

Economic Growth and Fluctuations

Macroeconomics tries to explain how and why the economy grows and fluctuates over time.

Uses of Macroeconomics

- A. Helps policymakers avert or minimize the impact of recessions.
- B. Helps policymakers assess various government spending and tax proposals to increase long-term economic growth.
- C. Helps policymakers keep inflation low and stable without causing unnecessary economic fluctuations.
- D. Tells us how broad policy changes affect the types of goods produced.

Recent Macroeconomic Performance

A. Measures of output in the economy

1. Real Gross Domestic Product (real GDP) measures the actual production of all goods and services in the economy (output).
2. Potential real GDP is the level of output the economy produces at the natural rate of unemployment. (This is the level of output produced according to the growth model.)

B. Macroeconomic theories are divided into two main topics

1. Economic growth analysis studies the causes of long-run sustained growth in real GDP.
2. Business cycle analysis studies the short-run expansions and contractions in real GDP.

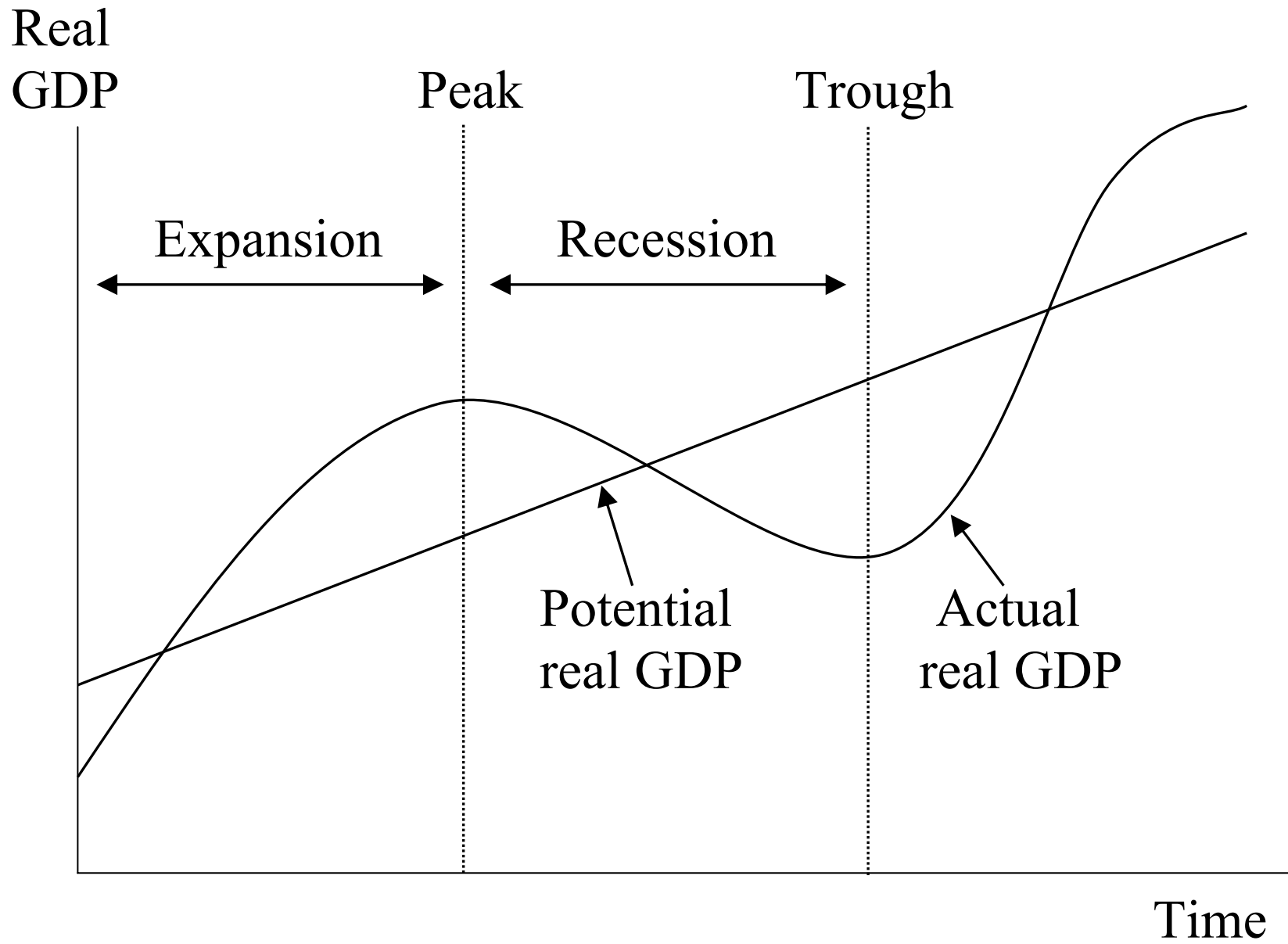
C. Factors that contribute to long-run economic growth

1. Technological progress (productivity)
2. Population growth
3. Capital accumulation

D. Phases of the business cycle (see graph of phases on next slide; see Figure 1.1 for historical overview)

1. A recession is a period where real GDP falls.
2. The trough is when real GDP stops declining.
3. An expansion is a period where real GDP rises.
4. The peak is when real GDP stops increasing.

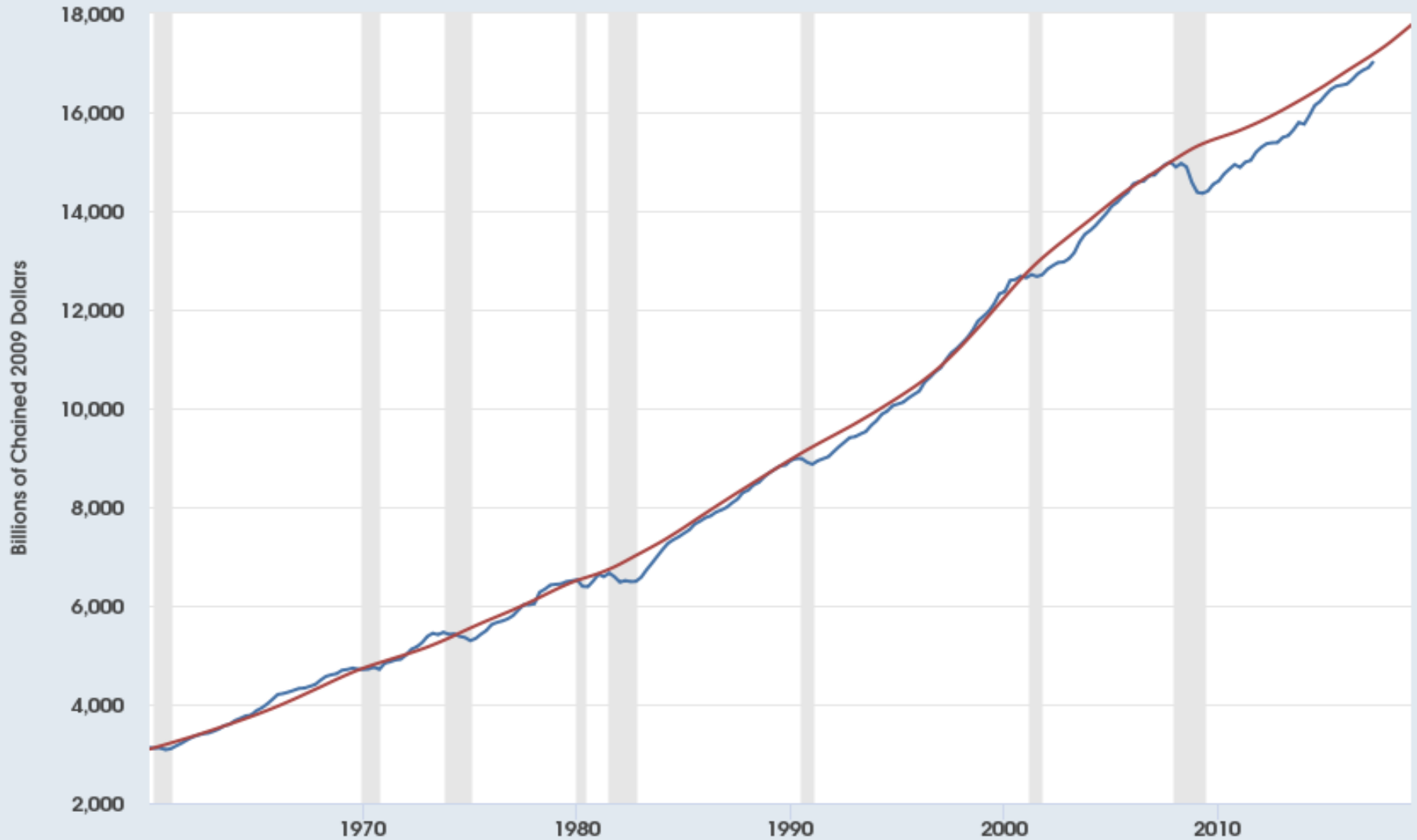
Graph: Business Cycle Phases



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— Real Gross Domestic Product (DISCONTINUED)
— Real Potential Gross Domestic Product

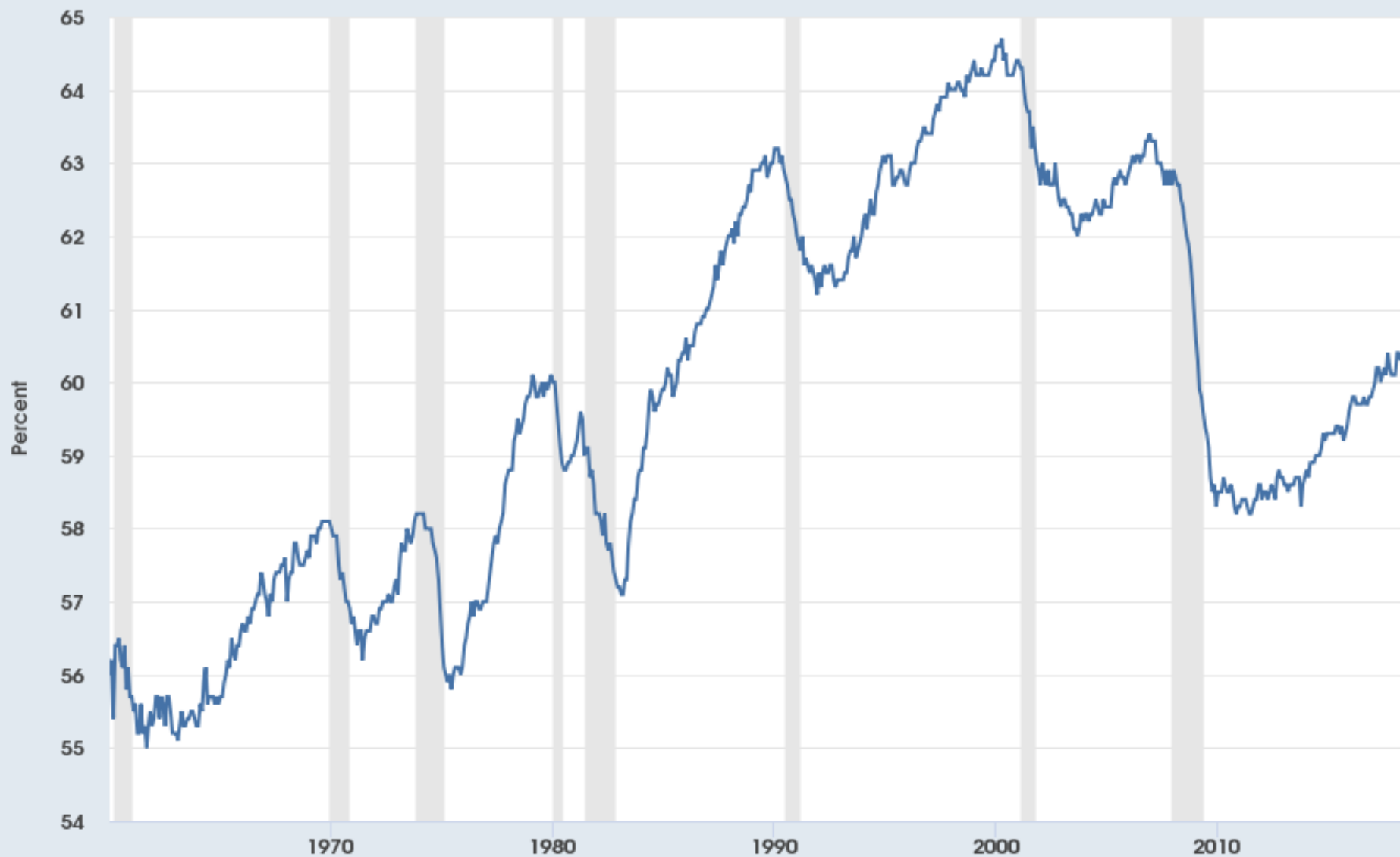


Shaded areas indicate U.S. recessions

Sources: BEA, CBO

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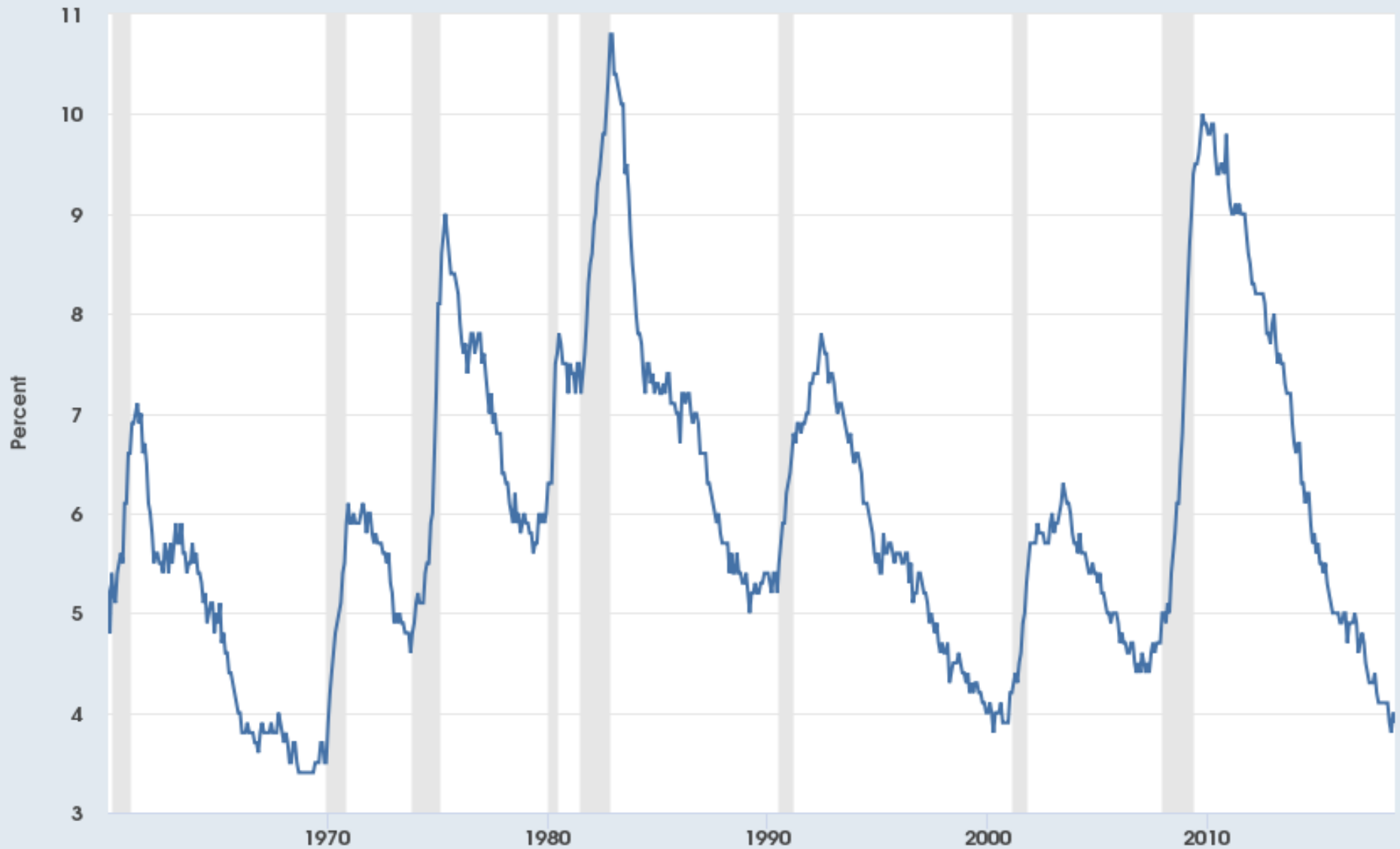
- E. The performance of key economic variables over the business cycle
1. Employment is procyclical. (It moves in the same direction as real GDP.)
 2. Unemployment is countercyclical. (It moves in the opposite direction of output.)
 3. The inflation rate is modestly procyclical.
 4. The nominal interest rate is modestly procyclical.
 5. The real interest rate (nominal interest rate minus the expected inflation rate) is procyclical.
 6. The real money supply (the money supply divided by prices) is procyclical.
 7. The real wage rate (the wage rate divided by prices) is procyclical.



Shaded areas indicate U.S. recessions

Source: U.S. Bureau of Labor Statistics

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Shaded areas indicate U.S. recessions

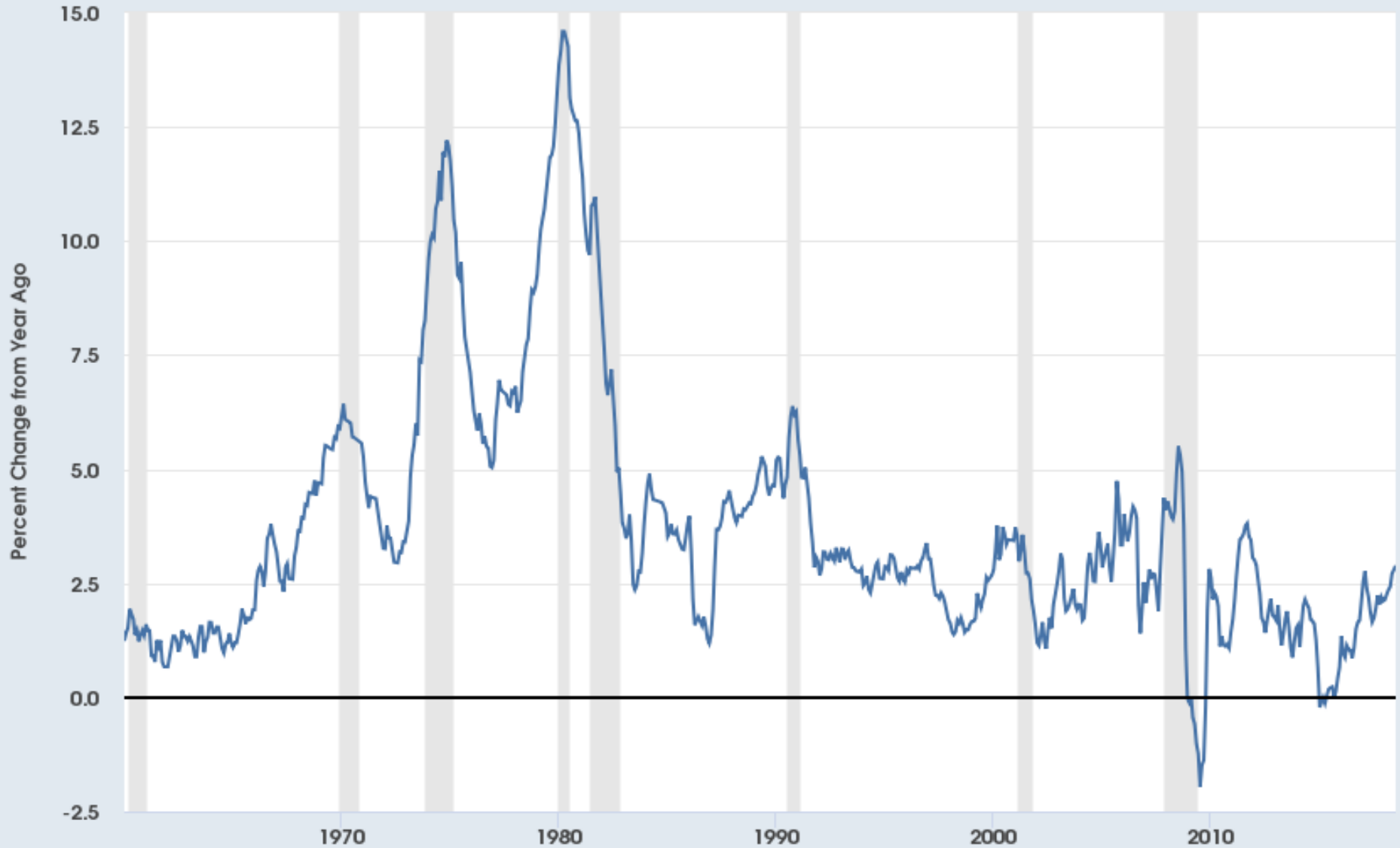
Source: U.S. Bureau of Labor Statistics

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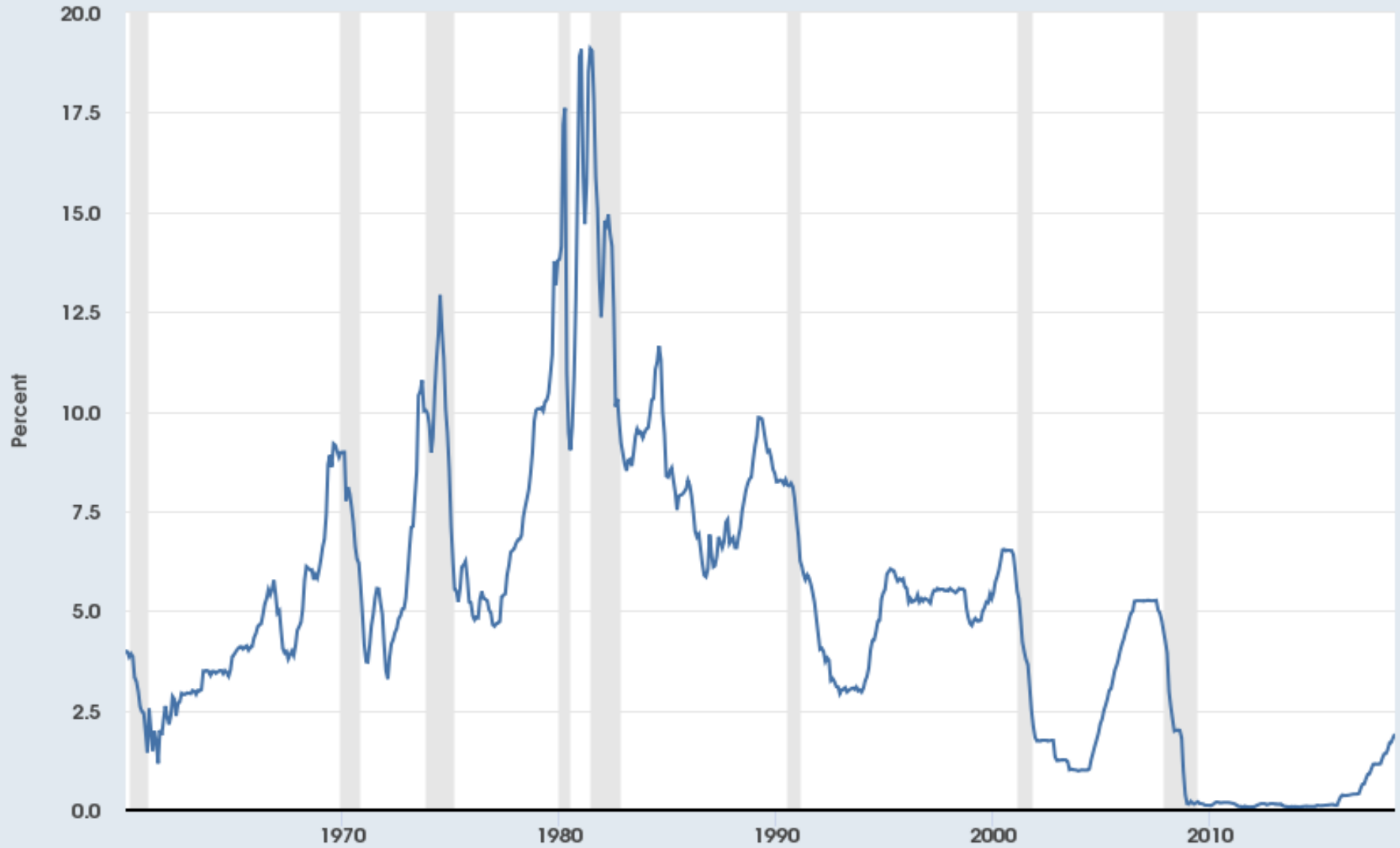
— Consumer Price Index for All Urban Consumers: All Items



Shaded areas indicate U.S. recessions

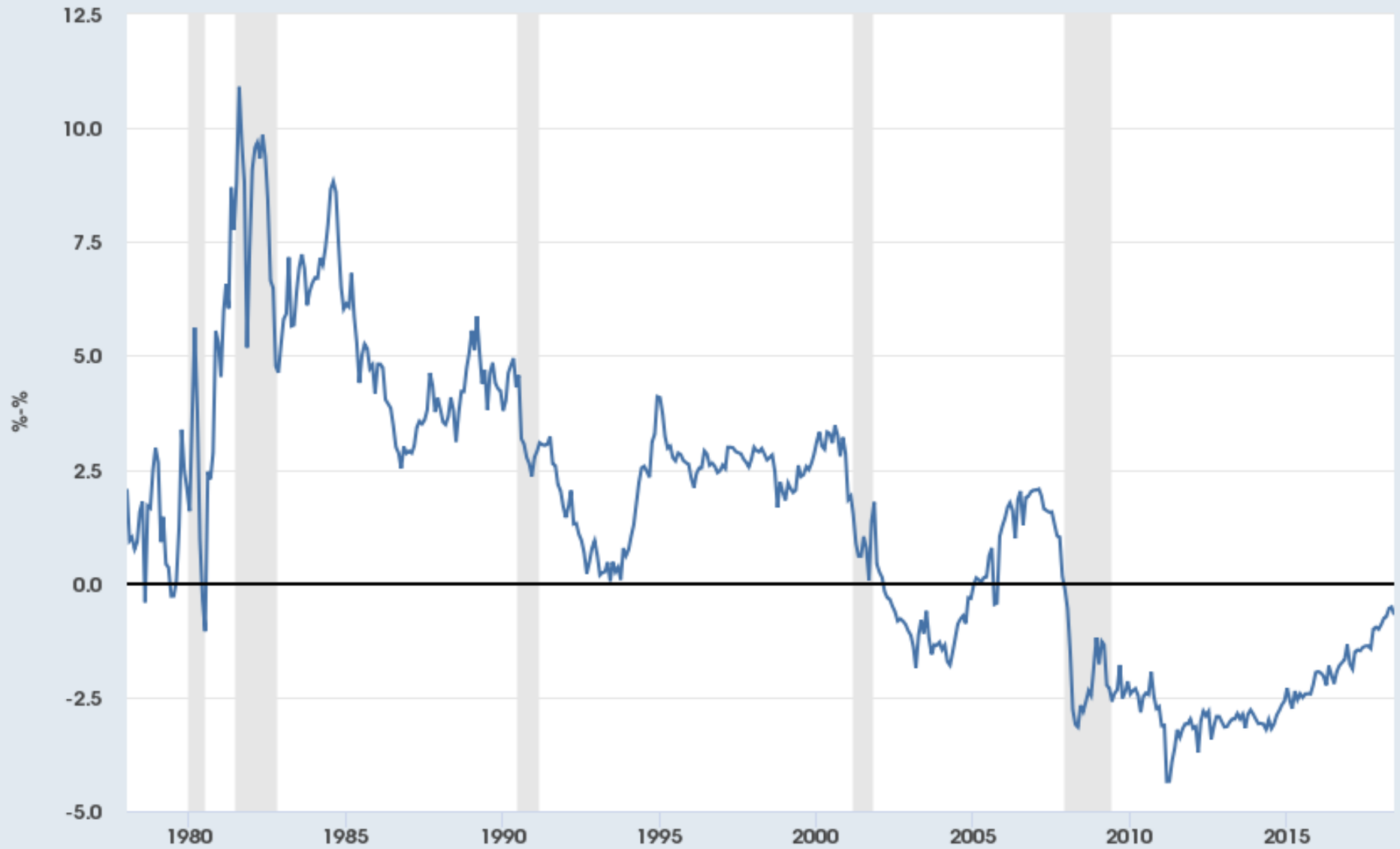
Source: U.S. Bureau of Labor Statistics

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Shaded areas indicate U.S. recessions Source: Board of Governors of the Federal Reserve System (US)

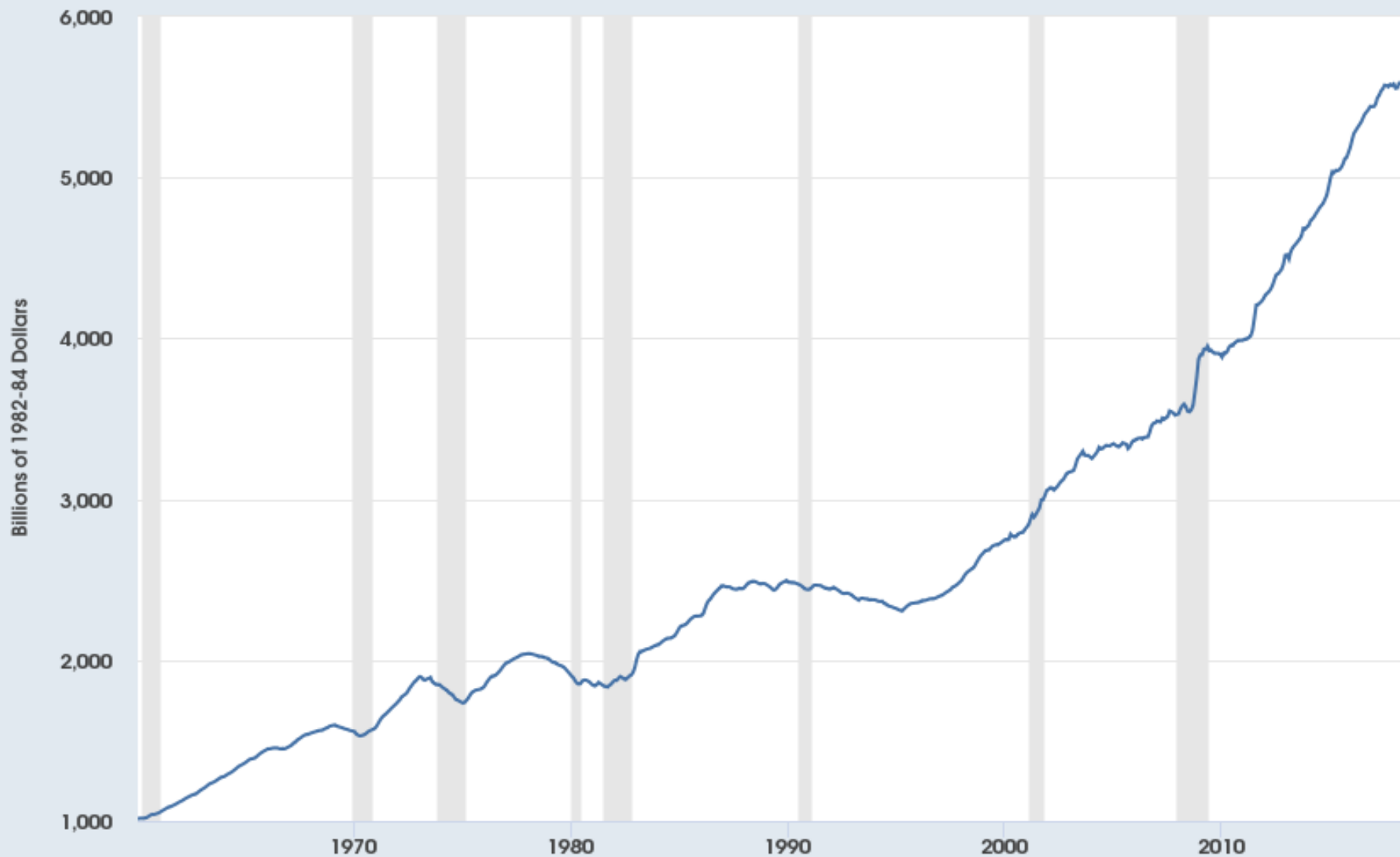
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Shaded areas indicate U.S. recessions

Sources: Board of Governors, Univ of Michigan

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Shaded areas indicate U.S. recessions

Source: Federal Reserve Bank of St. Louis

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F. Five core macroeconomic principles

1. The long-run growth rate of output depends on the growth rates of labor, capital, and technology.
2. In the long run, there is no tradeoff between output and inflation.
3. In the short run, there exists a tradeoff between output and inflation.
4. People's expectations of the future are formed rationally. (rational expectations)
5. Monetary policymakers should follow clear procedures and not administer onetime shocks to the economy.