

Riitta Hjerppe

The
**FINNISH
ECONOMY**

1 8 6 0 — 1 9 8 5

*Growth and
Structural Change*

**BANK OF FINLAND
GOVERNMENT PRINTING CENTRE/HELSINKI**

Contents

3

PREFACE	11
ACKNOWLEDGMENTS	14
1. STARTING POINT	17
1.1. Background to the growth study	17
1.2. When did modern economic growth begin?	19
1.3. The structure of the study	20
2. METHODOLOGY AND SOURCES	23
2.1. From sources to accounts	23
2.2. Estimation problems	29
2.3. New and old time series	33
3. THE DEVELOPMENT OF GROSS DOMESTIC PRODUCT 1860–1985	41
3.1. Growth before 1860	41
3.2. Accelerating growth 1860–1985	42
3.2.1. Period of instability 1860–1890	46
3.2.2. Toward greater stability 1890–1913	47
3.2.3. Acceleration 1920–1938	48
3.2.4. Growth peaks 1946–1974	49
3.2.5. Slackening growth 1974–1985	50
3.3. The standard-of-living gap is narrowed	50
3.4. Depressions and crises	53
4. STRUCTURAL CHANGE: AN INTEGRAL PART OF GROWTH	61
4.1. Factors of structural change	61
4.1.1. The economic structure of the 1860s	62
4.1.2. Slow change during the Period of Autonomy	64
4.1.3. Sharp fluctuations up to the Second World War	65
4.1.4. From primary production to services	66
4.2. Finland and other countries	67
4.3. Growth contributions of different economic activities	69

4.3.1. Agriculture and forestry	71
4.3.2. Industry	77
4.3.3. Services	80
5. POPULATION GROWTH: LABOUR SUPPLY AND CONSUMER DEMAND	95
5.1. Employment	98
5.2. Unemployment?	101
5.3. The standard of education	103
6. THE INCREASING IMPORTANCE OF PRODUCTIVITY	107
7. PRIVATE CONSUMPTION RISES — BUT NOT WITHOUT SETBACKS	113
7.1. The road to welfare consumption	116
8. THE PUBLIC SECTOR AND GROWTH	123
8.1. Schools and railways	123
8.2. Independence brings the machinery of government	126
8.3. Building a welfare state	130
8.4. Taxes and other receipts	132
8.5. Other public production	134
9. THE RATE OF INVESTMENT RISES	138
9.1. The Period of Autonomy creates a base	138
9.2. More machinery and equipment	140
9.3. Increasing importance of investment	142
9.4. Investment and economic growth	143
10. THE SIGNIFICANCE OF FOREIGN TRADE	149
10.1. The framework of trade policy	149
10.2. The shares of imports and exports	151
10.3. The balance of trade and improving terms of trade	154
10.4. The fluctuating export market	158
10.5. Imports: consumables give way to investment goods	163
10.6. Exports — the engine of growth?	166
11. AGGREGATE DEMAND AND AGGREGATE SUPPLY	172
12. REGULARITIES OF INDUSTRIAL DEVELOPMENT	180
13. SUMMARY	186

Tables

1. Gross Domestic Product at Market Prices, Volume Index of Gross Domestic Product, Price Index of Gross Domestic Product and Volume Index of Gross Domestic Product per Capita for Selected Years as well as Average Annual Changes over Different Periods	43
2. Growth of Gross Domestic Product and Gross Domestic Product per Capita of Europe and Finland over Selected Periods	51
3. Analysis of Economic Cycles on the basis of Changes in the Volume of Gross Domestic Product at Market Prices	54
4. Distribution of Gross Domestic Product in Finland, Sweden, the United Kingdom, Germany and the United States for Selected Years.....	68
5. Growth in Volume of Gross Domestic Product by Kind of Economic Activity for Selected Periods	69
6. Value Added of Economic Activities in Gross Domestic Product for Selected Periods	70
7. Growth Contributions of Economic Activities to the Growth of Gross Domestic Product for Selected Periods	70
8. Distribution of Gross Agricultural Production for Selected Years	74
9. Number and Distribution of Farms by Size of Arable Land Area for Selected Years	75
10. Distribution of Value Added for Manufacturing and Industrial Handicrafts for Selected Periods	78
11. The Structure of Services in terms of their GDP Shares for Selected Years	81
12. Distribution of the Credit Stock by Lender, the Credit Stock and its Volume for Selected Years	84
13. Population, Economically Active Population, Working-Age Population, and Labour Input at Ten-Yearly Intervals	100
14. Growth of Labour Input by Kind of Economic Activity for Selected Periods	107
15. Growth of Productivity by Kind of Economic Activity for Selected Periods	107
16. Growth of Gross Domestic Product, Labour Input and Labour Productivity for Selected Periods	108
17. Productivity Contributions of Economic Activities to the Average Growth of Overall Productivity for Selected Periods	110
18. Distribution of Taxes and Other Comparable Revenues of the Central Government (excl. Payments in Kind) for Selected Years	132
19. Rate of Investment, Growth of Gross Domestic Product and Incremental Capital-Output Ratio for Selected Periods	138
20. Growth Contributions of Aggregate Demand and Aggregate Supply Components for Selected Periods	177
21. Comparison of Industrialization Indicators for Western Europe and Finland at Selected Levels of GDP per Capita	182

Charts

1.	Gross Domestic Product and Appropriation Tax Receipts, 1865–1884.....	31
2.	Gross Domestic Product and Gross Domestic Product per Capita, 1860–1985	42
3.	Volume Index of Gross Domestic Product, 1860–1985	44
4.	Price Index of Gross Domestic Product and Wholesale Price Index, 1860–1985	45
5.	Gross Domestic Product per Capita of Finland, Sweden, the United Kingdom and the United States at 1970 Purchasing Power Parities, 1860–1985	52
6.	Annual Changes in Gross Domestic Product, 1861–1985	56
7.	Distribution of Gross Domestic Product, 1860–1985	62
8.	Distribution of Employment, 1860–1985	63
9.	Volume Indices of Economic Activities, 1860–1985	72
10.	Demographic Changes, 1821–1980	97
11.	Employment Index, 1860–1985	99
12.	Private Consumption and Private Consumption per Capita, 1860–1985	114
13.	Ratio of Private Consumption to Gross Domestic Product at Market Prices, 1860–1985	114
14.	Distribution of Private Consumption at Five-Yearly Intervals, 1860–1985 ...	117
15.	Percentage Share of Public Production in Gross Domestic Product at Factor Cost, 1860–1985	125
16.	Ratio of Public Consumption to Gross Domestic Product at Market Prices, 1860–1985	127
17.	Rate of Investment, 1860–1985	139
18.	Gross Domestic Product, Investment and Employment, 1860–1985.....	144
19.	Ratio of Merchandise Exports and Imports to Gross Domestic Product at Market Prices, 1860–1985	151
20.	Ratio of Merchandise Exports to the Combined Value Added of the Primary and Secondary Sectors, 1860–1985	153
21.	Volume Indices of Exports and Imports, 1860–1985	155
22.	Terms of Trade, 1865–1985	157
23.	Distribution of Finnish Exports by Country for Selected Years.....	159
24.	Structure of Finland's Eastern and Western Exports for Selected Years	160
25.	Distribution of Finnish Imports by Country for Selected Years.....	164
26.	Structure of Finland's Eastern and Western Imports for Selected Years	165
27.	Structure of Aggregate Demand, 1860–1985	172
28.	Structure of Aggregate Supply, 1860–1985	173

List of Tables in the Appendix

1.	Population and Gross Domestic Product, 1860–1985	192
2A.	Gross Domestic Product, 1860–1985	195
2B.	Gross Domestic Product at Constant Prices, 1860–1985	198
3A1.	Aggregate Supply and Aggregate Demand, 1860–1948	201
3A2.	Aggregate Supply and Aggregate Demand, 1948–1960	204
3A3.	Aggregate Supply and Aggregate Demand, 1960–1985	205
3B1.	Ratios of Aggregate Demand and Aggregate Supply Components to Gross Domestic Product at Market Prices, 1860–1948	206
3B2.	Ratios of Aggregate Demand and Aggregate Supply Components to Gross Domestic Product at Market Prices, 1948–1960	209
3B3.	Ratios of Aggregate Demand and Aggregate Supply Components to Gross Domestic Product at Market Prices, 1960–1985	210
3C.	Volume Indices of Aggregate Demand and Aggregate Supply Components, 1860–1985	211
4.	Gross Domestic Product by Kind of Economic Activity, 1860–1985	215
5.	Gross Domestic Product by Kind of Economic Activity, 1860–1985, Percentage Shares	231
6.	Volume Indices of Production by Kind of Economic Activity, 1860–1985 ...	237
7.	Distribution of Private Consumption at Five-Yearly Intervals, 1860–1985 ...	249
8.	Public Consumption, 1860–1985	250
9A.	Gross Fixed Capital Formation by Type of Capital Goods, 1860–1985	253
9B.	Gross Fixed Capital Formation by Type of Capital Goods, 1860–1985, Percentage Shares	256
10A.	Foreign Trade, 1860–1985	259
10B1.	Structure of Exports by Type of Goods, 1860–1985	262
10B2.	Structure of Imports by Type of Goods, 1860–1985	263
11A.	Employment by Kind of Economic Activity, 1860–1960	264
11B.	Employment Indices, 1860–1985	270
12A.	Wage and Salary Totals and Entrepreneurial Incomes in Selected Areas of Economic Activity, 1860–1948	274
12B.	Wage and Salary Totals in Selected Areas of Economic Activity, 1948–1985 ..	276
13.	Selected Price Indices, 1860–1985	277