiary and gaols are also covered by the category.

The share of expenditure on the protection of persons and property of population dwindled from 7.1 per cent to 3.3 per cent. This fall in expenditure reflects the improvement in the efficiency of administration because a certain minimum level of law and order has to be provided regardless of the size of the population of the area. When the population of the area rises to a certain level the marginal cost of providing protection to the additional population is zero. The average cost, therefore, declines.

Resource Development

The resource here refers to forests, minerals, agriculture and wildlife. Expenditure on forests is mainly on fire protection and reforestation. No reforestation has been done, nor was it needed, because of the total productive forest land of 34,000 square miles of which the 21,000 square miles located in Labrador are virtually untouched. Forest research is done by the Federal Government without cost to the Province. Expenditure related to minerals is incurred generally on geological surveys, geophysical mapping, assaying etc. Expenditure on agriculture consists of subsidies to the lands cleared with private equipment at the rate of \$125 per acre. Subsidies are also given to marketing and agricultural organizations, and to encourage the activities of 4-H Clubs.

Expenditure on resource development increased four-fold but its percentage share declined from 4.9 to 3.5 during the period under study.

Municipal Development

Outlays on municipal development are of recent origin and are at the bottom of list, accounting for about 2.0 per cent of the total current expenditure.

Municipal government in Newfoundland is still in the

process of development. Only 1/4 of 1.0 per cent of the area of the province is incorporated, but contains about one half of the population. Because of the nature of municipal government in the Province, such services as health, welfare and administration of justice which are shouldered by municipal governments in other provinces, are borne by the provincial government in Newfoundland. Even the police force, fire department and civil defence are provincial responsibilities.

Most of the expenditure on municipal development is in the form of grants of the order of \$1,000 to \$10,000 which are made to the newly formed councils to enable them to set up offices and provide essential services. It also includes the cost of property assessment, half of which is shared by the Provincial Government.

Public Welfare

Public welfare is the joint responsibility of the Federal and Provincial Governments, and the Provincial and Municipal administration in Canada. The former includes old age assistance, unemployment assistance and blind and disabled persons allowances. The latter covers mothers' allowances, assistance to needy persons, homes for the aged and infirm, and child care and protection.

The administration of public welfare in Newfoundland

differs from other provinces in two respects. First, child care and protection is provided by non-government agencies in all the other provinces. In Newfoundland, this service is provided and financed by the provincial government, except for orphanages and children's homes which are operated by religious organizations and the International Grenfell Association. Second, in Newfoundland the municipalities do not share the cost of providing public welfare with the provincial government nor do they acknowledge any responsibility. In other provinces the municipal governments share a considerable portion of such expenditure with the provincial government. In 1962, while the provincial government in Newfoundland bore 100.0 per cent of the expenditure on public welfare, the provincial government of Ontario bore only 69.5 per cent.¹ This is due to the fact, as pointed out above, that municipal government in Newfoundland is still in its rudimentary stage and depends largely on the provincial government for revenues.

Social welfare features prominently as Tables 4-1 and 4-2 show. In absolute terms, the expenditure on public welfare increased more than three-fold, but its percentage share declined from 28.5 to 20.3 between 1949/50 and 1963/64. During this period the number of people on welfare benefit

¹ Canadian Tax Foundation, Provincial Finances, 1965. (Toronto: Canadian Tax Foundation, 1965), Table 34.

did not increase. The allowances and amounts of other benefits, however, have been raised several times. While the welfare benefits may not be termed generous, interviews with authorities have revealed that they are quite tempting as compared with some opportunities of livelihood available to needy people.

Public welfare expenditure has, on the average, accounted for more than 20.0 per cent of the public expenditure during the fifteen year period. This is, by no means, an unconsiderable share of the government purse, especially in view of the shortage of capital required for economic development.

Public Services

Public services embrace health and hospitalization, education, and transportation and communication. Because of their importance, their separate shares are presented in Table 4-3. Their absolute share increased more than five-fold, and their percentage share increased from 47.0 to 54.7 over the fifteen year period 1949-64. In 1963/64 health accounted for 22.7 per cent, closely followed by education with 21.5 per cent.

There was only a negligible increase in the number of hospital beds and bassinets between 1955 and 1964. Particular attention was paid to improvement in the quality of medical services. The number of doctors, nurses and dieti-

tians rose considerably, accompanied by increases in salaries. The main increase in health expenditure was due, besides the increase in salaries and personnel, to the vast coverage of the Cottage Hospital and Medical Care Plan inaugurated in 1935. People living in outports are insured under the Plan for a nominal fee of \$10 to \$24 per annum per family regardless of its size. The Plan covers about half of the total population. The number of people so covered increased sharply due to an increase of 39.0 per cent in the population between 1949 and 1964.

In 1957, the government initiated a Children's Health Plan which provides free medical care for all children up to the age of 16. This also has resulted in increasing expenditure continuously. The number of children below 14 years of age increased from 141,390 to 201,563 in the decade 1951-61. In 1961, they constituted 41.9 per cent of the population. It should be noted, however, that some of the children so covered are also insured under the Medical Care Plan.

Some of the increase in health expenditure was due to expansion of the training programmes for nurses and nursing assistants, and bursaries for dietitians for study and training in universities outside the Province.

Health and hospitalization is also a responsibility

purely of the provincial government. In 1962 the Provincial Government defrayed 99.9 per cent of this expenditure compared with Alberta and Ontario where provincial government contributed 75.5 per cent and 86.6 per cent respectively; the rest was financed by the municipalities. All provincial governments except that of Prince Edward Island shared health expenditure with the municipal governments; in 1962 an average of 10.1 per cent of the total combined provincial and municipal expenditure on health and hospitalization in Canada was financed by the municipal government.

Education expenditure multiplied seven-fold and its share rose to 21.5 per cent.² This was caused by improvement and enlargement of the educational facilities necessitated by the increase in the number of school age children. They increased from 112,962 in 1951 to 167,697 in 1961. This required more teachers, more expenditure on teachers' training, greater number of bursaries and scholarships, and more schools. The per pupil expenditure rose from \$50.6 in 1949/50 to \$98.7 in 1962/63 in 1949 prices. During the same period, teachers' salaries increased from \$2.9 million to \$12.9 million though their share declined from 73.0 per cent to

² In education Newfoundland has a unique system. The schools are controlled, run and maintained by the School Boards which are denominational. The province is divided into 278 educational districts of which 81 are Church of England, 52 Roman Catholic, 90 United Church, 33 Amalgamated, 19 Salvation Army and 1 Presbyterian, Seventh Day Adventist and Pentecostal each. The Boards are financed by the Government.

Table 4-3

BREAKDOWN OF PUBLIC SERVICES: 1949-64
(In thousand dollars)

	Education		Health		Transportation and Communication		Total
	Amount	%	Amount	%	Amount	%	
1949/50	3,661	16.6	4,721	21.4	1,985	9.0	10,367
1950/51	3,989	19.1	9,229 ^a	44.3	1,928	9.2	15,146
1951/52	4,607	19.1	11,473 ^a	47.5	2,404	9.9	18,484
1952/53	5,311	18.6	4,539	17.0	2,377	8.3	12,277
1953/54	5,987	16.6	8,364	23.1	2,863	7.9	17,214
1954/55	7,427	19.2	9,271	24.0	3,393	8.8	20,091
1955/56	8,078	20.2	9,928	24.9	3,738	9.4	21,774
1956/57	8,562	19.5	10,691	24.4	4,070	9.3	23,323
1957/58	9,794	19.0	12,281	23.8	4,891	9.5	26,966
1958/59	12,027	18.8	14,674	23.0	6,446	10.1	33,147
1959/60	13,747	19.6	16,394	23.4	7,476	10.7	37,617
1960/61	15,941	20.5	17,813	22.8	8,655	11.1	42,409
1961/62	17,142	20.0	18,779	21.8	9,448	11.0	45,369
1962/63	18,517	19.7	20,380	21.7	10,653	11.3	49,550
1963/64	22,170	21.5	23,415	22.7	10,867	10.5	56,452

Source: Public Accounts of Newfoundland, 1950-64

Notes:

^a Includes expenditure on social welfare.

66.3 per cent. The funds allocated to bursaries and scholarships increased from a meagre amount of \$4,000 in 1949/50 to \$439,000 in 1962/63, causing the percentage share to rise from a negligible of 0.1 to 2.3. Large sums of money have also been expended on establishing vocational schools and on the encouragement of vocational training, and on the expansion of the Memorial University of Newfoundland. With the increase in the number of schools, the number of libraries increased and hence the library grants.

Public spending on transportation and communication increased from \$1.9 million to \$10.8 million. Its percentage share, however, remained the same. Most of this spending has been on wharves, bridges and the Trans Canada Highway. The task of providing electricity to the rural communities has been absorbing considerable sum of money.

COMPOSITION OF EXPENDITURE

The tendencies shown in the analysis of the functional purposes of the government expenditure are borne out by the breakdown of expenditure by payment. The most significant feature of Table 4-4 is the rapid increase in the outlays on the purchase of materials and supplies. Expenditure on this count increased six-fold and its share rose from 19.1 per cent in 1962/53 to 32.6 per cent in 1963/64. The share of all other items of expenditure, except public debt

Table 4-4

TOTAL PUBLIC EXPENDITURE, BY PAYMENT: 1952-64
(In thousand dollars)

	Wages and Salaries		Materials & Supplies		Grants and Subsidies		Debt Charges		Total
	Amount	%	Amount	%	Amount	%	Amount	%	
1952/53	12,985	32.1	7,702	19.1	8,273	20.5	849	2.1	40,400
1953/54	15,329	34.5	9,547	21.5	8,668	19.5	1,058	2.4	44,369
1954/55	17,909	32.1	14,013	25.1	9,709	17.4	1,499	2.7	55,843
1955/56	19,777	35.1	14,753	26.2	10,072	17.9	2,443	4.3	56,259
1956/57	20,668	35.0	12,922	21.9	11,671	19.8	3,150	5.3	59,011
1957/58	22,641	33.9	11,690	17.5	15,163	22.7	4,696	7.0	66,702
1958/59	26,479	31.1	21,556	25.3	21,725	25.5	5,740	6.7	85,129
1959/60	27,705	30.1	25,936	28.1	23,945	25.7	4,629	5.0	92,151
1960/61	30,984	31.1	26,028	26.1	25,655	25.7	5,758	5.8	99,733
1961/62	33,996	32.1	23,698	22.4	28,442	26.9	6,538	6.2	105,740
1962/63	41,509	31.0	33,196	22.8	30,903	23.1	7,465	5.1	133,952
1963/64	45,576	31.8	43,712	30.0	33,958	23.1	8,793	6.6	145,658

Source: Public Accounts of Newfoundland, 1952-64.

charges, remained, more or less, stable. This means that government investment activities increased more rapidly than other expenditure.

Grants and subsidies accounted for the second largest increase in the share of public expenditure. The main recipients of grants are schools, libraries and hospitals. These funds are, therefore, also spent on building social capital.

Expenditure on wages and salaries has maintained its premier position, but its relative share has remained the same. Increased expenditure on this item is partly explained by increase in salaries and partly by increases in the number of government employees. Until 1957/58, while expenditure on all other heads was rising, the outlays on materials and supplies fluctuated; but after that year wages and salaries have closely followed the increase in material costs and supplies. This was due to a doubling of the number of employees between 1959-64 necessitated by rising government construction activity.

Data on debt charges pertain to interest payments, retirement of funded debt and management charges. Interest payments constitute the largest portion of this item. This is discussed in detail under the public debt.

THE PUBLIC DEBT

From the point of view of economic policy there are three important aspects of public debt: size, composition and structure. These exert their influence on both public and private capital formation. The importance of the size of debt lies in that, unless it comes out of consumption expenditure, it is merely a transfer of private to public capital formation. This transfer, however, is essential to enable government to build social capital. But when the government indulges in industry and competes with the private sector, the desirability of such a transfer must be judged on the basis of efficiency of public versus private investment.

The composition of public debt is also of significance both from the point of view of economic development and income redistribution. The public debt is generally held by banks and corporations and in return they receive interest payments. Regardless of the form in which funds are raised to service the debt, the interest payments distribute income in favour of the high income groups. This is conducive to capital formation. This may be desirable in view of the emphasis of fiscal policy on economic development rather than income redistribution.

The debt structure has an important influence on the

capital market. It affects the cost of private as well as public borrowing. It need not be explained here that to the government the cost of long term borrowing is higher than short term borrowing. The term of public borrowing affects the cost of private borrowing. Musgrave has noted that as the length of maturity of public debt increases the cost of private borrowing rises faster than that of public borrowing. Furthermore, if the prices of government bonds are falling, and suppose that this leads to destabilizing expectations, then the potential loss to the bond holder will be greater, the greater is the term of maturity.³

Public debt in Newfoundland is presented in Table 4-5. In calculating the per capita net direct debt, accrued interest and temporary loans and overdrafts have been added to the net funded debt. While the direct debt comprises of the loans floated directly by the government, the indirect debt is that floated by the government enterprises and guaranteed by government.

Net funded debt has registered a very sharp increase causing the per capita net direct debt to rise nine-fold. This rise is exclusively attributable to government expenditure on economic development. Very little of the new issue

³ R. A. Musgrave, The Theory of Public Finance. (New York: McGraw Hill, 1959), pp. 590-611.

Table 4-5

TOTAL NET DIRECT AND INDIRECT DEBT: 1949-64
(In thousand dollars)

	Bonded Debt	Sinking Fund	Net Funded Debt	Per Capita Direct Debt	Net Indirect Debt
1949/50	6,223	2,081	4,142	n.a	n.a
1950/51	6,223	2,243	3,980	n.a	n.a
1951/52	5,000	1,207	3,793	n.a	n.a
1952/53	15,000	1,374	13,626	38.40	32,552
1953/54	15,000	1,828	13,172	35.70	36,912
1954/55	27,000	2,301	24,699	64.41	41,815
1955/56	43,000	3,166	39,834	98.38	42,171
1956/57	43,000	4,586	38,414	94.87	45,154
1957/58	54,500	5,501	48,999	124.01	44,860
1958/59	56,500	6,666	49,840	129.00	45,587
1959/60	60,500	8,750	51,750	135.00	46,769
1960/61	76,500	11,089	65,411	157.00	50,210
1961/62	86,500	14,222	72,278	176.00	26,201
1962/63	139,378	17,000	121,272	312.00	30,367
1963/64	154,368	21,514	132,850	344.00	42,404

Source: Dominion Bureau of Statistics, Financial Statistics of Provincial Governments, Direct and Indirect Debt (Actual), 1949-63

was for the purpose of debt retirement; only a new loan of \$2.0 million was floated to retire a debt maturing in 1958/59. The debt was used to finance the vast programme of construction of schools, roads, hospitals and the Trans Canada Highway in particular. The sharp rise in the last two years was accounted for by new loans floated to complete the Trans Canada Highway. Federal Government announced that it would not share the cost of those portions of the Highway to be completed after 1964. The Government of Newfoundland could not meet this deadline, and it was extended to 1966.

The average term of the issue increased slowly from 18.3 years to 20.0 years between 1955/56 and 1963/64. But no loans have ever been floated by the government for a period over 30 years. The average cost of borrowing has also risen from 3.72 per cent in 1955/56 to 5.41 per cent per annum in 1963/64.

Indirect debt is, in the main, floated by government owned corporations. The government has a hire-purchase agreement with these corporations for the renting and purchase of the buildings constructed by them. These buildings remain mortgaged to the corporations until the government retires the debt over the term of the bond issue.⁴

⁴ These corporations with their bonded debt are: Newfoundland Government Building Corporation Ltd., (\$8.1 million); Memorial University of Newfoundland Building Corporation

PUBLIC SPENDING AND ECONOMIC DEVELOPMENT

Wagner's law of increasing state activities is as nearly true today as any other inductive generalization of this type. This idea has flown in the face of the argument advanced by the classical economists that all government expenditure was unproductive and, therefore, must be kept at the minimum. The extreme view was expressed by J. B. Say: "The very best of all plans of finance", he wrote, "is to spend little and best of all taxes is that which is least in amount". Therefore, the maintenance of law and order against internal disturbance and external aggression was the only goal. In their emphasis on the duty of government to preserve the social life of the community, they overlooked the role of government in improving the quality of social life by raising the standard of health and education, and transportation and communication.

It is this neglected aspect of government spending that has gained importance now. Social or human capital is closely related to economic development. "Ideas", wrote Marshall, "whether those of art and science or those embodied in practical appliances, are the most real of the gifts that each generation receives from its predecessors. The world's

Ltd., (\$10.7 million); Technical College Building Corporation Ltd., (\$6.0 million); Nurses Training School Building Corporation Ltd., (\$5.6 million).

material wealth would quickly be replaced, if it were destroyed but the ideas by which it was made were retained. If, however, the ideas were lost, but not the material wealth, then that would dwindle and the world would go back to poverty".⁵ The same view has been repeatedly expressed in recent literature on economic development.⁶

Expenditure on health promotes economic development directly and indirectly. A rise in the expectancy of life will lengthen the productive years of human life. Indirectly, outlays on research, sanitation and prevention in the early stage of illness can bring great returns.

Transportation and communication is of the utmost importance in the export-base economy of Newfoundland. In the export-base theory of regional growth, transportation costs stand out as a vital factor in the competitive position of the economy.⁷ Given that the factor endowment and the cost curves of two regions are identical, their competitive will be determined by the transportation costs, and here public expenditure has a crucial role to play. The locational

⁵ Alfred Marshall, Principles of Economics. (London: MacMillan and Co., Ltd., 1956), p. 780.

⁶ See for example, Simon Kuznets, Toward a Theory of Economic Growth. (New York: Double-day and Co., 1955).

⁷ D. C. North, "Location Theory and Regional Growth", Journal of Political Economy, June 1955, pp. 249-50.

advantages in transfer and processing costs will shape the growth nodal points. Since the demand for exportable commodity is an exogenous factor their volume will depend on the endogenous factor, transfer and processing costs. In this way the comparative advantage lies in reducing these costs through an efficient network of infrastructures.⁸ The importance of these costs is greater for Newfoundland owing to the absence of locational advantages.

We have noted above that a substantial share of government expenditure has been incurred on health and education. These two items have, on the average, accounted for 40.0 per cent of government spending. Though this expenditure seems to be quite large, yet it is quite inadequate in view of the large increase in population. In health not only was the same level of health services not maintained but it fell below the level of 1956. Between 1955-61 the number of hospital beds declined from 4.5 to 3.8 per thousand persons. A great deal also remains to be done in the field of education. There were 31.0 teachers per thousand students in 1955 and the number increased to only 33.3 in 1961. Not only are the educational facilities insufficient but they are also inadequate.

⁸ Charles M. Tiebout, "Exports and Regional Economic Growth", Journal of Political Economy, April 1956.

CHAPTER V

ACCURACY AND FLEXIBILITY OF THE REVENUES

In recent literature on public finance the emphasis has shifted to the expenditure side. The apparent reason for this is that revenue is not a limiting factor in the advanced countries, and due to their high taxable capacity, it is possible for governments to raise as much funds as needed. But this does not apply to Newfoundland. Here the revenue acts as a constraint on the expenditure programmes of the government. It is imperative, therefore, to assign to revenue equal, if not more, importance. In this context, it is proposed to discuss the accuracy of the revenue estimates with special emphasis on taxes and their elasticity. This is important not only because the revenues are the main constraint on the provincial expenditures but also because their structure is very rigid as was concluded in Chapter III.

The federal grants have been excluded from the revenue estimates used here because they are very difficult to forecast. Some of the grants such as statutory subsidies, transitional grant and additional grant are fixed in amount. The shared-cost grants are likely to diverge from the actuals because their amount is contingent upon provincial expenditure. The probability of error of estimation in the tax equalization payments in particular which weigh the heaviest in federal

payment, is very high because there is a number of variables involved in calculating these grants. It should be noted, however, that federal grants have contributed from half to two-thirds of the total public receipts of Newfoundland.

The receipts for such items as fees, fines, interest and natural resources have also been left out. Items included are taxes (with the exception of personal and corporation income taxes and the estate tax which are collected by the Federal Government and of which Newfoundland receives only a small fraction), trading profits of the Board of Liquor Control and licence fees for motor registration and drivers' licences. Together these contribute 70.0 to 80.0 per cent of the public revenue raised from provincial sources exclusive of federal grants.

ACCURACY OF THE REVENUE ESTIMATES

Accuracy of the revenue estimates is of considerable importance in general and for developing regions in particular. For these countries the size of public expenditure programme is already limited by the volume of revenue, and if the revenue is underestimated, the expenditure will have to be further cut down. The full utilization of the public revenue is therefore not achieved. Overestimation will lead to the adoption of unrealistic targets which will

have to be abandoned later for lack of funds.

The revenue estimates are also relevant in the formulation and authorization stages of the budget. It is on the basis of these estimates that changes in the fiscal policies are made. Not only that, but they are also of importance in the execution process. As the process of budget execution proceeds, the plans can be modified in the light of changed prospects of revenue that subsequent re-estimates may reveal. The budget makers can also rationally plan the cash requirements and intra-year borrowing if they can anticipate the seasonal variations in receipts fairly well.¹

There are three principal methods of estimating revenues in practice: the rule of penultimate year, the method of averages, and direct valuation. According to the rule of penultimate year and the method of averages, the estimates are based on the actual receipts of the previous years and are forecast in the light of the past trend. They, however, do not take into account predictable changes in the future. The application of the above mentioned two methods is not commendable for they overlook structural and other changes occurring in growing economies. The most commonly used method now-a-days is the method of direct valuation. This method

¹ Jesse Burkhead, Government Budgeting. (New York: John Wiley and Sons Inc., 1959), pp.380-81.

requires gathering of information on the factors which have bearing upon the revenue proceeds. Through statistical analysis of this information, the revenues are projected directly, rather than by extrapolation. The revenue estimates of the British Treasury which are based on the technique of direct valuation have a reputation for accuracy and rarely diverge from the actual receipts by more than 2.0 or 3.0 per cent. To take an example of under-developed countries such as Antigua in the British Caribbean where the revenue estimates are based on the method of direct valuation the mean gross percentage error of estimating has been 3.9 per cent per annum over the twentyfour year period 1930-53.² In the following we proceed to assess the quality of the revenue estimates of Newfoundland.

A Measure of Estimating Error

It has been pointed out above that the revenue included here excludes certain other sources of revenue such as fees and fines, natural resources and personal and corporation income taxes; for reasons considerably beyond the control of the estimating authority these sources suffer from high degree of inaccuracy and their inclusions will create a bias in the results. The revenue from fees and fines and natural resources

² A. R. Prest, A Fiscal Survey of the British Caribbean. (London: Her Majesty's Stationery Office, 1957), p. 114.

depend on some unpredictable factors. Again, the personal and corporation income taxes are collected by the Federal Government.

The gross percentage error has been taken as the measure of accuracy. The percentage error is calculated by calculating the ratio of estimated to actual revenue and deducting this ratio from one hundred. The mean percentage deviation of the revenue estimates is presented in Table 5-1. The table reveals a poor quality of the estimates. The gross mean percentage error of the total revenue over the fifteen year period was 5.7, a ratio substantially higher than that of Antigua cited above. The error has been the highest in the revenue from motor registration followed by taxes and liquor profits.

The mean percentage error, however, does not tell the whole story; it conceals the inaccuracy of the individual sources. It is, therefore, important to investigate the errors the individual sources suffer from, because some of these are earmarked for expenditure on specific purposes such as the sales tax for social security and the gasoline tax for highway and road construction. While an underestimation of, say, the sales tax may be offset by an overestimation of say the gasoline tax, leaving the overall expenditure programme unaffected, yet this will influence the social security and highway and road construction

programmes. The average percentage deviation also obscures the year to year fluctuations which affect the annual budgetary policy. While the mean gross percentage error of total revenues for 1949-64 was 5.7 per cent, it ranged from 0.3 per cent in 1953/54 to 19.3 per cent in 1951/52 (Table 5-2).

It is difficult to explain the estimating errors in the liquor profits and registration fees because throughout the period there was no change in liquor prices and the motor registration or drivers' licence fees. Although the liquor profits have shown perfect accuracy of estimation in certain years yet the error in other years was quite high. There have been no sharp increases in the liquor consumption to explain the widely changing percentage deviation from year to year.

The same is true of the registration fees. Pessimism of the estimators seems to be the cause, for in 13 out of 15 years the revenue is grossly under-estimated. The percentage error has been of the magnitude of 2.0 per cent as a minimum in 1960/61 to 36.2 per cent as a maximum in 1950/51. As in the case of liquor profits, the fluctuations in the size of the error are difficult to explain. Over the years under review, the motor registration fees and fees for drivers' licence have never been changed. The number of drivers' licences issued and the number of automobiles and commercial vehicles registered increased steadily. There is only one p

Table 5-1

MEAN PERCENTAGE DEVIATION OF REVENUE ESTIMATES
1949-64

	Gross Error	Net Error
1. Liquor Profits (1949-64)	4.5	- 4.0
2. Motor Registration Fees (1950-64)	18.7	-12.5
3. Taxes (1949-64)	7.6	- 4.0
Gasoline Tax (1949-64)	8.6	- 7.5
Sales Tax (1950-64)	11.9	1.0
Fire Insurance Premium (1950-64)	14.7	- 8.5
Inland Stamps Revenue (1950-64)	18.6	-18.6
Entertainment Tax (1953-64)	55.7	1.2
Insurance Companies Tax (1957-64)	13.2	-11.2
4. Total (1, 2 and 3)	5.7	- 4.0

Source: Table B-1.

possible reason: the estimates failed to take into account the growth of the economy, which by raising incomes, caused the number of motor vehicles to increase.

The tax estimates diverge a great deal from the actual receipts as is shown in Table 5-2. The minimum percentage deviation was 1.3 per cent in 1958/59, and the maximum went up to 23.4 per cent in 1951/52. In view of the large share of the tax revenue in government receipts and their special significance in the public expenditure programme, the percentage share of individual taxes is presented in Table 5-3. The wide margin of error in the tax estimates can be attributed chiefly to the structural changes that have marked the system of taxation since Confederation. Almost all of the taxes listed in that Table were levied in or after 1949. In addition, some of them have been characterized by upward revisions. These two factors, however, provide only partial explanation because the errors have persisted throughout the period, whereas the tax rates were revised upwards only once in the case of sales tax, and thrice in the case of gasoline tax, other taxes remaining unchanged. Nor was the error necessarily one of the highest in the estimates for the years in which the changes became effective.

It follows from the preceeding discussion that the revenue estimates were influenced by exogenous factors to a very small degree. The inaccuracy of revenue estimates is

Table 5-2

ANNUAL PERCENTAGE ERROR OF THE REVENUE ESTIMATES
1949-64

	Taxes	Motor Registration Fees	Liquor Profits	Total
1949/50	-19.8	-15.3	0.0	- 8.8
1950/51	4.6	-35.2	- 4.3	- 1.4
1951/52	-23.4	-18.6	-11.5	-19.3
1952/53	5.3	-19.1	-13.5	- 1.4
1953/54	0.4	- 7.9	- 0.3	- 0.3
1954/55	4.8	- 9.4	0.3	2.7
1955/56	- 8.2	-19.8	0.1	- 7.6
1956/57	- 7.7	- 0.7	0.0	- 5.7
1957/58	3.2	8.5	3.2	4.0
1958/59	1.3	- 6.7	- 1.2	0.1
1959/60	- 6.0	- 5.0	-10.8	- 6.8
1960/61	7.4	2.0	0.4	6.2
1961/62	-10.0	-14.4	-20.9	-12.2
1962/63	- 8.9	-27.0	- 0.4	- 9.5
1963/64	- 2.8	-19.3	- 0.9	- 4.0

Source: Table B-1.

mainly attributable to faulty techniques and failure to take into account adequately the increases in income and prices.

Changes in the Quality of Estimates

Table 5-4 is designed to reflect the changes in the quality of estimates. In order to eliminate the disturbing influence of the year to year changes in fiscal policy, a 5 year moving average has been adopted. The results are not quite clear. While there was generally an improvement in the quality of estimates during the early years, the quality began to deteriorate in 1959/60. The impairment in the quality of the gasoline tax estimates and the sales tax estimates can be partly explained by increases in their tax rates in 1960. In other cases it is reasonable to assume that the deterioration in the quality of estimates was due to the failure of the estimators to properly take into account changes occurring in the economy, and other factors affecting the yield of various taxes and other sources of revenue.

Evidence of Bias in Estimates

To test any bias in the revenue estimating procedure the mean net percentage deviation of estimates from actuals is calculated for the period under study. Where the mean net percentage error is negative the revenue has been underestimated; where it is positive the revenue has been overestimated. The results thus obtained are presented in column

Table 5-3

ANNUAL PERCENTAGE ERROR OF THE TAX REVENUE ESTIMATES
1949-64

	Gasoline Tax (1)	Sales Tax (2)	Fire Insurance Premium (3)	Stamps Revenue (4)	Entertain- ment Tax (5)	Insurance Cos. Tax (6)
1949/50	-26.7	-	-	-	-	-
1950/51	-12.1	58.7	61.1	- 5.1	-	-
1951/52	-10.8	-29.0	-36.9	-22.5	-	-
1952/53	- 5.3	10.2	-26.0	-18.9	-	-
1953/54	- 6.4	0.9	-14.1	-17.8	193.4	-
1954/55	-88.8	5.7	-12.6	- 5.9	227.2	-
1955/56	- 5.3	-10.7	- 5.1	-31.0	40.0	-
1956/57	- 3.7	- 9.9	- 1.8	-37.0	30.7	-
1957/58	- 9.9	- 0.0	10.1	-17.7	53.2	-16.4
1958/59	2.2	1.4	19.2	0.0	-16.9	-17.2
1959/60	4.4	-10.7	-24.5	-23.2	-17.5	- 4.6
1960/61	1.8	12.5	-10.7	-14.8	- 3.2	- 5.7
1961/62	- 9.4	-10.6	- 8.2	-21.4	3.1	7.2
1962/63	-14.7	- 5.6	- 6.7	-18.9	13.2	-15.9
1963/64	- 8.2	1.1	13.9	-25.8	314.4	-25.8

Source: Table B-1.

(2) of Table 5-1.

The results of Table 5-1 are quite clear. In all cases, except the sales tax and entertainment tax, the estimated revenue fell short of actual revenue. This can further be substantiated from Table 5-2 and 5-3 which give annual percentage deviation of estimates. The revenue from motor registration was under-estimated in 13 out of 15 years and that from liquor profits was under-estimated in all 11 out of 15 years. Only thrice in 15 years was the gasoline tax revenue over-estimated. Although the total tax revenue was under-estimated in 8 out of 15 years, yet it should be noted from Table 5-3 that individual taxes have predominantly suffered from under-estimation

If the errors of estimates were due to chance, one would expect the size of the error to be low and negative and positive errors to be spread roughly over an even number of years. But our calculations indicate that the mean net percentage error for all sources of revenue, except the sales tax and entertainment tax, is negative and its size is significantly high. Prest has suggested that the significance of evidence of bias in the revenue estimates is that it is a part of the deliberately policy of the Governments.³

³ A. R. Prest, Public Finance in Underdeveloped Countries. (New York: Frederick A. Praeger, 1963), pp. 136-37.

Table 5-4

ANNUAL PERCENTAGE ERROR OF REVENUE ESTIMATES: 1951-62
(5 year moving average)

	Motor Registration Fees	Liquor Profits	Taxes	Total
1951/52	19.2	5.9	10.7	6.2
1952/53	18.0	6.0	7.7	5.0
1953/54	15.0	5.1	8.4	6.3
1954/55	11.4	2.8	5.3	3.5
1955/56	9.3	0.8	4.9	4.1
1956/57	9.0	1.0	5.0	4.0
1957/58	8.1	3.1	5.3	4.8
1958/59	4.6	3.1	5.1	4.6
1959/60	7.3	7.3	5.6	5.9
1960/61	11.0	6.9	6.7	7.0
1961/62	13.5	6.7	7.0	7.7

Source: Table 5-3.

ELASTICITY OF TAX REVENUE

The tax structure is defined to be elastic if its yield increases more than proportionately in response to an increase in national income with the tax rate schedules and the statutory limits of the tax base remaining unchanged. Elasticity in the tax system is necessary for stability as well as growth. A flexible tax structure acts not only as an automatic stabilizer but also adds to the public saving in a developing economy i. e., with an increase in income a greater portion of the additional income accrues to the government in taxes. A measure of the elasticity of the tax revenue will, therefore, reveal how far taxation is contributing to the public capital formation in Newfoundland.

There are two main difficulties encountered in measuring the tax elasticity: changes in prices and changes in tax rates. The former difficulty is partly eliminated by using current income. The latter can be partly overcome by using the same tax rates for all the years and calculating the hypothetical tax yields. No attempt is made, however, in this study to resolve these difficulties.

We have related the tax yields to the personal disposable income because most of the taxes levied by the Government of Newfoundland are theoretically indirect, though not in practice. The personal disposable income has been calculated by subtracting the yields of personal

and corporation income taxes from the total provincial personal income. Since income taxes are deducted at the source, the personal disposable income provides the most appropriate base to measure the elasticity of tax revenue. The formula used is the well known elasticity formula:

$$E = \left(\frac{T_t - T_{t-1}}{T_{t-1}} \right) / \left(\frac{Y_t - Y_{t-1}}{Y_{t-1}} \right)$$

Where E is the elasticity of the tax;

T_t is the tax yield of the current year;

Y_t is the personal disposable income of the current year in current prices.

Elasticities have been calculated for only two individual taxes, gasoline tax and sales tax, for together these contribute 90.0 to 95.0 per cent of the total tax revenue. The period covered is 1951 to 1961 because data are lacking for other years. The results are given in Table 5-5.

No definite picture emerges from the Table. Elasticities are quite high for the years 1950 to 1954 and 1959 to 1961, and low in the intervening years. Except for a few years changes in the tax elasticities can be explained in terms of changes in the tax rates.

The gasoline tax was 14 cents per gallon in 1949. It was raised to 15 cents in 1954 which reflects in a

Table 5-5

ELASTICITIES OF TAX REVENUES: 1951-61

	Elasticities		
	Gasoline Tax	Sales Tax	All Taxes
1951/52	1.7	-	9.3
1952/53	6.0	13.9	10.1
1953/54	2.4	3.1	3.2
1954/55	23.3	13.1	16.1
1955/56	1.6	0.3	0.6
1956/57	1.3	1.2	2.0
1957/58	0.8	0.5	0.6
1958/59	2.4	0.6	1.1
1959/60	0.7	1.2	1.0
1960/61	3.0	3.3	2.9

Source: Table B-2

spectacular increase in the elasticity to 23.3. The tax was raised again to 17 cents per gallon in 1956 and to 19 cents in 1960 raising the elasticity of gasoline tax to 3.0 as compared with 0.7 in the previous year.

Similarly, years of high elasticity of sales tax were associated with increase in the tax rate or expansion of the tax base. In 1952 the tax was extended to food and this expansion of the base resulted in a high elasticity of 13.9. In 1960 the tax rate was raised to 5.6 per cent giving an elasticity of 3.3 as compared with 1.2 in 1959.

The changes in the elasticity of the sales and gasoline taxes appear in the elasticity of the total tax revenue for they constitute the bulk of the tax revenues. The violent changes in the elasticity of the tax revenue during the early years up to 1955 can be ascribed to the fact that Government was still developing its fiscal system. The high elasticity figures for 1960 and 1961 were due to the upward revision in the tax rates. The period 1955-59 was relatively free of changes. During these years the average elasticity of the total tax revenue was 1.06. This means that when personal disposable income rises, the marginal increase in the tax revenue is only slightly higher than the increase in personal disposable income.

Table B-1

ESTIMATED AND ACTUAL REVENUE: 1949-64
(In thousand dollars)

		Gasoline Tax	Sales Tax	Fire Insurance Premium	Stamps Revenue	Entertain- ment Tax
1949/50	E	738	-	-	-	-
	A	1,006	-	-	-	-
1950/51	E	1,100	1,130	100	60	-
	A	1,252	712	257	63	-
1951/52	E	1,350	2,250	60	60	-
	A	1,514	2,167	100	77	-
1952/53	E	1,700	5,000	125	60	-
	A	1,796	4,535	169	74	-
1953/54	E	2,000	6,700	160	73	250
	A	2,133	5,650	186	89	85
1954/55	E	2,370	6,700	170	80	500
	A	2,599	6,337	195	85	153
1955/56	E	3,184	6,000	200	85	250
	A	3,362	6,718	211	123	179
1956/57	E	3,775	7,000	210	100	185
	A	3,921	7,774	214	159	142
1957/58	E	4,500	7,750	210	140	180
	A	4,096	7,751	191	170	117
1958/59	E	4,800	8,150	210	170	100
	A	4,695	8,093	185	170	120
1959/60	E	5,250	8,150	210	150	80
	A	5,029	9,131	278	195	97
1960/61	E	5,900	12,000	210	170	80
	A	5,796	10,665	225	199	83
1961/62	E	6,100	12,000	250	190	90
	A	6,734	13,417	272	242	87
1962/63	E	6,400	13,500	250	225	90
	A	7,507	14,308	268	277	80
1963/64	E	8,300	16,300	300	260	90
	A	9,042	16,113	258	351	105

Continued ...

Table B-1

ESTIMATED AND ACTUAL REVENUE: 1949-64
(In thousand dollars)

		Insurance Cos. Tax	Motor Registration	Liquor Profits	Total Taxes	Total Revenue
1949/50	E	-	315	2,000	738	3,420
	A	-	372	2,000	1,206	3,750
1950/51	E	-	425	2,000	2,390	5,015
	A	-	502	2,300	2,284	5,084
1951/52	E	-	515	2,000	3,720	6,435
	A	-	633	2,487	4,859	7,979
1952/53	E	-	625	2,100	6,825	9,550
	A	-	772	2,428	6,483	9,684
1953/54	E	250	850	2,605	8,183	11,638
	A	85	923	2,606	8,149	11,677
1954/55	E	590	950	2,896	9,820	13,666
	A	153	1,049	2,888	9,368	13,304
1955/56	E	250	1,090	3,000	9,719	13,809
	A	151	1,360	2,996	10,593	14,948
1956/57	E	125	1,350	3,150	11,270	15,770
	A	142	1,360	3,150	12,209	16,719
1957/58	E	235	1,538	5,125	13,015	19,688
	A	281	1,417	4,975	12,607	18,899
1958/59	E	235	1,412	3,410	13,665	18,487
	A	284	1,513	3,461	13,486	18,460
1959/60	E	280	1,625	3,383	14,120	19,128
	A	294	1,710	3,792	15,025	20,527
1960/61	E	285	2,000	3,700	18,645	24,345
	A	292	1,961	3,695	17,270	22,926
1961/62	E	290	2,150	3,700	18,920	24,770
	A	270	2,512	4,680	21,024	28,214
1962/63	E	300	2,200	4,250	20,765	27,215
	A	357	3,017	4,267	22,797	30,080
1963/64	E	300	2,500	5,070	25,500	33,050
	A	404	3,099	5,048	26,275	34,421

Source: Estimates of Revenue and Expenditure, 1950-65.

E stands for estimated revenue and A for actual revenue.

Table B-2

ANNUAL CHANGES IN SELECTED TAX YIELDS AND

PERSONAL DISPOSABLE INCOME: 1951-61
(In thousand dollars)

	Gasoline Tax	Sales Tax	All Taxes	Personal Disposable Income
1951	262	-	2,575	21,000
1952	282	1,368	1,524	6,000
1953	342	1,115	1,666	16,000
1954	461	687	1,219	- 2,000
1955	763	381	1,125	39,000
1956	559	1,056	2,717	32,000
1957	175	- 23	397	15,000
1958	599	282	879	18,000
1959	334	1,098	1,539	34,000
1960	767	1,534	2,245	18,000
1961				

Source: Government of Newfoundland, Estimates of Revenue and Expenditure, 1952-64.

Dominion Bureau of Statistics, National Accounts: Income and Expenditure.

Dominion Bureau of Statistics, Taxation Statistics, Canada.

Table B-3

INDICES OF TAX RECEIPTS AND PERSONAL

DISPOSABLE INCOME: 1951-62

	Gasoline Tax	Sales Tax	All Taxes	Personal Disposable Income
1951/52	100.0	100.0	100.0	100.0
1952/53	118.5	143.2	133.4	103.1
1953/54	141.1	178.4	167.7	111.3
1954/55	171.6	200.0	192.8	110.3
1955/56	222.0	212.1	218.0	130.4
1956/57	258.9	245.4	251.3	146.9
1957/58	270.5	244.7	259.4	154.6
1958/59	310.0	253.6	277.5	163.9
1959/60	332.0	288.3	309.2	181.4
1960/61	382.7	336.7	355.4	190.7
1961/62	444.7	423.6	432.7	205.1

Source: Calculated from:

Public Accounts of Newfoundland, 1951-62Dominion Bureau of Statistics, National
Accounts: Income and Expenditure,
1951-62.

CHAPTER VI

PUBLIC CAPITAL FORMATION

References have been made in this study of the effects of the fiscal system on the rate of capital formation. There is hardly any tax structure that directly or indirectly does not change the level of consumption and the rate of saving. Likewise, government expenditure has important bearing on private investment activity. This chapter is exclusively devoted to the discussion of the part which public finance has played in the capital formation in Newfoundland since Confederation.

Serious conceptual problems both on the side of public finance and on the side of economic development arise. On the side of public finance, we face the difficulty of ascertaining the effects of taxes to raise the revenue to finance the development programmes. Secondly, there are difficulties involved in measuring the results of some types of government spending, especially on social services. Thirdly, there are questions relating to the effectiveness and efficiency of government spending. Economic development, on the other hand, presents its own problems. There does not seem to be any clear-cut consensus of opinion on the diverse causes of economic development. Uncertainty also shrouds the

relative importance of the factors that contribute to development.

Capital formation has been taken as the measure of economic performance especially in the light of the importance assigned to it by the Harrod-Domar model. It seems pertinent, however, to point out some pitfalls of this approach. Some recent quantitative studies of the possible causes of economic development have revealed that capital accumulation does not play such a vital role as Harrod and Domar have assigned it. The estimates prepared by Abramovitz indicate that of the four-fold increase in the per capita output that took place in the United States from 1869-78 to 1944-53 only 44.0 per cent can be ascribed to the three-fold increase in the per capita capital.¹ Tinbergen, using a Harrod-Domar type model, has estimated that in the four leading industrial countries (France, Germany, England and United States) during the four decades prior to the World War I, capital formation accounted for about 0.4 per cent to 0.8 per cent in the total rate of about 2.1 per cent to 2.5 per cent annual

¹ Moses Abramovitz, "Resource and Output Trends in the United States Since 1870", American Economic Review, Papers and Proceedings, May 1956, pp. 5-23.

increase in production.² Cairncross is of the opinion that capital accumulation has not contributed more than one-fourth of the total recorded state of economic development.³

Capital formation in Newfoundland was related to public finance in two different ways. Firstly, Government directly invested in the secondary manufacturing industry. Secondly, it built up physical and social capital. These introductory remarks suggest the broad pattern that will be followed in this chapter. Capital formation will be discussed under the headings of direct government investment in the manufacturing industry, accumulation of physical capital, and social and cultural development expenditure. In order to ascertain this contribution to the development of Newfoundland, a comparison will be made between public and private capital formation.

VOLUME AND COMPOSITION OF CAPITAL FORMATION

The total volume of capital formation in Newfoundland, along with the shares of the public and private sectors of the economy is presented in Table 6-1. During the thirteen year period from 1951 to 1963 total capital increased six-

² Tinbergen and J. J. Polak, The Dynamics of Business Cycles, A Study in Economic Fluctuations. (Chicago: University of Chicago Press, 1950), pp. 127-28.

³ A. K. Cairncross, "The Place of Capital in Economic Progress", L. H. Durpriez (ed.) Economic Progress: (Louvain: Institut de Recherches Economique et Sociales, 1955), p. 253.

fold. There was a sharp increase after 1958, with the exception of 1963, when the total capital formation fell below the level of preceeding year. This increase, however, is not so large as the figures suggest. Some of it can be attributed to price rises. In order to obtain the volume of real capital formation the data must be deflated by the price index of construction material, the price index of machinery and equipment and the index of the prices of the imported machinery and construction material. Due to the non-availability of these indices we have to be content with the gross figures.

Both public and private capital accumulation grew considerably but the percentage share of the public sector has gained in importance: it increased from 31.8 per cent in 1951 to 43.5 per cent in 1963. Quite wide fluctuations are noticeable in the percentage share of public capital formation, and these fluctuations were caused by the unstable behaviour of the growth of private capital. Public capital formation, on the other hand, increased steadily and regularly.

It is important to note that by far the largest portion of the public capital formation was in the form of construction, that of private capital, on the contrary, was mainly in the form of machinery. Since the prices of construction material rose more sharply than those of machinery the public

Table 6-1
TOTAL CAPITAL FORMATION, BY PUBLIC
AND PRIVATE SECTOR: 1951-63
(In million dollars)

	Private	Public	Total	As % of Total	
				Private	Public
1951	39.6	18.4	58.0	68.2	31.8
1952	63.1	23.1	86.2	73.2	24.8
1953	53.0	27.0	80.0	66.2	34.8
1954	38.3	34.5	72.8	52.6	47.4
1955	62.4	42.4	104.8	59.5	40.5
1956	73.2	49.0	112.2	65.2	34.8
1957	81.5	55.3	136.8	59.5	40.5
1958	70.8	68.2	139.0	50.9	49.1
1959	82.2	82.5	164.7	49.9	50.1
1960	112.4	90.8	203.2	55.3	44.7
1961	155.2	100.6	255.8	45.0	55.0
1962	231.7	121.8	353.5	65.5	34.5
1963	185.6	142.9	328.5	56.5	43.5

Source: Dominion Bureau of Statistics, Public and Private Investment in Canada.

Public Accounts of Newfoundland, 1951-63.

investment is discounted at a higher rate than the private investment. In other words, the real volume of total investment would have been higher if more expenditure had been incurred on machinery rather than construction. Therefore, from the point of view of real capital accumulation, it would have been preferable if private investment had been larger and public investment correspondingly smaller. But this does not detract from the importance and share of the public investment. It not only had a stimulating effect on the volume of private capital formation but also made up for the shortage of private investment. The main reason for the sharp increase in the cost of construction was the enormous increase in expenditure on construction throughout the period in general and in the 1960's in particular. In 1951/52, 72.0 per cent of the total fixed public capital formation was in the form of construction. This share rose to 92.0 per cent in 1963/64.

RATE OF CAPITAL FORMATION

There are two ways of appraising the annual amounts of capital formation. One is to relate the amount of capital formation to the amount of capital already in existence: this gives the rate at which capital grows. But this method poses the serious problem of measuring the value of the capital in existence. We, therefore, have to rely on the second method which relates the volume of physical capital to the

level of gross provincial product. This measure gives us the annual gross rate of capital formation. The figures thus obtained are shown in Table 6-2. Since the true contribution of public capital can be assessed only if we compare it with total and private capital accumulation, the annual gross rate of capital formation is calculated for the public and private sectors of the economy.

The data on which the calculations are based are not very reliable. The data on the total and private investment are obtained from Private and Public Investment in Canada published by the Dominion Bureau of Statistics, and include investment in primary and construction industries, manufacturing and utilities, and trade, finance, commercial and institutional services. The data on public investment are compiled from the Public Accounts of Newfoundland. These include expenditure on construction, machinery and government plants. Since the definition of the two agencies are not identical, a sufficient margin of error should be allowed.

The rate of total capital formation increased from 20.6 per cent per annum in 1951 to 31.2 per cent in 1963. During the same period the annual rate of private capital formation declined from 14.1 per cent to 11.6 per cent. After 1957 it never reached the level of 1951, except in 1962. The years 1958 and 1959 are marked by the lowest rates of 8.4 per cent and 6.5 per cent respectively. The annual rate of public

Table 6-2
GROSS RATE OF CAPITAL FORMATION, BY PUBLIC
AND PRIVATE SECTOR: 1951-63

	Public	Private	Total
1951	6.5	14.1	20.6
1952	7.2	19.8	27.0
1953	7.9	15.6	23.5
1954	9.6	10.7	20.3
1955	10.8	11.8	22.6
1956	11.3	10.6	21.9
1957	12.3	10.1	22.4
1958	14.6	8.4	23.0
1959	16.4	6.5	22.9
1960	16.3	10.1	26.4
1961	16.2	13.6	29.8
1962	17.0	19.6	36.6
1963	19.6	11.6	31.2

Source: Tables 1-1 and 6-1.

capital formation increased three-fold between 1951 and 1963. In the years from 1957 to 1959 when the rate of private capital formation was falling, that of public capital accumulation was increasing (Table 6-2). The reason for this was the recession that struck the Canadian economy in 1957. The following two years were associated with low prices and low levels of employment in Canada in general and in Newfoundland in particular (See Table 1-3). The Government enhanced its works programmes to alleviate the mass unemployment which reached as high as 19.0 per cent in that period (Table 1-3). The expenditure on public construction rose from approximately \$43.0 million in 1957 to nearly \$71.0 million in 1959. This accounted for the increase in the rate of public capital formation during that period.

The importance of public capital accumulation is apparent from Table 6-2. The rate of government investment increased much faster than that of total capital formation. While the rate of public capital expenditure was only one-third of the total in 1951, it rose to more than one-half in 1963.

COMPOSITION OF PUBLIC INVESTMENT

In economic theory investment is determined by the marginal efficiency of capital and the rate of interest. The investment expenditure is allocated to those uses where

its marginal efficiency is greatest. Capital is said to be optimally allocated when the marginal efficiency of all units is the same. However, the public investment funds which are allocated through the process of budget appropriations disregard the price mechanism. Yet, from the point of view of economic development, some distinction should be drawn between productive and unproductive investment or between direct and indirect productive investment.

This distinction is often blurred in the case of public investment. The Government of Newfoundland has made direct investment by owning and operating its own enterprises and by holding shares in private enterprises. It has also built up fixed capital in the form of machinery and construction. The fixed capital has been divided into direct and indirect productive investment. Examples of the former are expenditure on roads, highways, bridges, airstrips and other types of construction. The latter kind of investment pertains to social and cultural capital such as in schools and hospitals the result of which will be better educated people and a healthier population. The designation of investment in schools and hospitals as indirectly productive capital, in no way, distracts from its importance. Tinbergen's estimates show that, of the total rate of 2.1 to 2.5 per cent increase in production per annum in Britain, France, Germany and United States forty years prior to World War I,

6.7 per cent increase was due to population --- more than the contribution by capital.⁴

The total capital formation in Newfoundland is divided into three categories; direct investment, economic development investment, and social and cultural development. Their respective shares are presented in Table 6-3. The total investment expenditure of the public sector increased from \$18.4 million in 1951/52 to \$142.1 million in 1963/64. It registered sharp increases between 1957 and 1959, and again between 1960 and 1963. In order to investigate the causes of movements in the total public investment we discuss its components in some detail below.

Direct Investment

The Government of Newfoundland owned and operated two plants, namely Birch plant and Gypsum plant, until 1961 when the latter was sold. In addition, it holds shares in more than half a dozen other enterprises mainly engaged in construction, and the number of such enterprises has been increasing over the years.

The volume of total direct investments increased three-fold but its percentage share shrank to a half during 1951-64. Its share decreased continuously up to 1958/59. Until

⁴ J. Tinbergen and J. Polak, The Dynamics of Business Cycles. (Chicago: Univ. of Chicago Press, 1950), pp. 127-28.

Table 6-3

COMPOSITION OF PUBLIC INVESTMENT: 1951-64
(In thousand dollars)

	Direct Investment		Development Expenditure		Social and Cultural Investment		Total
	Amount	%	Amount	%	Amount	%	
1951/52	4,176	22.6	9,819	53.3	4,422	24.0	18,417
1952/53	5,363	23.3	12,914	55.8	4,851	20.9	23,127
1953/54	5,820	21.6	16,277	60.1	4,951	18.3	27,048
1954/55	5,820	14.0	23,053	66.7	5,665	19.3	34,538
1955/56	5,853	13.9	30,777	72.6	5,742	13.5	42,371
1956/57	5,583	11.5	36,724	74.8	6,747	13.7	49,055
1957/58	5,583	10.1	42,092	76.1	7,629	13.8	55,304
1958/59	4,956	7.3	52,721	77.2	10,586	15.5	68,263
1959/60	11,655	14.2	58,204	70.5	12,662	15.3	82,520
1960/61	12,117	13.4	64,614	71.1	14,093	15.5	90,824
1961/62	13,278	13.2	72,071	71.6	15,282	15.2	100,631
1962/63	13,070	10.8	92,181	75.6	16,576	13.6	121,827
1963/64	12,531	10.9	108,820	76.5	20,836	14.6	142,187

Source: Public Accounts of Newfoundland, 1951-64.

then the total investment comprised of the two above mentioned plants besides shares of a few hundred thousand dollars in other enterprises. In 1959/60 there was a rapid rise in investment, and a large programme of construction was initiated. The Memorial University of Newfoundland, the College of Trades and Technology and the Nursing Training School were built. The Government held shares in the Corporations which undertook the construction programme.

Economic Development Expenditure

This expenditure refers to outlays on constructing and repairing roads, Trans Canada Highway, bridges, ferries and airstrips and machinery. Expenditure under this heading accounted for a half to two-thirds of the total public investment. Its volume increased by 1100 per cent between 1951 and 1963. While some of the increase in expenditure on economic development was caused by rising costs of construction, most of the monies were spent on new roads or improving their condition. The rapid increase in expenditure that occurred during the last two years resulted from the accelerated construction of the Trans Canada Highway. The deadline for completing the Highway with federal assistance was 1964. Since Newfoundland was lagging much behind the schedule it had to speed up construction.

The purchases of machinery also increased from \$1.0

million to \$7.4 million. A large portion of this rise was attributable to increases in the prices of machinery.

Social and Cultural Investment

Social and cultural investment includes construction of schools and hospitals. Its volume increased five-fold but its relative share declined from 24.0 to 14.6 per cent between 1951 and 1963. The rise in social and cultural investment in 1958/59 was the consequence of a sharp increase in the aid from the Federal Government. The emphasis has been on students and training programmes. An example of this was the announcement in the budget of 1965 of free tuition and generous monthly salaries to students attending the Memorial University of Newfoundland and technical institutions. Investment in social and cultural capital has been a rather neglected aspect of the economic development of the province, and is considerably deficient.

DEVELOPMENT LOANS

The Government has contributed considerably to the economic development of the Province by building infra-structures, investing in the secondary industries and advancing loans for development. The loans on economic development have been classified as industrial, housing and others. The classifications are self-explanatory and their respective shares, along with the total volume of

loans, are given in Table 6-4.

The total volume rose by 300 per cent between 1951 and 1963. Industrial loans registered the sharpest increase in absolute as well as in percentage terms. Housing loans did not increase and their relative share declined greatly from 42.9 per cent to 13.6 per cent during 1951-63. Other loans (which include loans to municipalities, school boards, co-operative enterprises etc.) doubled in volume but their relative share declined. Increasing share in the industrial loans points to the emphasis on economic development by the Government.

The industrial loans generally benefit the secondary manufacturing industry and the fishery. The Government of Newfoundland has particularly been interested in the development of these industries. This is reflected in the establishment of the Industrial Development Loan Board and the Fishery Development Loan Board in 1949. A little less than one-third of the industrial loans is absorbed by the fish processing industry and the rest goes to various other industries. The fish processing industry occupies an important place in the economy of Newfoundland, and secondary manufacturing is conspicuous by its absence. So far the loans have helped in expanding or establishing nearly a dozen fish plants, and a score of other manufacturing plants including cement, gypsum, hardwood and metals.

Table 6-4

COMPOSITION OF DEVELOPMENT LOANS: 1951-64
(In thousand dollars)

	Industry		Housing		Other		Total
	Amount	%	Amount	%	Amount	%	
1951/52	3,904	31.3	5,351	42.9	3,214	25.7	12,459
1952/53	8,917	46.7	6,480	33.9	3,702	19.4	19,099
1953/54	11,337	47.7	7,138	31.3	4,310	18.9	22,785
1954/55	18,671	60.0	7,184	23.1	5,250	16.9	31,105
1955/56	22,359	63.4	6,945	19.7	5,964	16.9	35,268
1956/57	25,655	64.8	6,944	17.6	6,950	17.6	39,549
1957/58	30,103	69.3	6,757	15.6	6,281	14.5	43,141
1958/59	31,139	69.7	6,703	15.0	6,852	15.3	44,694
1959/60	29,198	67.2	6,620	15.2	7,613	17.5	43,431
1960/61	30,263	66.2	6,571	14.4	8,842	19.3	45,676
1961/62	29,872	65.8	6,546	14.4	8,939	19.7	45,357
1962/63	31,379	67.9	6,609	14.3	8,188	17.7	46,176
1963/64	33,399	69.0	6,577	13.6	8,431	17.4	48,407

Source: Public Accounts of Newfoundland, 1950-64.

CHAPTER VII

SUMMARY

Public finance has played an unobtrusive role in the economy of Newfoundland before Confederation, and after Confederation it proved a powerful force for development.

The economy of Newfoundland has always been heavily based on exports, especially fish. Fishery was the principal source of income and employment until Confederation in 1949. The Island had very little industry and leaned heavily, even for the bare necessities of life, on imports. Trade also provided from half to two-thirds of the public revenue in the form of custom duties before 1949. Dependence on the fishery left the economy wide open to the vagaries of nature and to the economic and political conditions in the markets abroad. The hazards of these factors repeatedly brought the realization for the need of diversification of the economy. Inadequate supervision of the few financial institutions, coupled with imprudent policies of public finance, brought the government several times to the verge of bankruptcy. Such were the conditions which compelled Newfoundland to join Canada in 1949.

Since Confederation the gross provincial product of Newfoundland has grown rapidly and the economy has achieved

some diversification. A large portion of the income still comprises of transfer payments, and dependance on seasonal industries for income and employment is quite high. The population of Newfoundland has grown faster than that of any other province in Canada, and has the highest proportion of school age children and old people in the population. In addition, the population is sparsely distributed and the degree of urbanization is relatively low. The bearing of these economic features on public finance is important. They keep the tax potential low, and necessitate not only vast expansion in public expenditure, but also on able-bodied relief, unemployment insurance benefits, family allowances and old age pensions. Besides, the dispersion of population raises the unit cost of public services. These factors place strains and stresses on the use of public revenue for development purposes.

A half to two-thirds of the public revenue of Newfoundland is contributed by the Federal Government in the form of conditional and unconditional grants. The unconditional grants are a device of income redistribution over space in an attempt to achieve economic equilibrium over the provinces. A high proportion of conditional grants is contingent upon provincial expenditure on agreed programmes. The Province is free to design its own development policies but in order to execute them effectively it must not rely too much on

conditional grants. The common argument, however, that conditional grants distort the provincial priorities is not applicable to Newfoundland. The Province very badly lacks health, educational and transportation facilities which fall within the scope of conditional grants. These services must stand on the top of priority list in an economy such as Newfoundland. Federal aid has also increased the tax potential of the economy by monetizing the fishery sector (where transactions were carried on barter before Confederation) by the flow of money in the form of unemployment insurance benefits and other allowances. They have also helped to improve the debt raising ability of the Provincial Government by strengthening the current account position.

Some 60.0 per cent of the revenue raised from provincial sources is accounted for by the sales tax and the gasoline tax. The sales tax which is the single biggest source of provincial revenue is earmarked for social security. Earmarking creates rigidity in the development expenditure programme. There is also the inherent danger of continuing welfare benefits merely because the funds for it are reserved. The revenue structure is such that in the event of a cut in the federal aid the shocks will have to be absorbed by a cut in the development programmes and this is highly undesirable.

The revenue constraint is aggravated by large percentage errors of estimation, and the errors in the case of individual

sources of revenue are still higher. In addition, there is strong evidence of bias towards under-estimation of revenue. Nor is there any definite evidence of improvement in the quality of revenue estimates. The quality did improve up to 1958/59 but it began to deteriorate again in 1959/60.

The tax revenues are not very flexible in response to the provincial personal disposable income. No definite picture emerges from the calculations made of the elasticity of tax revenues, but it can be said that the elasticity is no greater than unity. However, the gasoline tax has indicated greater elasticity than the sales tax. With rises in income and expansion of roads the expenditure on automobiles and hence gasoline grew faster.

Public expenditure has expanded vastly. Although public services absorb more than half of the government expenditure yet social welfare has remained the single most important item of expenditure. In the context of economic development this priority is unwarranted because the province still faces a substantial shortage of public services. The share of materials and supplies in the total current and capital expenditure increased considerably reflecting a tendency towards greater emphasis on investment expenditure.

Public finance has played a major role in capital formation. In certain years it accounted for half of the

total capital formation in the province. The gross rate of public capital formation has been much higher than that of the private sector and has increased continuously over the years. The volume of total public investment increased eight-fold during the period covered in this study. Furthermore, the loans advanced by government have gone a long way in developing the fish processing and secondary manufacturing industries of the province.

BIBLIOGRAPHY

Official Publications

Government of Canada

- Department of External Affairs, Reports and Documents Relating to the Negotiations for the Union of Newfoundland with Canada (Ottawa: King's Printer, 1949).
- Department of Finance, Federal-Provincial Relations Division, Review of Dominion-Provincial Arrangements (Ottawa: mimeographed, December 1962).
- Department of Finance, Federal-Provincial Relations Division, The Current Federal-Provincial Arrangements in Canada (Ottawa: mimeographed, November 1964).
- Dominion Bureau of Statistics, Census of Canada, 1951, 1956 and 1961.
- Dominion Bureau of Statistics, Financial Statistics of Provincial Governments, Direct and Indirect Debt (Actual), 1949-63.
- Dominion Bureau of Statistics, National Accounts: Income and Expenditure, 1949-64.
- Dominion Bureau of Statistics, Public and Private Investment in Canada, 1951-58.
- Dominion Bureau of Statistics, Survey of Production, 1956-1957 and 1961.
- Dominion Bureau of Statistics, Taxation Statistics: Canada, 1961.
- Dominion Bureau of Statistics, The Labour Force, 1951-61.
- Dominion Bureau of Statistics, Vital Statistics, 1949-64.
- Royal Commission on Dominion-Provincial Relations, Report, Book I, Canada, 1867-1939 (Ottawa: King's Printer, 1939).
- Royal Commission on Newfoundland Finances, Report, 1958 (Ottawa: Queen's Printer, 1958).

Special Committee of the Senate on Manpower and Employment,
Report (Ottawa: Queen's Printer, 1961).

Government of the United Kingdom

Newfoundland Royal Commission, Report, 1933 (London: His Majesty's Stationery Office, 1933).

Secretary of State for Colonies, Report on the Financial and Economic Position of Newfoundland (London: His Majesty's Stationery Office, 1946).

U. K. Parliament, United Kingdom Parliamentary Papers, C 8867, Nos. 8, 22 and 26, 1898.

Government of Newfoundland

Department of Finance, Estimates of Revenue and Expenditure, 1950-65.

Department of Finance, Public Accounts of Newfoundland, 1950-64.

Newfoundland Commission, Revision Financial Terms, Revised Report of Financial Advisor, 1957 (St. John's: mimeographed, 1957).

South Coast Commission, Report (St. John's: mimeographed, 1957).

Books and Articles

Abell, A. S., "Federal-Provincial Tax Arrangements", Report 1961 Conference (Toronto: Canadian Tax Foundation, 1961).

Abramovitz, Moses, "Resource and Output Trends in the United States Since 1870", American Economic Review, Papers and Proceedings, May 1956.

Barber, C. L. "Canadian Tariff Policy", Canadian Journal of Economics and Political Science, November 1955.

Bauer, P. T. and Yamey, B. S., "Economic Progress and

Occupational Distribution", Economic Journal, December 1951.

Brewis, T. N. et al., Canadian Economic Policy (Toronto: MacMillan Co., 1965).

Brooman, F. S., Macroeconomics (London: George Allen and Unwin Ltd., 1964).

Buchanan, J. M., "Federal Grants and Resource Allocation", Journal of Political Economy, 1952.

Burkhead, Jesse, Government Budgeting (New York: John Wiley and Sons Inc., 1959).

Burns, R. M., "Co-operation in Government", Canadian Tax Journal, January-February 1959.

Cairncross, A. K., "The Place of Capital in Economic Progress", in Leon H. Dupriez (ed) Economic Progress (Louvain: Institut de Recherches Economique et Sociales, 1955).

Canadian Tax Foundation, Provincial Finances, 1965 (Toronto: Canadian Tax Foundation, 1965).

Clark, Colin, The Conditions of Economic Progress (London: MacMillan and Co. Ltd., 1940).

Copes, P., Government Assistance, Productivity and Income in the Fishing Industry of Newfoundland (St. John's, Newfoundland: mimeographed, 1964).

Copes, P., St. John's and Newfoundland. An Economic Survey (St. John's: Newfoundland Board of Trade, 1961).

Due, John F., Provincial Sales Tax (Toronto: Canadian Tax Foundation, 1964).

Fisher, A. G. B., Economic Progress and Social Security (London: MacMillan and Co. Ltd., 1945).

Graham, John F., "The Special Atlantic Provinces Adjustment Grant, A Critique", Canadian Tax Journal, January-February, 1960.

Graham, John F., Johnson, A. W. and Andrews, J. M., Inter-Governmental Fiscal Relationship (Toronto: Canadian Tax Foundation, 1964).

Hayek, F. A. von, "A Note on the Development of the Doctrine

of Forced Saving", Quarterly Journal of Economics, November 1932.

Johnston, Bruce, "Agricultural Productivity and Economic Development", Journal of Political Economy, December 1951.

Kaldor, N., "The Role of Taxation in Economic Development", Essays on Economic Policy, Vol. I (London: Gerald Duckworth and Co. Ltd., 1964)

Kamerschen, David, "Over Population in the Under-developed Countries", Economic Development and Cultural Change, January 1965.

Kuznets, Simon, Toward a Theory of Economic Growth (New York: Doubleday and Co. Ltd., 1955).

Levitt, Kari, Population Movements in the Atlantic Provinces (Halifax: Atlantic Provinces Economic Council, 1960).

Lockwood, William N., The Economic Development of Japan (Princeton: Princeton University Press, 1954).

Lounsbury, F. E., Secondary Manufacturing in the Atlantic Provinces (Fredericton, New Brunswick: Atlantic Provinces Economic Council, 1961).

Marshall, Alfred, Principles of Economics (London: MacMillan and Co. Ltd., 1956).

Musgrave, R. A., The Theory of Public Finance (New York: McGraw Hill, 1959).

Newfoundland Board of Trade, Submission to the Royal Commission on Canada's Economic Prospects (St. John's, Newfoundland: mimeographed, 1957).

North, Douglas C., "Location Theory and Regional Growth", Journal of Political Economy, June 1955.

Nurkse, Ragnar, Problems of Capital Formation in Under-developed Countries (Oxford: Basil Blackwell, 1960).

Perry, J. Harvey, Taxation in Canada (Toronto: Toronto University Press, 1951).

Prebisch, Raul, The Economic Development of Latin America and Its Principle Problems (New York: United Nations, 1950).

- Prest, A. R., A Fiscal Survey of the British Caribbean (London: Her Majesty's Stationery Office, 1957).
- Prest, A. R., Public Finance in Underdeveloped Countries (New York: Frederick A. Praeger, 1963).
- Scott, A. D., "A Note on Grants in Federal Countries", Economica, November 1950.
- Smallwood, J. R., Our Case (St. John's, Government of Newfoundland, 1966).
- Smiley, D. V., Conditional Grants and Canadian Federalism (Toronto: Canadian Tax Foundation, 1963).
- Tiebout, Charles M., "Exports and Regional Economic Growth", Journal of Political Economy, April 1956.
- Tinbergen, J. and Polak, J. J., The Dynamics of Business Cycles. A Study in Economic Fluctuations (Chicago: University of Chicago Press, 1950).
- Wilson, T., Financial Assistance with Regional Development (Fredericton, New Brunswick: Atlantic Provinces Economic Council, 1964).

