

MACROECONOMICS

second edition



STEPHEN D. WILLIAMSON

Chapter 3

Business Cycle Management

Figure 3.1 Idealized Business Cycles

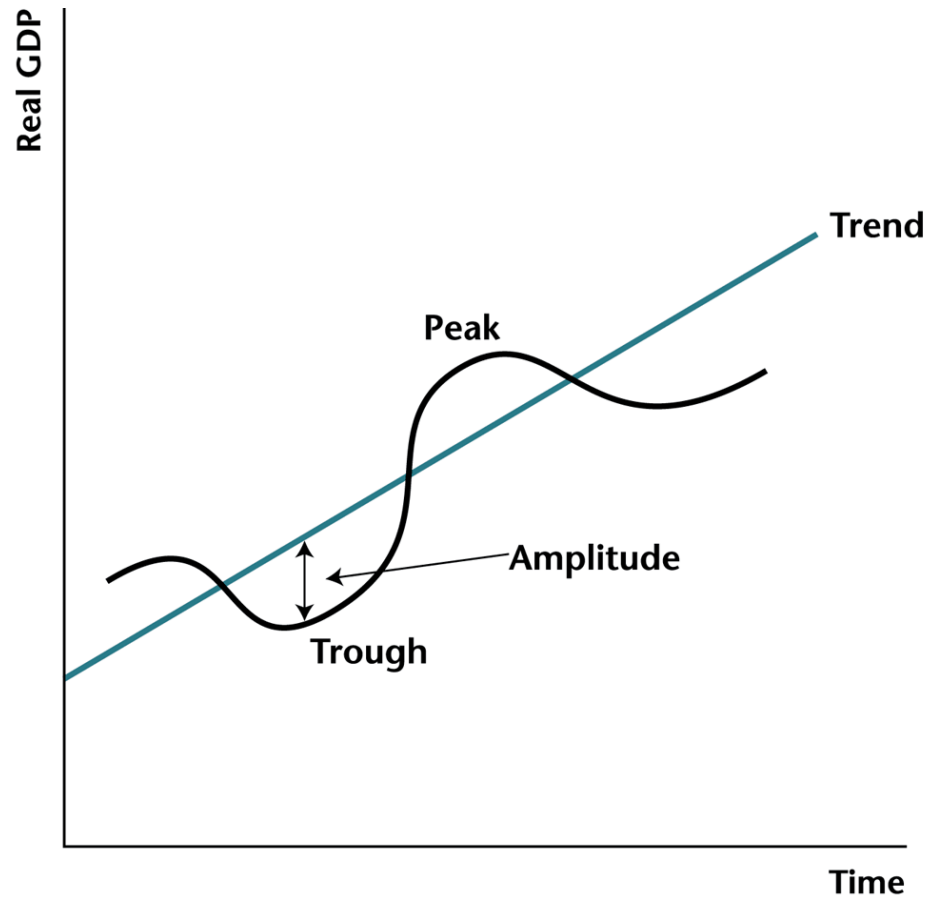


Figure 3.2 Percentage Deviations from Trend in Real GDP from 1947--2003

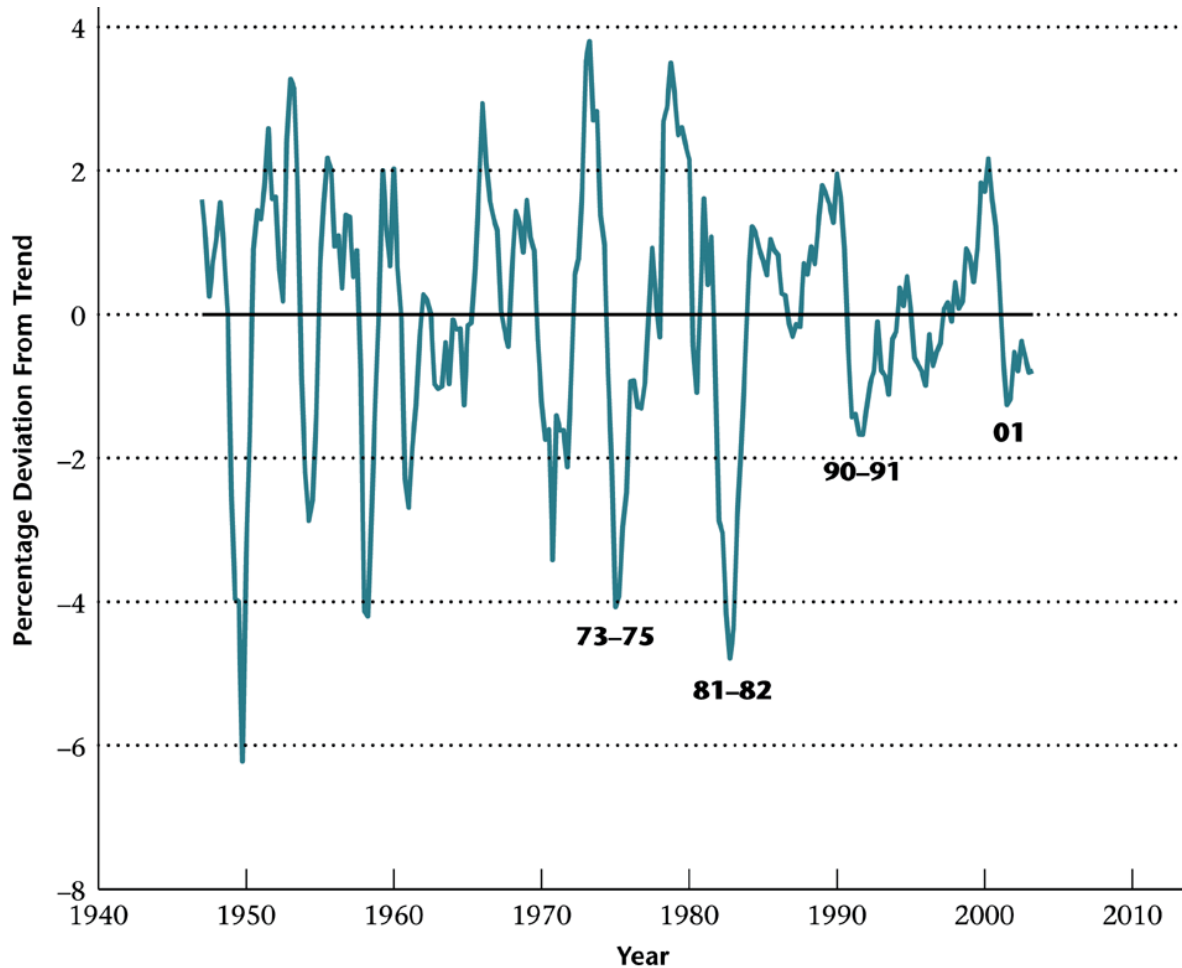


Figure 3.3 Time Series Plots of x and y

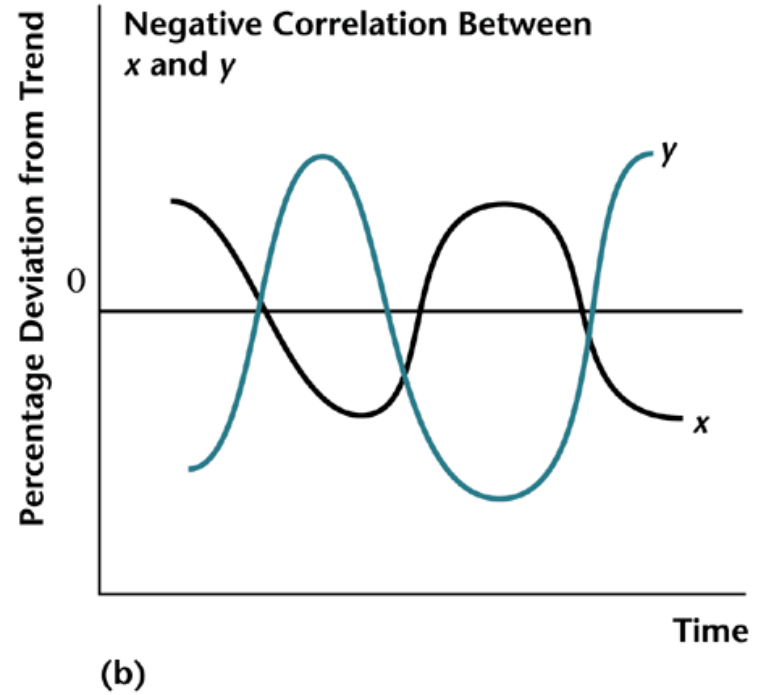
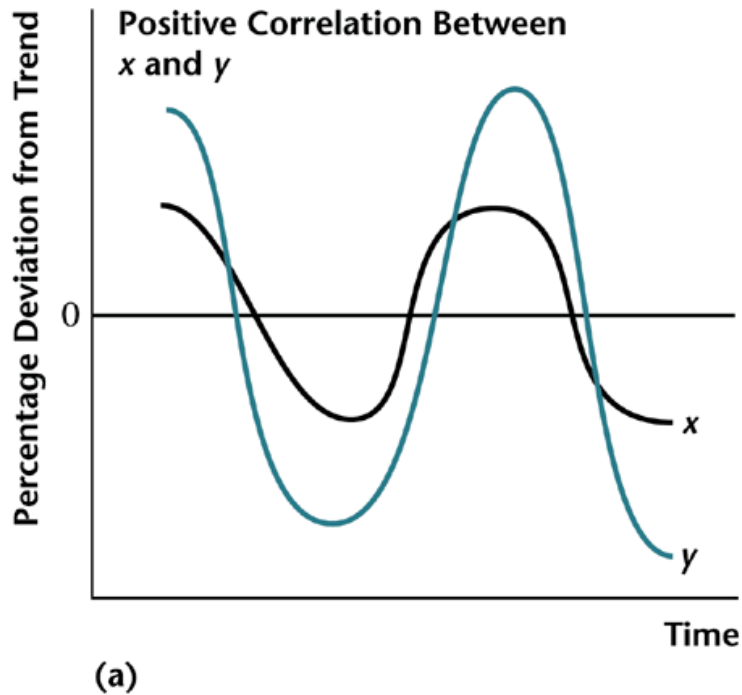


Figure 3.4 Correlations Between Variables y and x

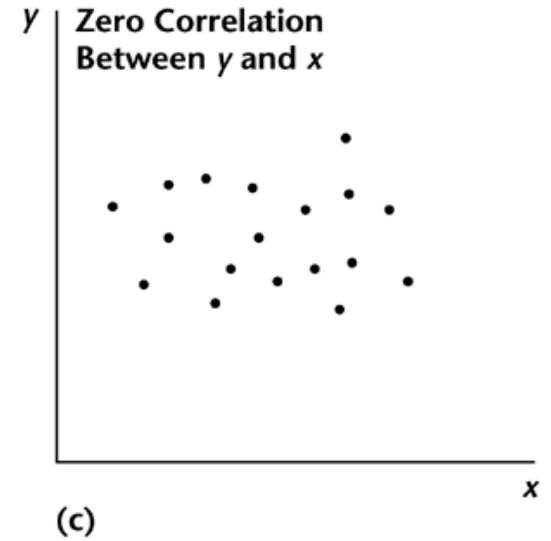
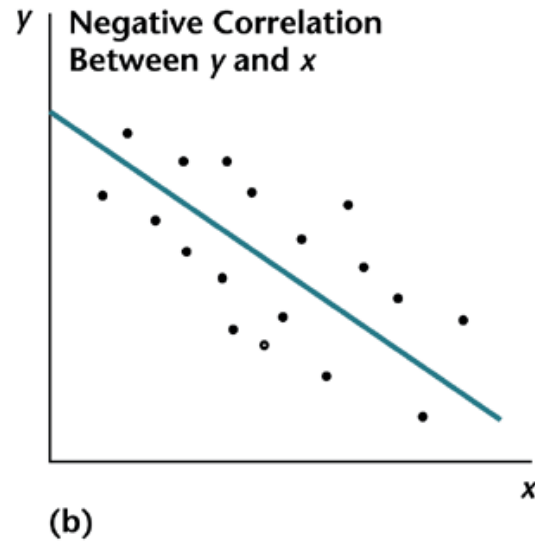
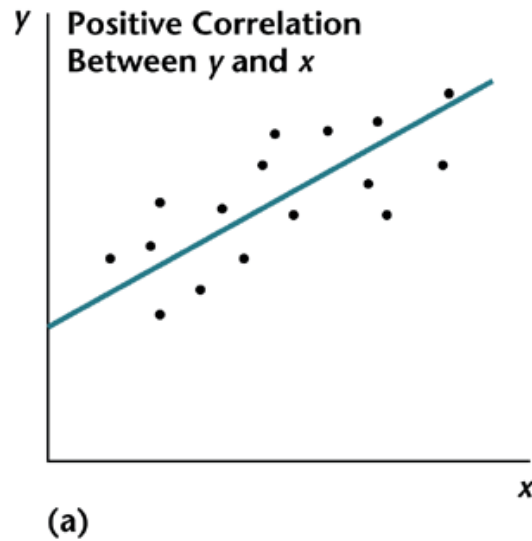


Figure 3.5 Imports and GDP

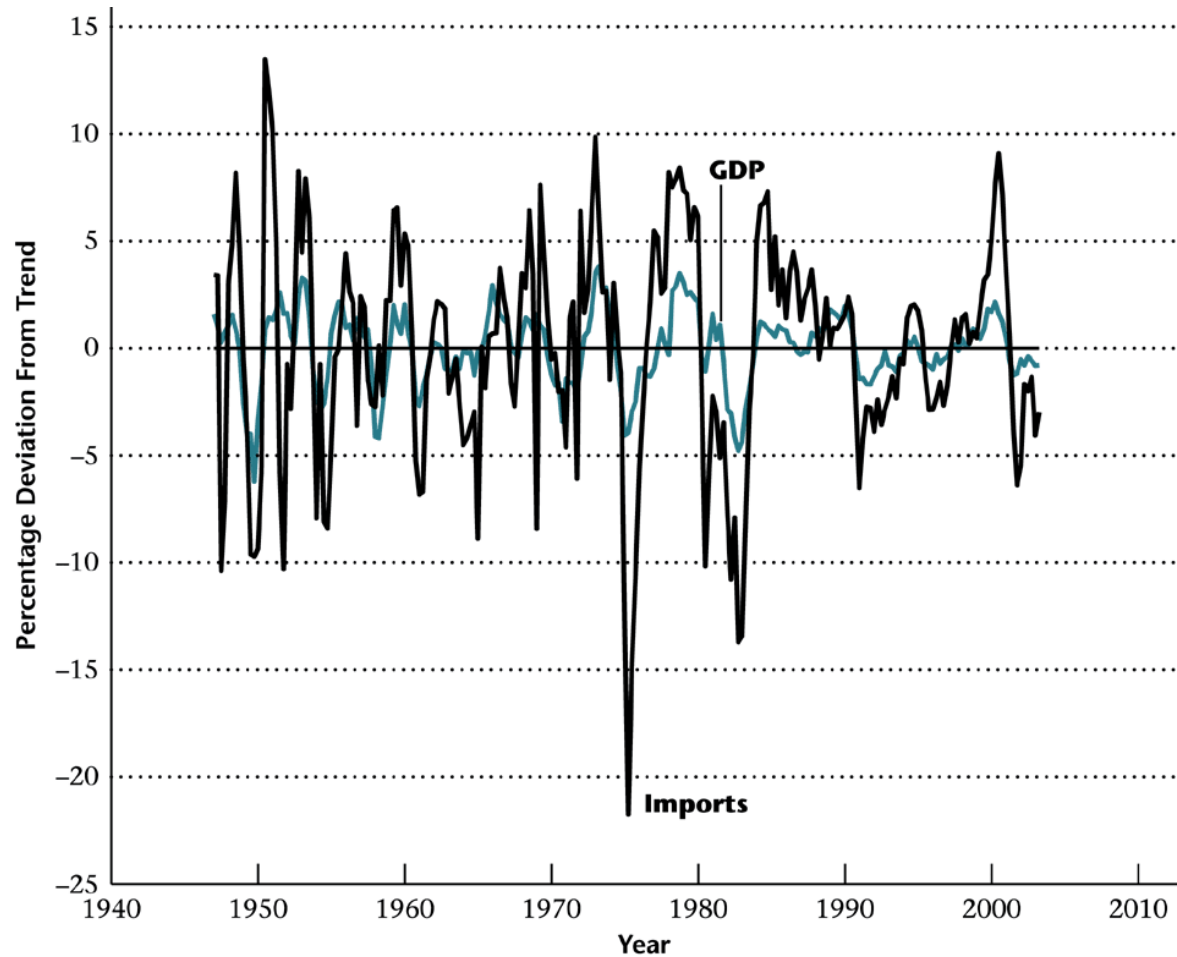


Figure 3.6 Scatter Plot of Imports and GDP

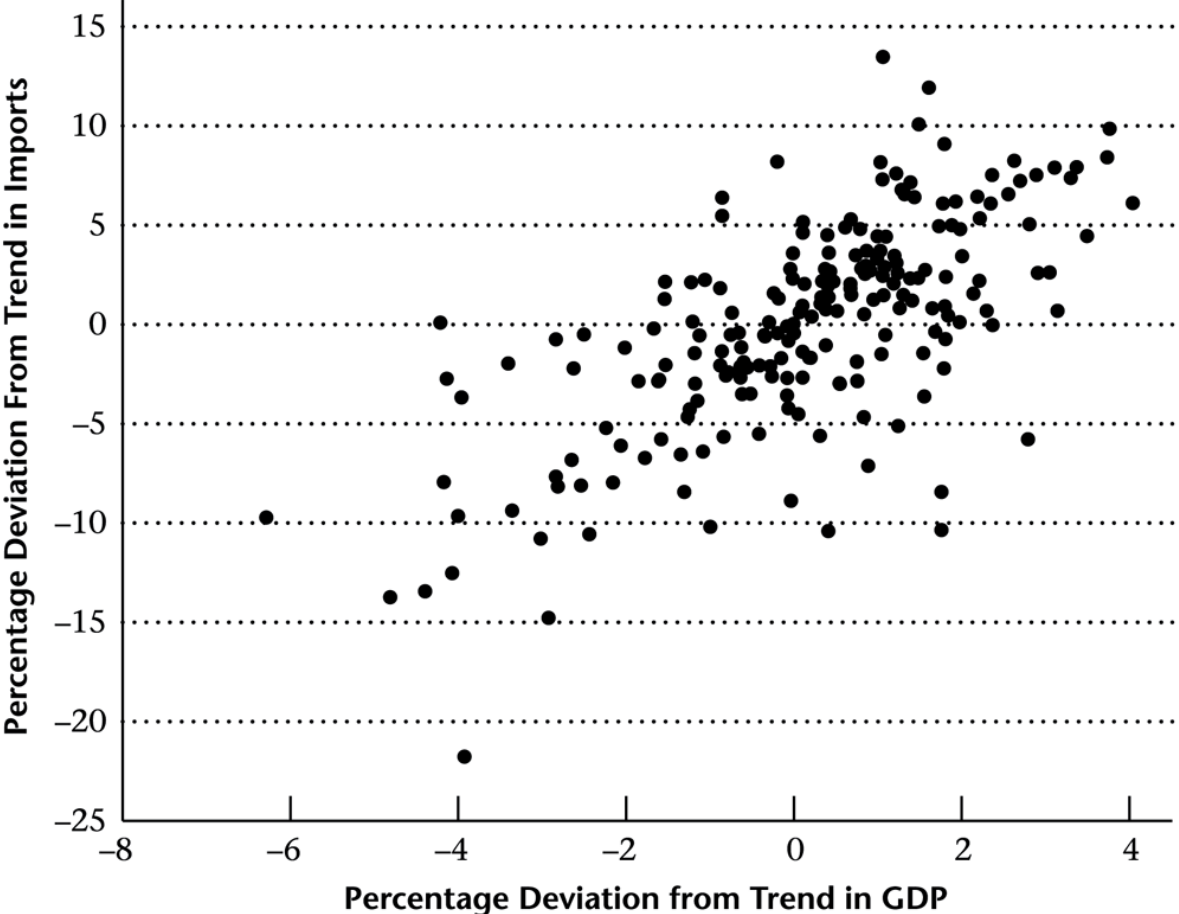


Figure 3.7 Leading and Lagging Variables

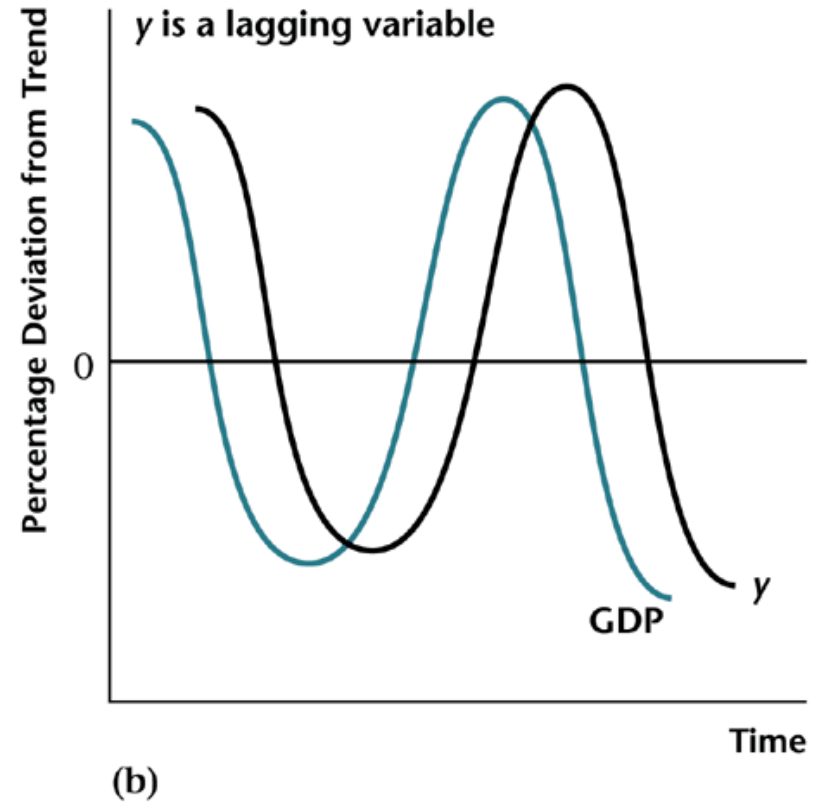
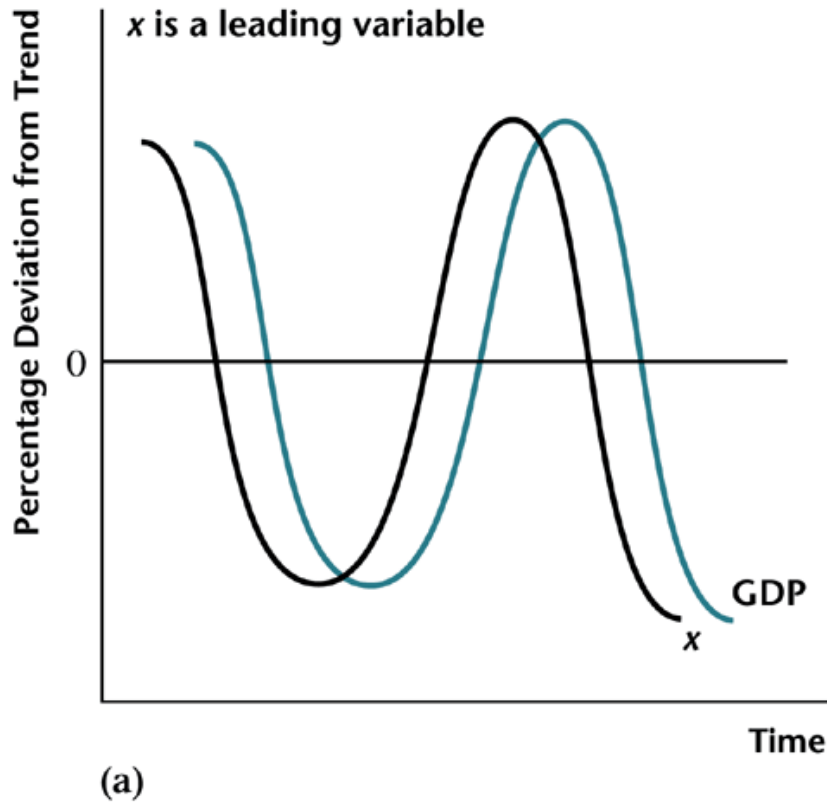


Figure 3.8 Percentage Deviations from Trend in Real GDP (colored line) and the Index of Leading Economic Indicators (black line) for 1959–2003

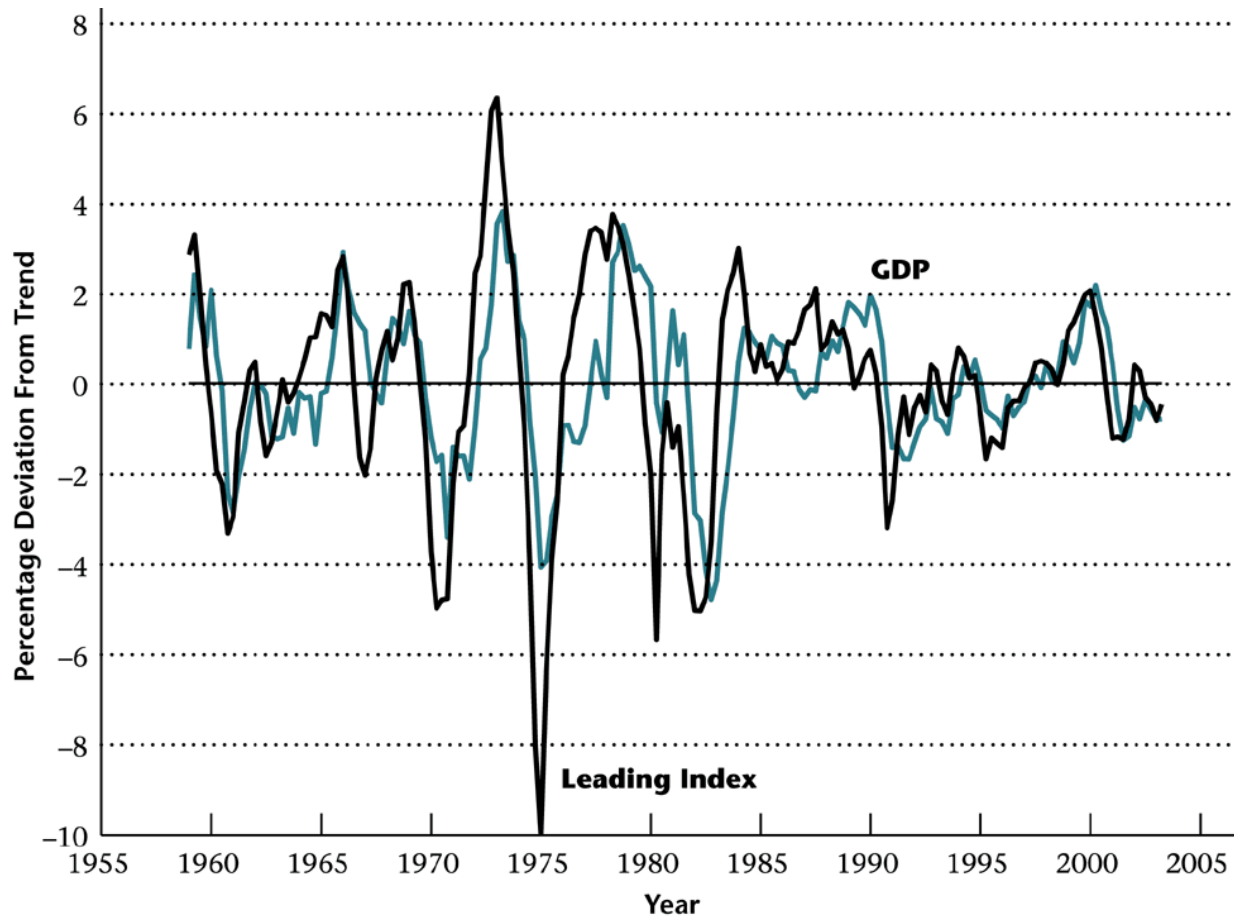


Figure 3.9 Percentage Deviations from Trend in Real Consumption (black line) and Real GDP (colored line)

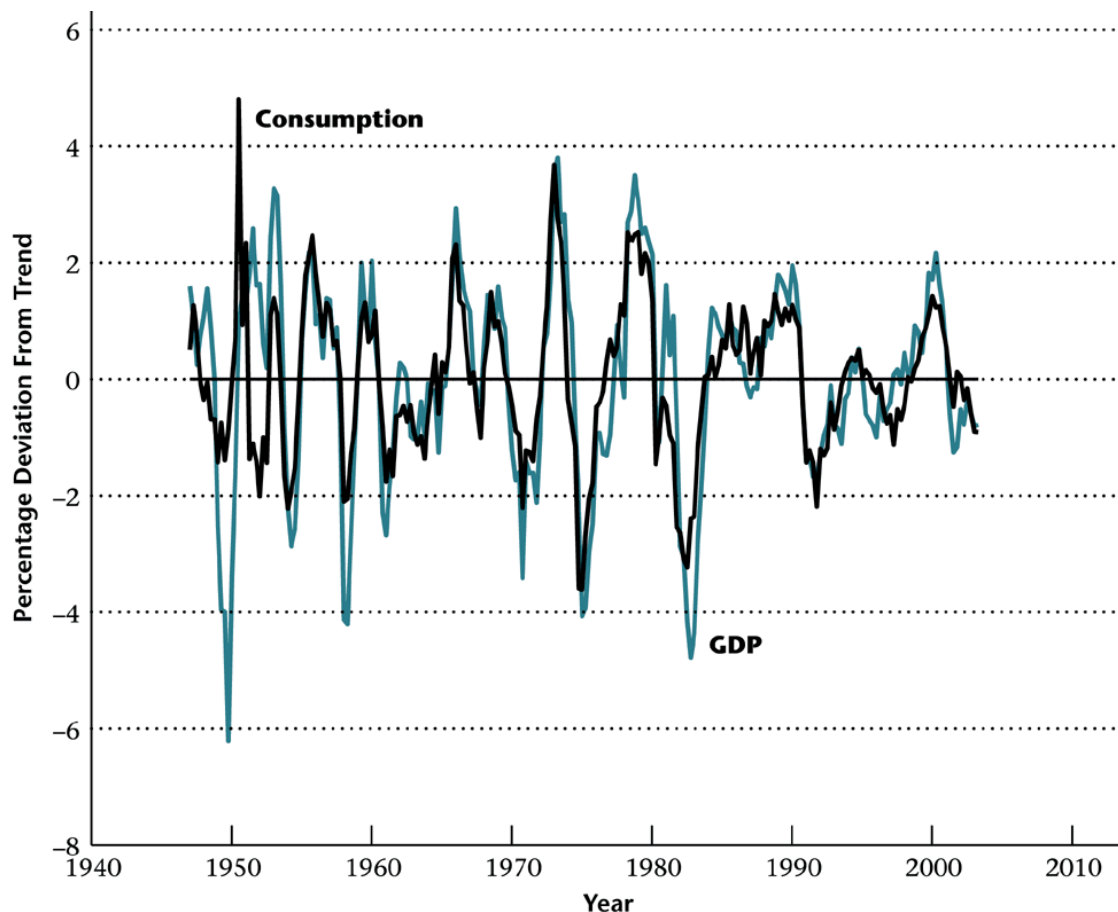


Figure 3.10 Percentage Deviations from Trend in Real Investment (black line) and Real GDP (colored line)

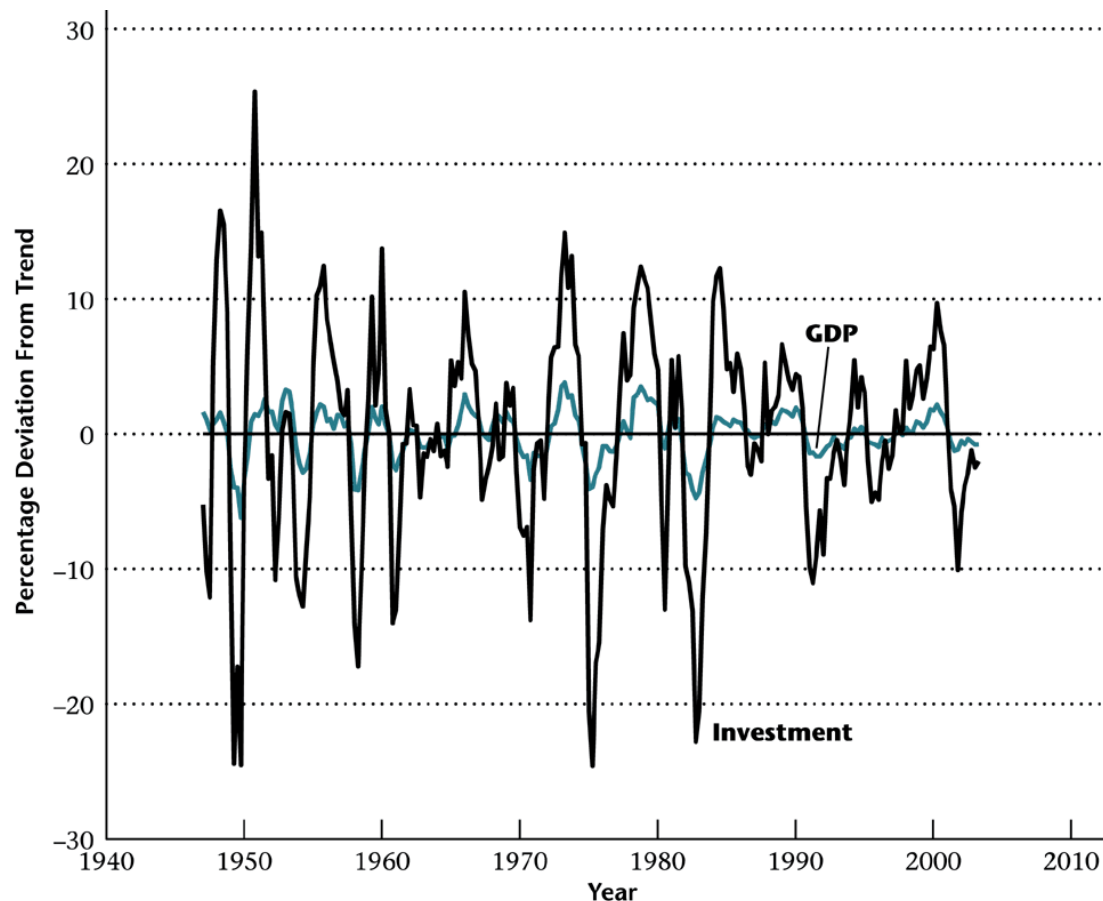


Figure 3.11 Scatter Plot for the Percentage Deviations from Trend in the Price Level (the Implicit GDP Price Deflator) and Real GDP

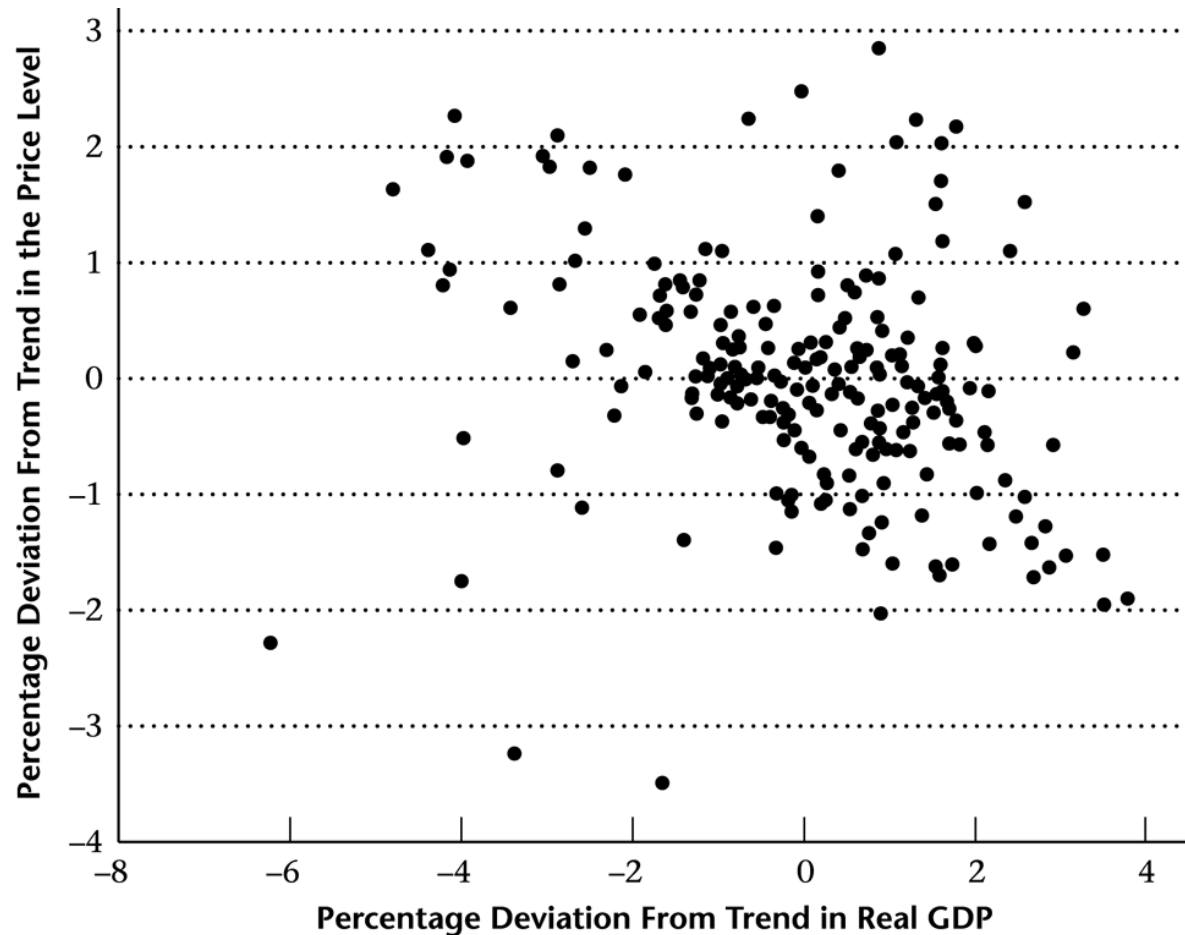


Figure 3.12 Price Level and GDP

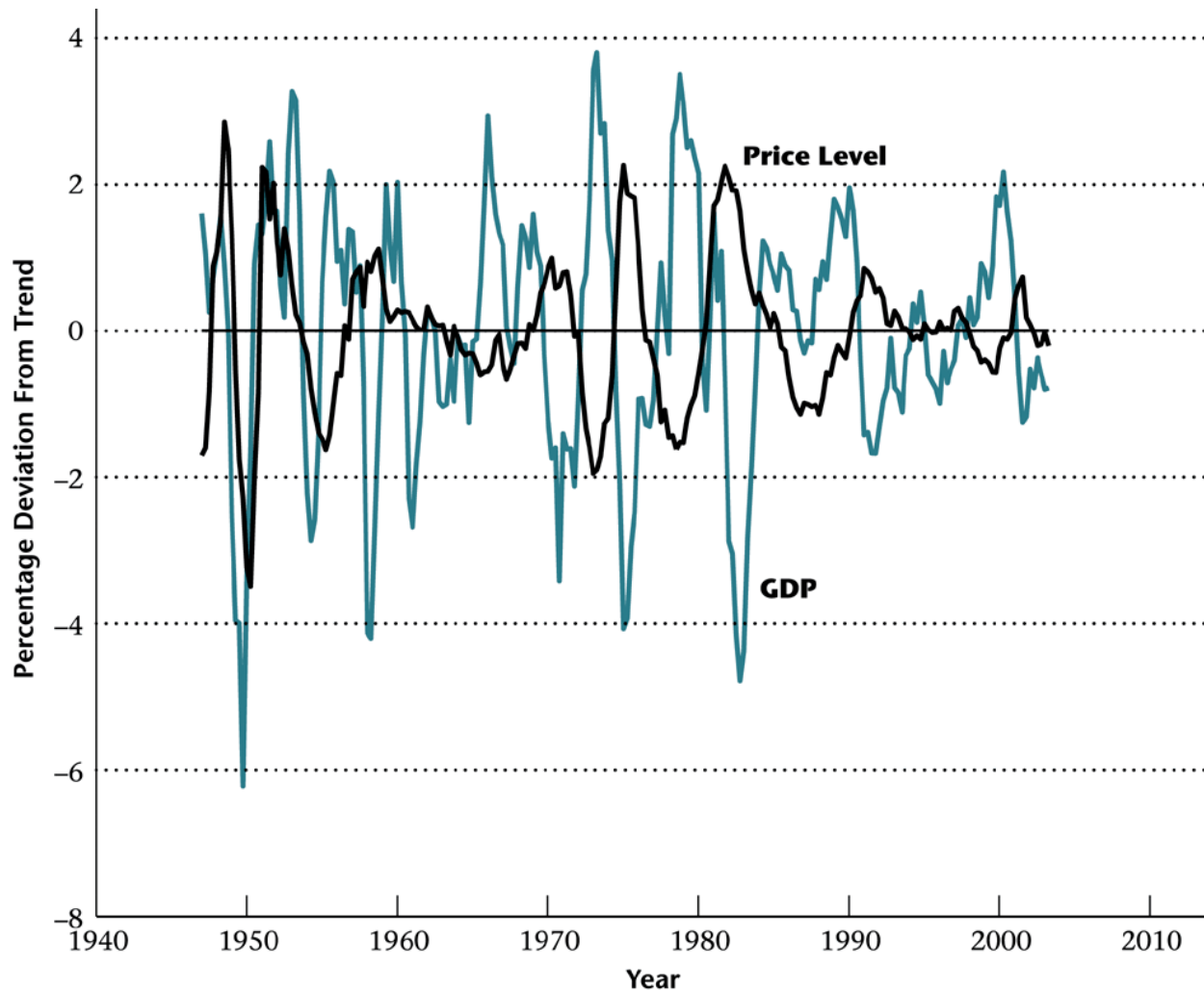


Figure 3.13 Percentage Deviations from Trend in the Money Supply (black line) and Real GDP (colored line) for the Period 1959–2003

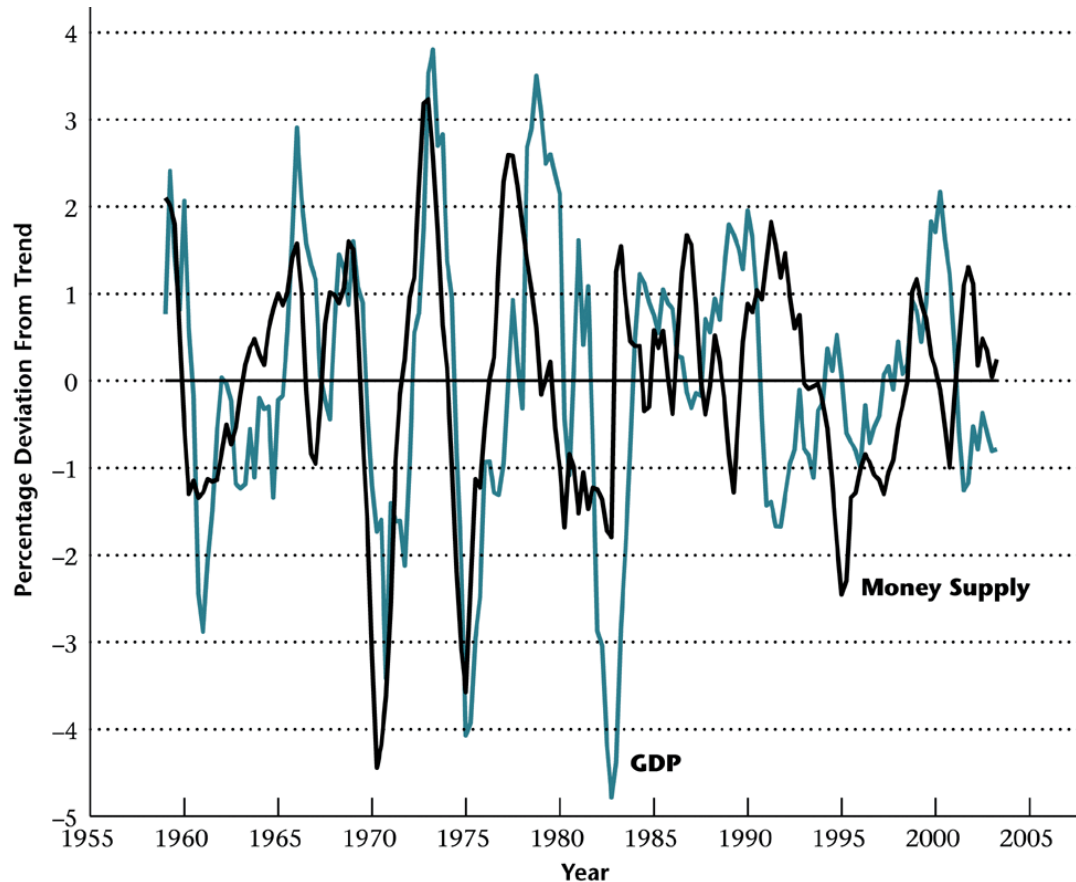


Figure 3.14 Percentage Deviations from Trend in Employment (black line) and Real GDP (colored line)

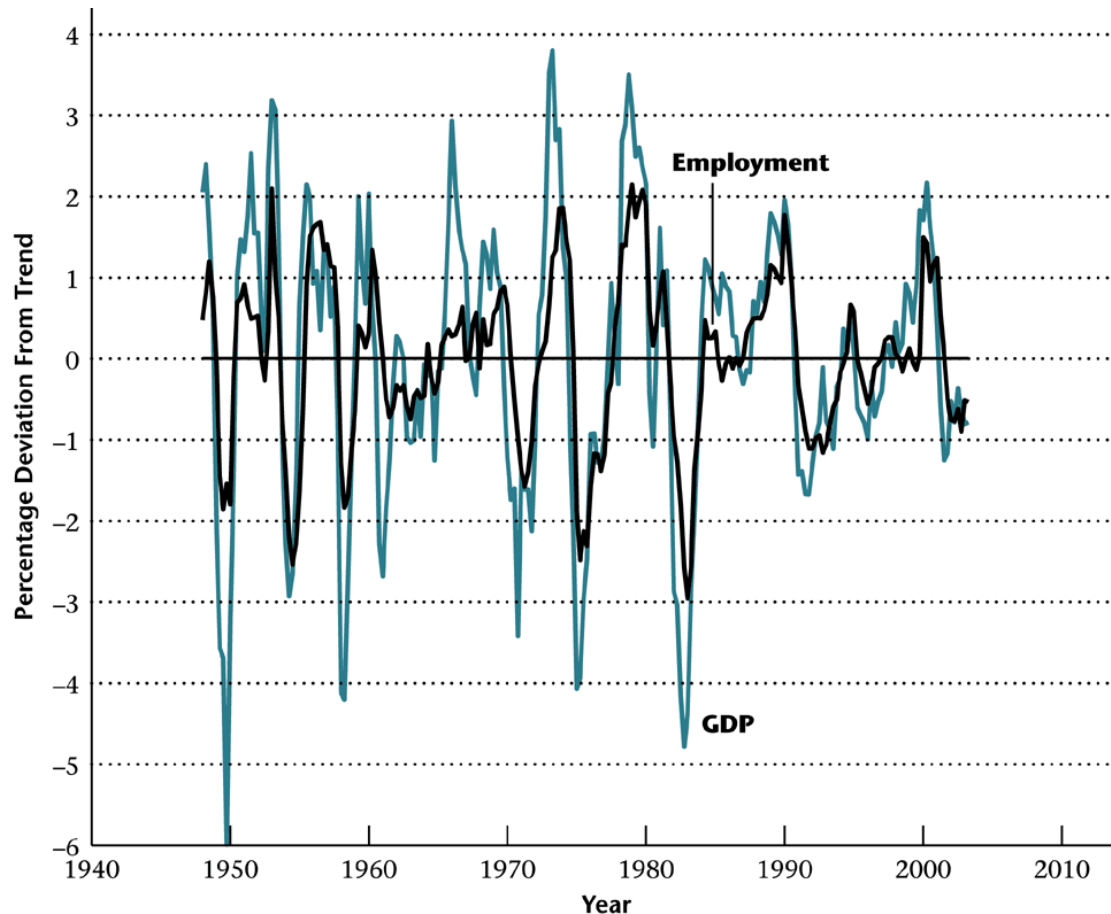


Figure 3.15 Percentage Deviations from Trend in Average Labor Productivity (black line) and Real GDP (colored line) for 1948–2003

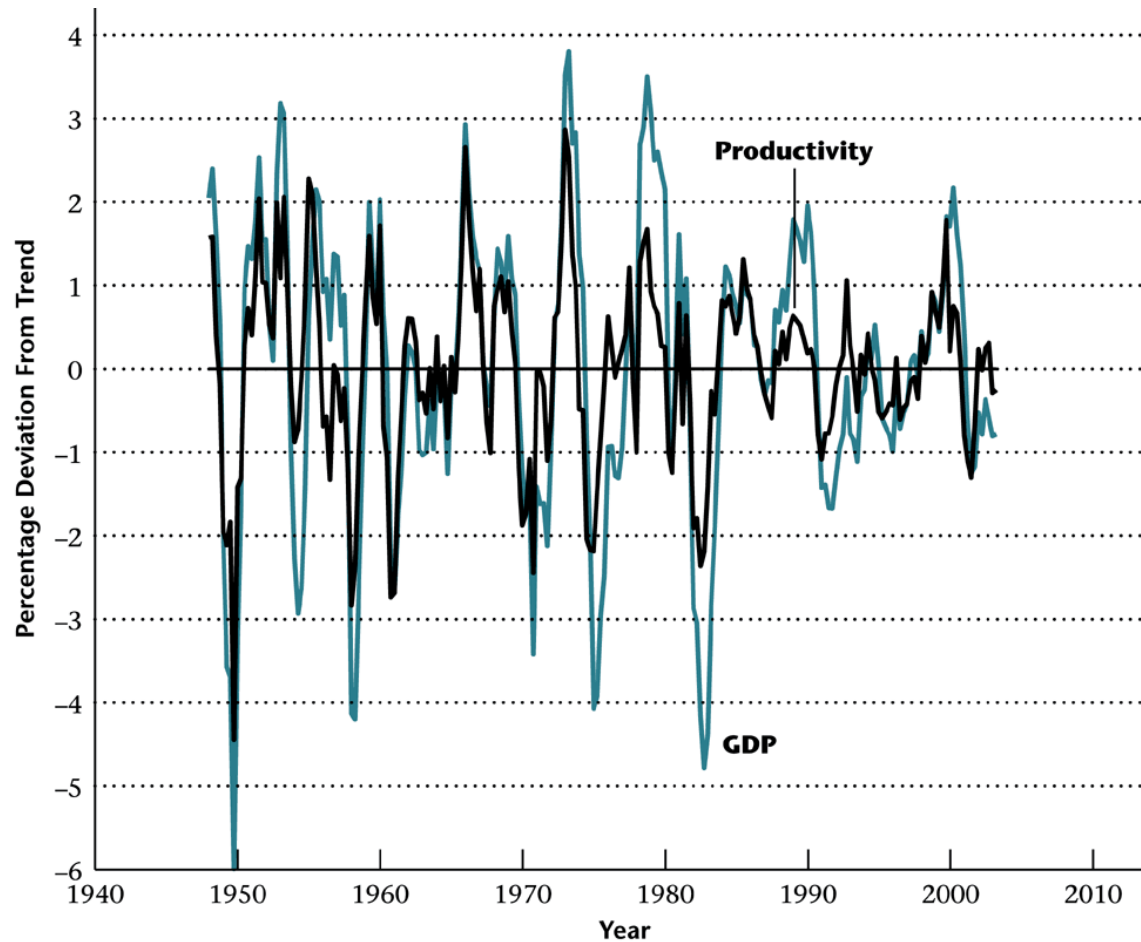


Table 3.1 Correlation Coefficients and Variability of Percentage Deviations from Trend

	<i>Correlation Coefficient</i>	<i>Standard Deviation (% of S.D. of GDP)</i>
Consumption	0.76	75.6%
Investment	0.83	469.2
Price Level	-0.26	57.6
Money Supply	0.38	77.9
Employment	0.81	59.3
Average Labor Productivity	0.83	62.8

Table 3.2 Summary of Business Cycle Facts

	<i>Cyclical</i>	<i>Lead/Lag</i>	<i>Variability Relative to GDP</i>
Consumption	Procyclical	Coincident	Smaller
Investment	Procyclical	Coincident	Larger
Price Level	Countercyclical	Coincident	Smaller
Money Supply	Procyclical	Leading	Smaller
Employment	Procyclical	Lagging	Smaller
Real Wage	Procyclical	?	?
Average Labor Productivity	Procyclical	Coincident	Smaller