Data Appendix: The Great Depression in Canada and the United States: A Neoclassical Perspective

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Raw Series	Source
1. Canadian Gross national expenditure deflator	Historical statistics of Canada Series K172
2. Canadian Civilian population older than 14	Historical statistics of Canada Series D126
3. Canadian Gross national product	Historical statistics of Canada Series F32
4. Canadian Private consumption	Historical statistics of Canada Series F14
5. Canadian Gross fixed capital formation	Historical statistics of Canada Series F16
6. Canadian Inventory change	Historical statistics of Canada Series F25
7. Canadian Government expenditure	Historical statistics of Canada Series F15
8. Canadian Exports	Historical statistics of Canada Series F29
9. Canadian Imports	Historical statistics of Canada Series F30
10. Canadian Residual	Historical statistics of Canada Series F31
11. Canadian Wages and salaries	Historical statistics of Canada Series F1
12. Canadian Military pay	Historical statistics of Canada Series F2
13. Canadian Corporation profits before taxes	Historical statistics of Canada Series F3
14. Canadian Dividends paid to non-residents	Historical statistics of Canada Series F4
15. Canadian Net interest and government profits	Historical statistics of Canada Series F5
16. Canadian Net income of farm operators	Historical statistics of Canada Series F6
17. Canadian Net income of non-farm unicorporated	Historical statistics of Canada Series F7
18. Canadian Inventory valuation adjustment	Historical statistics of Canada Series F8
19. Canadian Indirect taxes less subsidies	Historical statistics of Canada Series F10
20. Canadian Capital consumption allowances	Historical statistics of Canada Series F11
21. Canadian Residual	Historical statistics of Canada Series F12
22. US population older than 16	Current Population Reports Series 25 No311
23. US Gross national product	Kendrick (1961)
24. US detrended consumption nondurables	Cole and Ohanian (1999) Table 2
25. US detrended consumption durables	Cole and Ohanian (1999) Table 2
26. US detrended Business Investment	Cole and Ohanian (1999) Table 2
27. US detrended Government Purchases	Cole and Ohanian (1999) Table 2
28. US detrended Exports	Cole and Ohanian (1999) Table 2
29. US detrended Imports	Cole and Ohanian (1999) Table 2
30. Canadian Export Prices	Historical statistics of Canada, F357-359*
31. Canadian Import Prices	Historical statistics of Canada, F357-359*
32. Canadian Employment	Historical statistics of Canada, D124-133
33. Canada, Non-Agricultural Employment	Historical statistics of Canada, D124-133
34. Canada, Agricultural Employment	Historical statistics of Canada, D124-133
35. Average hours worked, non-agriculture	Historical statistics of Canada, 406-411*

36. Index, Industrial wages	Historical statistics of Canada, E198-208
37. Index, Farm Wages (35-39=100)	*Labour Gazette*
38. GNP Deflator	Historical statistics of Canada, E1
39. Monetary Base, M0	Metcalfe et al
40. M1	Metcalfe et al
41. Canadian commercial failures	Historical statistics of Canada, Y215-216
42. Canadian commercial failures, liability	Historical statistics of Canada, Y215-216
43. U.S. commercial failures	U.S. Depart. of Commerce (1975), V20-30
44. U.S. commercial failures, liability	U.S. Depart. of Commerce (1975), V20-30

Note:

The Historical statistics of Canada series can be downloaded from http://www.statcan.ca/english/freepub/11-516-XIE/sectiona/toc.htm
* Historical Statistics of Canada, 1965.

List of constructed series

1. Detrended Canadian GNP (TABLE I)
2. Detrended Canadian consumption (TABLE I)
3. Detrended Canadian investment (TABLE I)
4. Detrended Canadian government expenditures (TABLE I)
5. Detrended Canadian exports (TABLE I)
6. Detrended Canadian imports (TABLE I)
7. Detrended US GNP (TABLE I)
8. Detrended US Consumption (TABLE I)
9. Detrended US investment (TABLE I)
10. Detrended US government expenditures (TABLE I)
11. Detrended US exports (TABLE I)
12. Detrended US imports (TABLE I)
13. Detrended Canadian TFP (Table II)
14. Detrended US TFP (Table II)
15. Detrended Canadian capital (Table II)
16. Detrended US capital (Table II)
17. Canadian hours (Table II)
18. US hours (Table II)
19. Detrended Canadian private non-agricultural TFP (Table III)
20. Detrended US private non-agricultural TFP (Table III)
21. Indexed Canadian Monetary Base (Table IV)

22. Indexed Canadian M1 (Table IV)
23. Indexed Canadian Price level (Table IV)
24. Detrended Canadian GNP per capita 1920-22 (Table VII)
25. Indexed Canadian GNP deflator 1920-22 (Altman) (Table VII)
26. Indexed Canadian GNP deflator 1920-22 (Urquhart) (Table VII)
27. Canadian indexed industry real wages (Figure 3)
28. Canadian indexed agriculture real wages (Figure 3)
29. Canadian detrended farm real wages (1920-22, 1929-33) (Table X)
30. Canadian detrended manufacturing real wages (1920-22, 1929-33) (Table X)
31. Indexed Canadian terms of trade (Figure 5)
32. Canadian Education Workers
33. Canadian Relief Workers, Non-Agriculture
34. Canadian Relief Workers
35. Total government employment
36. Canadian Private Non-Agricultural Employment

Notes:

(1) Table VII in the paper reports that the price index for Canada is from Urquhart (1993). The data reported for 1920-22 is actually from Altman (1993). The first three rows of column 25 reports this. The Urquhart values for 1993 are reported in the first three rows of 26.

Construction of Series Used in the Paper

We briefly outline the construction of the series we used in the paper. Our outline of the construction of these series corresponds to the description given in Appendix A of the paper. Numbers in parenthesis correspond to the series listed above.

Detrending

The series were detrended according to

$$Y_d(t) = (Y(t)) / \left(Y(1929) * (1.0 + x)^{t-1929}\right)$$

where $Y_d(t)$ denotes the detrended series, $Y(t)$ is the undetrended series and x is the trend.

Table I (1-12):
Detrended the series using a 2 percent annual trend.

Table II. Data for growth accounting (13-18):
GDP: The GDP series are from Kendrick (1961) and *National Expenditure and Product Accounts* (1988).
Capital Stock: From Brown (1961) and Kendrick (1961), Table A-XV.
Labor Input: The labor inputs for both countries are the products of total employment and average hours per worker. Canadian hours is Series C-51 and D-409 in Urquhart (1965).

Table III. Data for growth accounting (19-20):
Private Non-Agricultural Growth Accounting
GDP: Private Non-Agricultural GDP is defined as GDP minus government, agriculture and fishing and forestry (CHECK THIS).
Capital Stock: From Brown (1961) and Kendrick (1961).
Labor Input: The labor series for Canada is the product of non-agricultural employment (see discussion below) and Series C-51. The U.S hours are from Kendrick (1961).

Table IV. Nominal Money, Prices and Interest Rates in Canada 1929-1939 (21-23):
The monetary data are from Metcalfe et al (1996). The price level is the GNE deflator from Historical Statistics of Canada.

Table VII. Comparing 1920-22 and 1929-1935 (24-26):
The GDP series were detrended using a 2% annual trend.

Figure 3 Real Wages (27-28):
Not detrended.

Table X. Comparing 1920-22 and 1929-1935 (29-30):
Detrended using a 1.4% linear trend.

Figure 5 Terms of Trade (31):
The terms of trade is the ratio of an index of export prices and import prices.

The following series were used in the estimate of the private non-agricultural work force.

(32) Canadian education workers:
Education workers are the sum of university professors and teachers reported by Historical Statistics of Canada. Historical Statistics of Canada reports the number of teachers for certain years, and we used linear interpolation to fill in the missing years.

(32), (33) Canadian relief workers:
Based on data reported in Labour Gazette and Bryce (1985).

(35) Total government employment:
An estimate of total government employment in Canada was constructed as follows. Federal government employment is reported in Historical Statistics of Canada. We estimated the number of provincial and municipal employee's by multiplying total employment in Canada by the fraction of (non-school) state and municipal workers in the U.S. Total government employment is the sum of federal government employment, teachers, provincial and municipal workers and non-agriculture relief workers. Our estimate of total employment is the sum of Dominion employment, education workers, provincial and municipal workers and non-agriculture relief workers.
This series likely overestimates private sector employment in the 1930-31 period. The number of relief workers - workers employed by governments on make-work projects - are only available starting in 1932. As a result, our estimate of private employment in 1930-31 is an overestimate. We suspect that this effect is relatively small.

(36) Canadian private non-agricultural employment
This series is equal to total nonagricultural employment minus total government employment.