

Source Papers in Economic History

SELECT COMPARATIVE ECONOMIC STATISTICS 1900-1940:
AUSTRALIA AND BRITAIN, CANADA, JAPAN, NEW ZEALAND
AND U.S.A. SOURCE PAPER NO. 4

N.G. BUTLIN

Source Paper No. 4

December 1984



THE AUSTRALIAN NATIONAL UNIVERSITY
GPO Box 4 Canberra ACT 2601 Australia

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Introduction

This Source Paper is designed to provide preliminary background statistics on several countries, USA, Britain, Japan, Canada, New Zealand and Australia, over the years, approximately 1900-40. In the case of Australia the dates extend to 1980 because of a particular frame of reference, to provide international comparisons for Australia before 1940 and intertemporal comparisons particularly between the interwar years and post 1970 in Australia.

In presenting the statistics, no attempt is made to penetrate very deeply into any of the economies. Nor is it pretended that most of the data are other than those readily available. It is fortunate that, for all countries other than Australia and New Zealand, there are now extremely valuable volumes of long-term historical statistics. These have been exploited to bring together, in a hopefully convenient manner, a series of "thumb-nail sketches" of each economy. In all cases, attempts have been made so far as practicable, to develop a standard description. This of course does not necessarily mean that the definitions underlying nominally comparable measures are standard. As will be seen with reference to the statistics there are gaps and omissions in some countries relative to others. In principle, efforts have been made to provide measures of

- (a) Gross national expenditure and its components in current and constant prices
- (b) Gross national income and its components in current and constant prices
- (c) Gross domestic product, and its components in current and constant prices
- (d) Gross domestic capital formation and its components in current and constant prices
- (e) Price deflators and other price series, including movements in the terms of trade
- (f) International transactions and the balance of payments

- (g) Simplified indicators of public budgets and activity
- (h) Indicators, in particular, of the behaviour of manufacturing
- (i) The workforce, employment and unemployment
- (j) Money and real wage movements
- (k) The money supply

Had we but world enough and time, the data array could be greatly improved. This paper has been produced at high speed to allow participants in a proposed conference on the recovery from the depression in Australia in the nineteen-thirties to have a ready if superficial reference to the economies concerned for purposes of international comparisons. Apart from some of the obvious inconsistencies in coverage, one point warrants particular comment. The constant prices series in all cases have been left as presented in the original sources. This means that there is a wide variety in the base years presented. This may irritate users. They can, however, acquire tapes of the data from the Department of Economic History, R.S.S.S., ANU, PO Box 4, Canberra 2600. Armed with this they may then commit such sins against reason and logic required in the deflation process as they may choose.

A great deal of help has been sought and generously given in order to produce this assembly quickly. Professors G. Hawke (New Zealand) and M.A.C. Urquhart (Canada) and Drs C. Forster and A. Martina (Japan) and Dr M. Thomas (U.K.) have been directly helpful. The last three can be absolved from the responsibility for my errors and misinterpretations though their help is gratefully acknowledged. Professors Hawke and Urquhart cannot escape so lightly in terms of either responsibility or my gratitude. Professor Hawke generously provided the dossier of statistics that I sought, including in some cases his own unpublished estimates of certain series. Professor Urquhart generously provided his own recent versions of Canadian social accounts. I have also to thank Dr M.W. Butlin for access to estimates in his Long-term

Database supplemented by the ANU Clio Database and to the Reserve Bank of Australia for all the statistics from 1949/50. In drawing on Clio material I have used several series compiled by Drs G. Withers, A. Barnard and A. Lougheed.

One comment is warranted from this review of statistical material. It is extraordinary that the United States is by far the most difficult economy for which to present an appropriate array of statistics over this period. The intervention of the US Department of Commerce in developing social accounts from 1929 creates an obstacle rather than a support to this sort of exercise. It is mildly surprising that the country whose citizen, Professor Simon Kuznets, has been awarded a Nobel Prize particularly for his work on long-term social accounts and their analysis should have left the record in such disarray.

At best, these statistics as presented here are only a beginning. It is assumed that persons using them will extend much more deeply into the economy or economies with which they are concerned. In this context, it might be noted that there is one major omission that was considered and on reflection left as such. This is the matter of short-term (monthly or quarterly) time series in particular for Australia. Two problems led to the decision to leave these out. First their inclusion would have meant a massive addition to this paper. Secondly, Australian short-term statistics over this period are very limited in coverage though they are relatively prolific for prices and wages and for banking. A limited dossier has been assembled in crude form but not included here.

The sources used are indicated in the country sections.

N.G. Butlin

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| U1 | Gross National Product, Commerce Concept, (Millions of Current dollars) - Kendrick |
| U2 | Gross National Product, Commerce Concept, (Millions of 1929 Dollars) |
| U3 | Implicit Deflators 1958=100 |
| U4 | Gross National Product, by Type of Expenditure, in Current Price and in Constant (1958) Price (in Billions of Dollars) |
| U4a | Gross National Product, by Type of Expenditure, in Current Price and in Constant (1958) Prices (in Billions of Dollars) |
| U5 | Gross Domestic Product Originating in Private Farm and NonFarm Sectors and government, 1929 Prices (in Billions of Dollars) |
| U6 | National Income, by Industrial Origin, in Current Prices (in Billions of Dollars) |
| U7 | Gross national Product, in Current and 1958 Prices |
| U8 | Value of new Private and Public Construction (in Millions of Dollars) |
| U9 | Value of New Private and Public Construction 1957-59 Dollars (in Millions of Dollars) |
| U10 | Outlays of the Federal Government (in Millions of Dollars) |
| U11 | Federal Government Receipts-Administrative Budget (in Millions of Dollars) |
| U12 | Internal Revenue Collections (in Millions of Dollars) |
| U13 | Summary of Federal Government Finances-Administrative Budget (in Millions of Dollars) |
| U14 | State and Local Government Revenue, (in Millions of Dollars) |
| U15 | State and Local Government Expenditure, (in Millions of Dollars) |
| U16 | Public Debt of the Federal Government (in Millions of Dollars) |
| U17 | Balance of International Payments (in Millions of Dollars) |
| U17a | Balance of International Payments (in Millions of Dollars), Cont'd |
| U18 | Indexes of Quantity and Unit Value of Exports |
| U19 | Indexes of Quantity and Unit Value of Imports |
| U20 | Money Supply (in Billions of Dollars) |
| U21 | Interest Rates |
| U22 | Labor Force and its Components (in Thousands of Persons 14 Years Old and Over. Annual Averages) |
| U23 | Consumer Price Index BLS 1967=100 |
| U24 | Average Annual Earnings per Full-time Employee, by Industry (in Current Dollars) |
| U25 | Average Annual Earnings of Employees |

Source: Historical Statistics of the United States
Bicentennial Edition. Department of Commerce

BRITAIN

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| B1 | Gross National Product by Category of Expenditure, 1900-1940 (Pounds Million) |
| B2 | GDP & GNP by Category of Expenditure at Constant Prices 1900-1940 (Pounds Million) |
| B3 | Price Indices for main Categories of Goods and Services 1900-1940 (1913=100) |
| B4 | Final Expenditure, Gross Domestic and Gross National Product-at Market Prices and at Factor Cost, 1900-1940 (Pounds Million) |
| B5 | UK Factor Incomes in the Gross National Product 1900-1940 (Pounds Million) |
| B6 | Gross Domestic Product by Industry and Type of Income 1920-38 (Pounds Million) |
| B6a | Gross Domestic Product Cont'd |
| B7 | Gross Domestic Fixed Capital Formation at Current Prices, by Type of Asset and by Sector, 1900-1940 (Pounds Million) |
| B8 | Gross Domestic Fixed Capital Formation at Constant Prices by Type of Asset, 1900-1940 at 1900 Prices (Pounds Million) |
| B9 | Balance of Payments, Current account, 1900-1940 (Pounds Million) |
| B10 | Price indices for Exports and Imports of Goods, and Terms of Trade 1900-1940(1963=100) |
| B11 | Current Account of Combined Public Authorities, 1900-1940 (Pounds Million) |
| B12 | British Money Supply (Pounds Million) (2nd Quarter) 1919-1938 |
| B13 | UK 3Months' Bank Bills % and Yield on Consols |
| B14 | Working Population, Employment and Unemployment, 1900-40 |
| B15 | Income from Employment, 1900-1940 (Pounds Million) |
| B16 | Indices of Wage Rates, Wage Earnings and Retail Prices, 1900-40 (1913=100) |
| B17 | Price Indices for Consumers' Goods and Services, 1900-1940 (1913=100) |
| B18 | Index of Average Money Incomes (1924=100) |
| B19 | Index of Industrial Production, by Main Orders 1900-1940 (1913=100) |

Source : Feinstein, C H National Income, Expenditure and
Output of the United Kingdom

Howson, S. British Monetary Management

Mitchell B. & Deane P. Abstract of British Historical
Statistics

(iii)

JAPAN

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| J1 | G.N.E. current prices |
| J2 | G.N.E. constant prices |
| J3 | G.N.E. deflators |
| J4 | Expenditure price indexes |
| J5 | Gross Product by industry, current prices |
| J6 | Gross Product by industry, constant prices |
| J7 | G.D.P. deflators |
| J8 | G.N.P. current prices |
| J9 | G.N.P. constant prices |
| J10 | G.D.C.F. current prices |
| J11 | G.D.C.F. constant prices |
| J12 | Government consumption, current prices |
| J13 | Government consumption, constant prices |
| J14 | External transaction account |
| J15 | Terms of trade |
| J16 | Money supply |
| J17 | Persons engaged |
| J18 | Average wage earnings of manufacturing |
| J19 | Wage rates by job |
| J20 | Average wage earnings by industrial group of manufacturing |
| J21 | Value of production of manufacturing |

Sources: Ohkawa et. al. (ed) Estimates of Long-Term Economic Statistics of Japan since 1868 (Tokyo)

CANADA

- C1 Gross National Expenditure, By Components (Dollars Million) 1926-40
- C2 Gross National Expenditure In Constant (1971) Dollars Million 1926-40
- C3 Implicit Price Deflators 1949=100
- C4 Gross National Product By Industry In Current Prices (URQUHART) 1900-26
- C5 Gross National Product In Current And Constant Dollars (URQUHART) 1900-26
- C6 National Income And GNP By Components 1926-40
- C7 GDP At Factor Cost By Industry 1926-40
- C8 Gross Fixed Capital Formation Current Dollars 1900-26
- C9 Gross Fixed Capital Formation, By Industry 1926-40
- C10 The Residential Construction Component (URQUHART) 1900-26
- C11 Government Expenditure On Goods And Services 1900-26
- C12 Government Revenue, Expenditure And Surplus Or Deficit, By Component, All Governments 1926-40
- C13 Notes And Coin Held By Banks And General Public And Chartered Bank Deposit Liabilities (\$M)
- C14 Canada'S Balance Of International Payment (URQUHART) 1900-26
- C15 Canadian Balance Of International Payments, All Countries
- C16 Canadian Balance Of International Payments, All Countries,
- C17 Foreign Trade, Indexes Of Import And Export Prices And The Terms of Trade 1913-40
- C18 Labour Force And Main Components 1921-40
- C19 Wages, Salaries And Supplementary Labour Income, By Industry 1926-40
- C20 Annual Earnings In Manufacturing Industries, Production And Other Workers 1905-40
- C21 Index Numbers Of Average Wage Rates For Selected Main Industries 1901-40
- C22 Cost-Of-Living Index 1913-40
- C23 Price Index Numbers Of A family Budget 1900-39
- C24 General Wholesale Price Index 1911-40
- C25 General Statistics For All Manufacturing Industries 1900-40

Source : Urquhart M.C. & Buckley K. Historical Statistics of Canada
1st Ed. C.U.P.

Leacy F.H. Ibid. 2nd Ed. Stat. Can

Urquhart M.C. unpublished estimates

NEW ZEALAND

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| N1 | G.D.P. current prices |
| N2 | Price indexes |
| N3 | G.D.C.F. |
| N4 | Government Consolidated Fund |
| N5 | Local authorities |
| N6 | Share prices |
| N7 | Terms of trade |
| N8 | Import prices |
| N9 | Balance of Payments |
| N10 | Exports prices |
| N11 | Export components |
| N12 | Exports and imports |
| N13 | Money supply |
| N14 | Labour force and unemployment |
| N15 | Wage rates and earnings |

Source : Supplied by Professor G.Hawke

AUSTRALIA 1900-40

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| Aa1 | Main Expenditure Aggregates, current prices |
| Aa2 | Main Expenditure Aggregates at constant prices, |
| Aa3 | Implicit Deflators, Main Aggregates |
| Aa4 | GDP by Industrial Subdivisions, current prices |
| Aa4a | GDP by Industrial Subdivisions, constant prices |
| Aa5 | GDP Deflators by Industry |
| Aa6 | Gross Domestic Capital by Sector, current prices |
| Aa7 | Gross Private Capital Formation, Components, current prices |
| Aa8 | Gross Private Capital Formation, constant prices |
| Aa9 | Gross Public Capital Formation, Components, current prices |
| Aa10 | Gross Public Capital Formation, constant prices |
| Aa11 | GDGF Deflators by Components |
| Aa12 | Expenditure Consolidated Reserve Fund, Total Public |
| Aa13 | Commonwealth Consolidated Fund Expenditure |
| Aa14 | Commonwealth Consolidated Fund Expenditure, Adjustment for Trust Funds |
| Aa15 | State Taxation Collections |
| Aa16 | Net Loan Expenditure of the States |
| Aa17 | Special Grants Paid by Commonwealth to States |
| Aa18 | Surpluses And Deficits, Commonwealth And States |
| Aa19 | Public Debt |
| Aa20 | Balance of International Transactions |
| Aa21 | Terms of Trade |
| Aa22 | Imports by Class of Commodity |
| Aa23 | Imports by Country of Origin |
| Aa24 | Exports by Commodity and Industry |
| Aa25 | Exports by Destination |
| Aa26 | Export Prices of Pastoral Products |
| Aa27 | Production of Selected Agriculture Commodities |
| Aa28 | Prices of Agricultural Products |
| Aa29 | Prices of Dairy Products |
| Aa30 | Mineral Production, Value |
| Aa31 | Statistical Summary, Manufacturing |
| Aa32 | Money, Advances by Banks and International Reserves \$M |
| Aa33 | Workforce, Employment and the Unemployment Rate |
| Aa34 | Average Annual Employment By Industry |
| Aa35 | Commonwealth Basic Wage \$ per week |
| Aa36 | Average Annual Earnings, Manufacturing |
| Aa37 | Interest Rates and Yields % |
| Aa38 | Rates of Exchange on Sterling |

Source : A.N.U. clio Database

Butlin M.W. Preliminary Annual Database (R.B.A)

vii)

AUSTRALIA B

1949/50 - 1982/83

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| Ab1 | Expenditure on Gross Domestic Product at Current Prices \$M |
| Ab2 | Expenditure on Gross Domestic Product at Constant Prices \$M |
| Ab3 | Price Indices for Expenditure on Gross Domestic Product |
| Ab4 | Gross Domestic Product at Current Prices \$M |
| Ab5 | Gross Domestic Product at Constant Prices |
| Ab6 | Private Gross Fixed Capital Expenditure |
| Ab7 | New Fixed Capital Expenditure by Private Enterprises |
| Ab8 | Private Gross Fixed Capital Expenditure at Constant Prices \$M |
| Ab9 | Consumer Price Index |
| Ab10 | Receipts of Public Authorities by Level of Government \$M |
| Ab11 | Outlays of Public Authorities by Level of Government \$M |
| Ab12 | Receipts of Commonwealth Budget \$M |
| Ab13 | Outlays of Commonwealth Budget by Economic Type \$M |
| Ab14 | Receipts of State and Local Authorities \$M |
| Ab15 | Outlays of State and Local Authorities \$M |
| Ab16 | Deficits of Public Authorities by Level of Government \$M |
| Ab17 | Financing the Deficit of Public Authorities \$M |
| Ab18 | Commonwealth Government Securities on Issue \$M |
| Ab19 | Exports and Imports of Goods and Services at Current Prices \$M |
| Ab20 | Exports and Imports of Goods and Services at Constant Prices \$M |
| Ab21 | Export Price Index |
| Ab22 | Import Price Index |
| Ab23 | Price Indices for Traded Goods and Services, Terms of Trade |
| Ab24 | Net Official Monetary Movements and Official Reserve Assets \$M |
| Ab25 | Exchange Rates (\$A1) |
| Ab26 | Current Account of the Balance of Payments \$M |
| Ab27 | Labour Force by Employment Status |
| Ab28 | Civilian Employees by Sector '000 |
| Ab29 | Employment by Occupational Status |
| Ab29A | Import Price Index |
| Ab30 | Unemployment, Vacancies and Overtime |
| Ab31 | Wages \$ |
| Ab32 | Money Supply \$M |

Source: W.E. Norton and P.M. Garmston, Australian Economic Statistics 1949-50 to 1982-83: I Tables, Reserve Bank of Australia, Occasional Paper No. 8A.