Data Appendix

"The Great Depression in the United States From a Neoclassical Perspective"

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Original Data: Description

O.1. Gross National Product (millions of 1929 dollars)
O.2. Net National Product (millions of 1929 dollars)
O.3. Gross Domestic Product (millions of 1929 dollars)
O.4. Total Persons Engaged, not including military (thousands)
O.5. Manhours, Total (millions)
O.6. Manhours, Civilian (millions)
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O.8. Manhours, Private, Farm (millions)
O.9. Manhours, Private, Non-Farm (millions)
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O.28. Fixed Investment, Nonresidential (billions of 1972 dollars)
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Original Data: Source

O.1. Kendrick, Table A-III
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O.4. Kendrick, Table A-VI
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O.23. NIPA 1929-1974, Table 1.2 (page 324)
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O.40. BEA, NIPA Table 6.5A. Full-Time Equivalent employees by Industry
O.41. BEA, NIPA Table 6.2A. Compensation of Employees by Industry
O.42. BEA, NIPA Table 6.2A. Compensation of Employees by Industry
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O.44. BEA, NIPA Table 6.17A. Corporate Profits Before Tax by Industry

O.45. BEA, NIPA Table 6.19A. Corporate Profits After Tax by Industry
O.46. Historical Statistics, Series A39.
O.47. from Appendix Table 1. of Hanes, Christopher. *Changes in the Cyclical Behavior of Real Wage Rates, 1870-1990*, The Journal of Economic History, Vol.56, No.4.
O.48. from Table 3 (column 3) of Joines, Douglas H. *Estimates of Effective Marginal Tax Rates on Factor Incomes*, The Journal of Business, Vol. 54, No.2.
O.49. BOG, Table 122. For years 1929-1931, we use the series yearly average on 3- to 6-month Treasury notes and certificates; for years 1932-1939, we use the series Treasury bills (average rate on new issues offered within period)
O.50. BOG, Table 120, page 448.
O.51. BOG, Table 1.
O.52. BOG, Table 66.
O.53. BOG, Table 2.
O.54. BOG, Table 2.
O.55. BEA, NIPA Table 1.7.5. Relation of Gross Domestic Product, Gross National Product, Net National Product, National Income, and Personal Income, download December 12th.
O.56. BEA, NIPA Table 6.20A. Net Corporate Dividend Payments by Industry
O.57. BEA, NIPA Table 6.21A. Undistributed Corporate Profits by Industry
O.58. NIPA table 1.1.3 line 1
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O.64. NIPA table 1.1.3 line 20
O.65. BLS series LNU00000003
O.66. Maddison p.212 - 215 table A.7. col. 3, 7, 8, 9, 10, 13, 15
O.67. Maddison p.232 – 235 table B.3. col. 3, 7, 8, 9, 10, 13, 15
O.68. Kendrick p.294 table A-IIa col. 11
O.69. Historical Statistics p.10 Series A 39
O.70. Friedman and Schwartz p.122 – 125 table 4.8 col. 10
O.71. Friedman and Schwartz p.122 – 125 table 4.8 col. 1
O.72. Romer p.23 table 2 col. 3
O.73. State Personal Income, 1929-1997, U.S. Department of Commerce, BEA – various tables (e.g. Alabama page 91)
O.74. All Banks Statistics of U.S. 1896 – 1955, Board of Governors, Table 1
O.75. Banking and Monetary Statistics 1914 –1941, Board of Governors, Table 67

Notes:
- Kendrick denotes Kendrick, John W. 1961. *Productivity Trends in the United States*. Princeton, N.J.: Princeton University Press (for NBER)
- NIPA 1929-1974 denotes *The National Income and Product Accounts of the United States, 1929-74 Statistical Tables*, A Supplement to the Survey of Current Business, United States Department of Commerce, Bureau of Economic Analysis.

- BEA denotes Bureau of Economic Analysis, http://www.bea.gov
- Historical Statistics denotes *Historical Statistics of the Unites States, Colonial Times to 1970*. U.S. Department of Commerce, Bureau of the Census
- FRW 1925-94 denotes, *Fixed Reproducible Tangible Wealth in the United States, 1925-94*, U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis
- BOG denotes *Banking and Monetary Statistics 1914-1941*, Board of Governors of the Federal Reserve System
- Maddison denotes Maddison, Angus 1991 "Dynamic Forces in Capitalist Development" Oxford; Oxford University Press
- Kendrick denotes Kendrick, John W. "Productivity Trends in the United States" Princeton; Princeton University Press
- Historical Statistics denotes Bureau of the Census 1975 "Historical Statistics of the United States" U.S. Department of Commerce
- Friedman and Schwartz denotes Friedman, Milton and Anna Schwartz 1982 "Monetary trends in the United States and the United Kingdom" Chicago and London; The University of Chicago Press
- Romer denotes Romer, Christina 1989 "The Prewar Business Cycle Reconsidered: New Estimates of Gross National Product, 1869 – 1908" Journal of Political Economy vol. 97 (1)

Constructed Series: Description

C.1. 1.9% Trend Growth
C.2. Detrended GNP (billions of 1972 dollars)
C.3. Detrended durable consumption (billions of 1972 dollars)
C.4. Detrended nondurable consumption (billions of 1972 dollars)
C.5. Detrended total investment (billions of 1972 dollars)
C.6. Detrended fixed investment (billions of 1972 dollars)
C.7. Detrended nonresidential investment (billions of 1972 dollars)
C.8. Detrended government purchases (billions of 1972 dollars)
C.9. Detrended exports (billions of 1972 dollars)
C.10. Detrended imports (billions of 1972 dollars)
C.11. Per capita detrended GNP (millions of 1972 dollars)
C.12. Per capita detrended durable consumption (millions of 1972 dollars)
C.13. Per capita detrended nondurable consumption (millions of 1972 dollars)
C.14. Per capita detrended nonresidential investment (millions of 1972 dollars)
C.15. Per capita detrended government purchases (millions of 1972 dollars)
C.16. Per capita detrended exports (millions of 1972 dollars)
C.17. Per capital detrended imports (millions of 1972 dollars)
C.18. Per capita detrended GNP (Index, 1929 = 100)
C.19. Per capita detrended durable consumption (Index, 1929 = 100)
C.20. Per capita detrended nondurable consumption (Index, 1929 = 100)
C.21. Per capita detrended nonresidential investment (Index, 1929 = 100)
C.22. Per capita detrended government purchases (Index, 1929 = 100)

C.23. Per capita detrended exports (Index, 1929 = 100)
C.24. Per capital detrended imports (Index, 1929 = 100)
C.25. Consumption share (per cent)
C.26. Government purchases share
C.27. Investment (= total investment + durables) share
C.28. Exports share
C.29. Imports share
C.30. Per capital total persons engaged, not including military
C.31. Per capita total hours (thousands)
C.32. Per capita total private hours (thousands)
C.33. Per capita farm private hours (thousands)
C.34. Adjustment factor for farm hours
C.35. Adjusted farm hours (thousands)
C.36. Manufacturing hours (thousands)
C.37. Per capital total persons engaged, not including military (1929 = 100)
C.38. Per capita total hours (1929 = 100)
C.39. Per capita total private hours (1929 = 100)
C.40. Adjusted farm hours (1929 = 100)
C.41. Manufacturing hours (1929 = 100)
C.42. GNP per hour
C.43. Detrended GNP per hour, (1929=100)
C.44. Detrended Private Domestic Total Factor Productivity (1929=100)
C.45. Detrended Private Nonfarm Total Factor Productivity (1929=100)
C.46. Price level (1929 = 100)
C.47. Deposits in operating banks (millions of dollars)
C.48. Deposits in operating banks relative to output
C.49. Deposits at suspended banks relative to output
C.50. Loans relative to output
C.51. Change in loans (per cent)
C.52. Government obligations relative to output
C.53. Real manufacturing wages
C.54. Real manufacturing wages, detrended
C.55. Real total wages
C.56. Real total wages, detrended
C.57. Real manufacturing wages, detrended (1929 = 100)
C.58. Real total wages, detrended (1929 = 100)
C.59. Real nonmanufacturing wage, detrended (1929 = 100)
C.60. Consumption, Nondurable goods
C.61. Consumption, Service
C.62. Consumption, Nondurable goods and service
C.63. Consumption, Nondurable goods and service, Quantity Index (2000=100)
C.64. Output per Adult
C.65. Consumption per adult
C.66. Investment per adult
C.67. Government expenditures per adult
C.68. Detrended output (HP filter)

C.69. Detrended consumption (HP filter)
C.70. Detrended investment (HP filter)
C.71. Detrended Government expenditures (HP filter)
C.72. Output in recovery relative to trend
C.73. Consumption in recovery relative to trend
C.74. Investment in recovery relative to trend
C.75. Government expenditure in recovery relative to trend
C.76. GDP per capita, rest of the world
C.77. GNP per adult population, U.S.
C.78. GDP per capita, rest of the world (1929=100)
C.79. GNP per adult population U.S. (1929=100)
C.80. GDP per capita, rest of the world average (1929=100)
C.81. M0 per adult population
C.82. M1 per adult population
C.83. M0 per adult population (1929=100)
C.84. M1 per adult population (1929=100)
C.85. M0 growth rate
C.86. M1 growth rate
C.87. M0 shock
C.88. M1 shock
C.89. Price level (1920=100)
C.90. Price level (1929=100)
C.91. Detrended output per adult
C.92. Detrended output per adult (1920 =100)
C.93. Detrended output per adult (1929 =100)
C.94. Predicted Output (1929=100)
C.95. Commercial Bank Suspensions 1929-1933 / Total Deposits 1933 (fraction)
C.96. Change in State Personal Income 1929-33 (percent)
C.97. Index used for further calculations(1929=100)
C.98. Corporate Profits after tax, real relative to trend and population (millions 1929 $)
C.99. Net Corporate Dividends, real relative to trend and population (millions 1929 $)
C.100. Undistributed corporate profits, real relative to trend and population (millions 1929 $)

Construction of Series

C.1. $(1.019)^t$ where t =0, …10
C.2. O.23 / C.1
C.3. O.25 / C.1
C.4. (O.24-O.25) / C.1
C.5. O.26 / C.1
C.6. O.27 / C.1
C.7. O.28 / C.1
C.8. O.31 / C.1
C.9. O.29 / C.1

C.10. O.30 / C.1
C.11. C.2 / O.46
C.12. C.3 / O.46
C.13. C.4 / O.46
C.14. C.7 / O.46
C.15. C.8 / O.46
C.16. C.9 / O.46
C.17. C.10 / O.46
C.18. C.11, indexed
C.19. C.12, indexed
C.20. C.13, indexed
C.21. C.14, indexed
C.22. C.15, indexed
C.23. C.16, indexed
C.24. C.17, indexed
C.25. C.4 / C.2
C.26. C.8 / C.2
C.27. (C.3+C.5) / C.2
C.28. C.9 / C.2
C.29. C.10 / C.2
C.30. O.4 / O.46
C.31. O.5 / O.46
C.32. O.7 / O.46
C.33. O.8 / O.46
C.34. $(1.018)^t$, where t = 0,…10.
C.35. C.33 * C.34
C.36. O.20 / O.46
C.37. C.30, indexed.
C.38. C.31, indexed.
C.39. C.32, indexed.
C.40. C.35, indexed.
C.41. C.36, indexed.
C.42. O.1 / O.6
C.43. C.37 detrended using a 2.17% trend and indexed.
C.44. O.15 detrended using a 1.6% trend.
C.45. O.18 detrended using a 1.78% trend.
C.46. O.32, indexed
C.47. O.51 – O.52
C.48. C.47 / 1000 / O.55
C.49. (O.52 / O.55* 100000)
C.50. O.53 / 1000 / O.55
C.51. percent change in C.50
C.52. O.54 / 1000 / O.55
C.53. O.47 / O.32
C.54. C.53 / C.1
C.55. O.41 / O.5 / O.32

C.56. C.55 / C.1
C.57. C.54, indexed
C.58. C.56, indexed
C.59. C.59_(t+1) equals C.59_t*{1+[growth rate of C.58 – O.40/O.38*(growth rate of C.57)]/(1-O.40/O.38)}
C.60. For t = 1947:I to 1989:IV,
C.60(t) = O.61 (1990:I)*O.59 (t) / O.59 (1990:I)
For t = 1990:I to 2004:III,
C.60 (t) = O.61 (t)
C.61. For t = 1947:I to 1989:IV,
C.61 (t) = O.62 (1990:I)*O.60 (t) / O.60 (1990:I)
For t = 1990:I to 2004:III,
C.61 (t) = O.62 (t)
C.62. C.62 = C.60 + C.61
C.63. C.63 (t) = 100*C.62 (t) / Average (C.62 (2000:I, 2000:II, 2000:III, 2000:IV))
C.64. C.64 = O.58 / O.65
C.65. C.65 = C.63 / O.65
C.66. C.66 = O.63 / O.65
C.67. C.67 = O.64 / O.65
C.68. HP filter of ln(C.64)
C.69. HP filter of ln(C.65)
C.70. HP filter of ln(C.66)
C.71. HP filter of ln(C.67)
C.72. C.72 = C.68(Trough + i)+1 where i = 0, 1, 2, 3, and 4
C.73. C.73 = C.69(Trough + i) +1 where i = 0, 1, 2, 3, and 4
C.74. C.74 = C.70(Trough + i) +1 where i = 0, 1, 2, 3, and 4
C.75. C.75 = C.71(Trough + i) +1 where i = 0, 1, 2, 3, and 4

REMARK: For C.72 through C.75,

NBER defines postwar peaks and troughs as

Peak	Trough
November 1948(IV)	October 1949 (IV)
July 1953(II)	May 1954 (II)
August 1957(III)	April 1958 (II)
April 1960(II)	February 1961 (I)
December 1969(IV)	November 1970 (IV)
November 1973(IV)	March 1975 (I)
January 1980(I)	July 1980 (III)
July 1981(III)	November 1982 (IV)
July 1990(III)	March 1991 (I)
March 2001 (I)	November 2001 (IV)

C.76. C.76 = O.66 / O.67

C.77. C.77 = O.68 / O.69
C.78. C.78(t) = 100*C.76 (t) / C.76(1929)
C.79. C.79(t) = 100*C.77 (t) / C.77(1929)
C.80. C.80 = Average (C.78)
C.81. C.81 = O.70 / O.69
C.82. C.82 = O.71 / O.69
C.83. C.83(t) = 100*C.81 (t) / C.81 (1929)
C.84. C.84(t) = 100*C.82 (t) / C.82 (1929)
C.85. C.85(t) = LN (O.70 (t)) – LN (O.70 (t-1))
C.86. C.86(t) = LN (O.71 (t)) – LN (O.71 (t-1))
C.87. C.87 (t) = C.85 (t) – A – B1*C.85 (t-1) – B2*C.85 (t-2)
C.88. C.88 (t) = C86 (t) – A – B1*C.86 (t-1) – B2*C.86 (t-2)

Where

	M0	M1
A	0.020	0.040
B1	0.756	0.515
B2	-0.269	-0.180

are OLS estimates of a constant and coefficients of second order auto regressions of C.85 and C.86 respectively.

C.89. C.89 (t) = 100*O.72 (t) / O.72 (1920)
C.90. C.90 (t) = 100*O.32 (t) / O.32 (1920)
C.91. C.91 (t) = C.77 (t) /(1.019 ^ (t-1920))
C.92. C.92 = 100*C.91 (t) / C.91 (1920)
C.93. C.93 = 100*C.91 (t) / C.91 (1929)
C.94. C.94 is output from Matlab code
C.95. C.95=Sum(O.75)/O.74
C.96. C.96=(O.73(1933)/O.73(1929)-1)*100
C.97. C.97=1.019^t*O.32(t)/O.32(1929)*O.46(t)/O.46(1929)
C.98. C.98=O.45/C.97
C.99. C.99=O.56/C.97
C.100. C.100=O.57/C.97

Figures and Tables

Table 1. Series reported are C.18 through C.24.

Table 2. Series reported are C.25 through C.29.

Table 3. Series reported are C.37 through C.41.

Table 4. Series reported are C.43 through C.45.

Table 5. Series reported are C.72 through C.75. Reported are the averages of these series by quarters from the trough.

Table 6. Series reported are C.79 and C.80.

Table 7. Series reported are C.83, C.84, C.90, O.49, O.50.

Table 8. Series reported are C.87 through C.88.

Table 9. Series reported are C.48 through C.52.

Table 10. Series reported are C.57 through C.59.

Special box. Series reported are C.89, C.90, C.92, C.93.

Figure 1. Series reported are C.18 and C.20.

Figure 2. Series reported are C.18 and C.94.

Figure 3. Series reported are C.95 and C.96

Figure 4. Series reported are C.98, C.99 and C.100