# Economics 302 (Sec. 001) Intermediate Macroeconomic Theory and Policy (Spring 2012)

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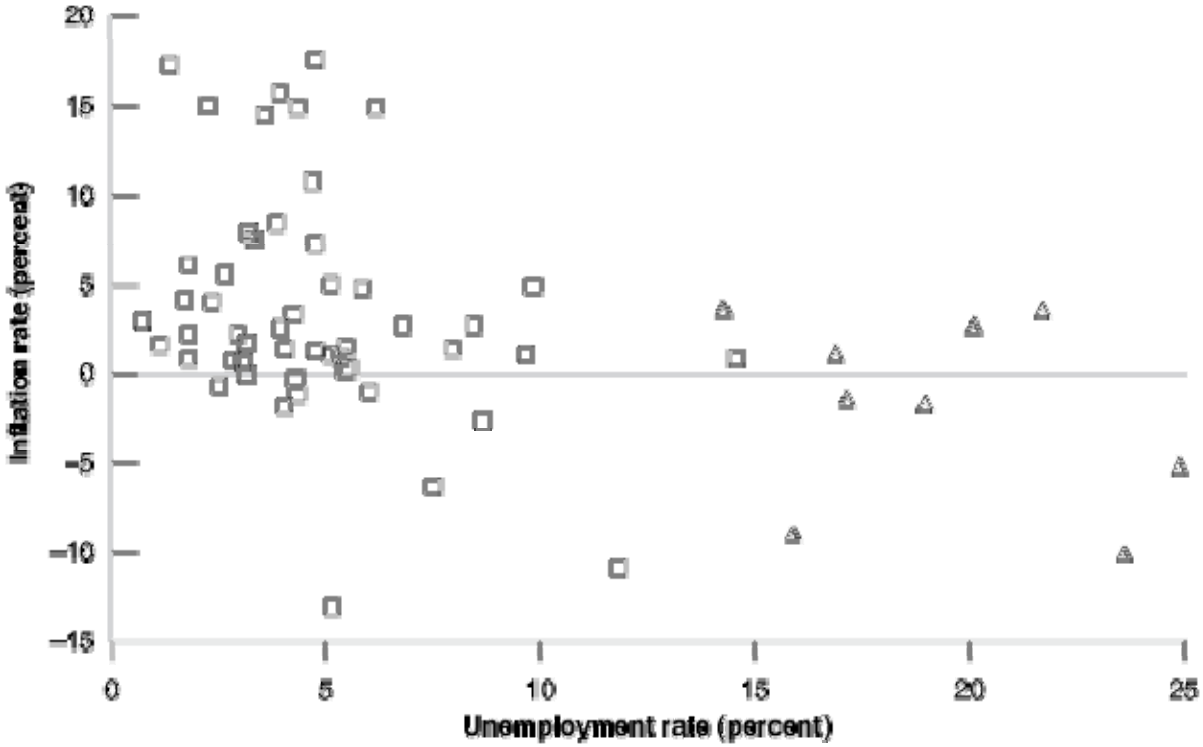
UW Madison

# The Natural Rate of Unemployment and the Phillips Curve

**Figure 8 - 1**

***Inflation versus Unemployment in the United States, 1900 to 1960***

During the period 1900 to 1960 in the United States, a low unemployment rate was typically associated with a high inflation rate, and a high unemployment rate was typically associated with a low or negative inflation rate.




•The Phillips curve, based on the data above, shows a negative relation between inflation and unemployment.

# 8-2 The Phillips Curve

## Mutations

**Figure 8 - 2**

***Inflation versus Unemployment in the United States, 1948 to 1969***

The steady decline in the U.S. unemployment rate throughout the 1960s was associated with a steady increase in the inflation rate.

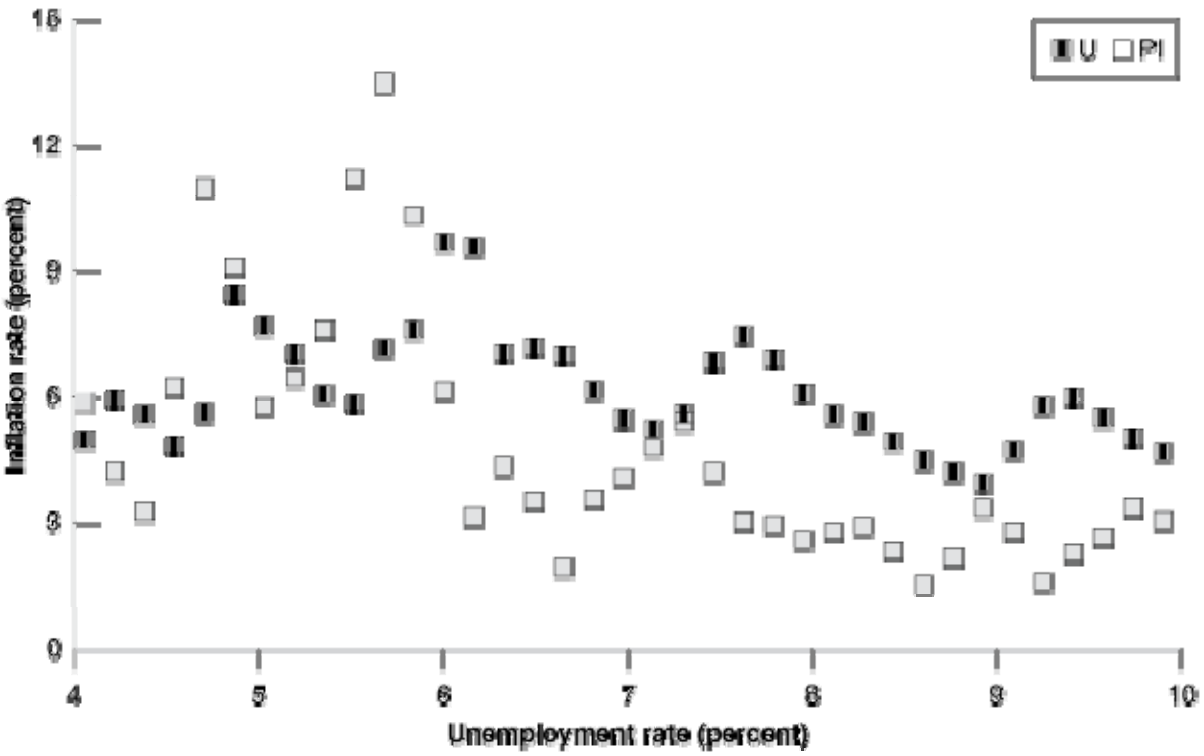
# 8-2 The Phillips Curve

## Mutations

**Figure 8 - 3**

***Inflation versus Unemployment in the United States Since 1970***

Beginning in 1970, the relation between the unemployment rate and the inflation rate disappeared in the United States.



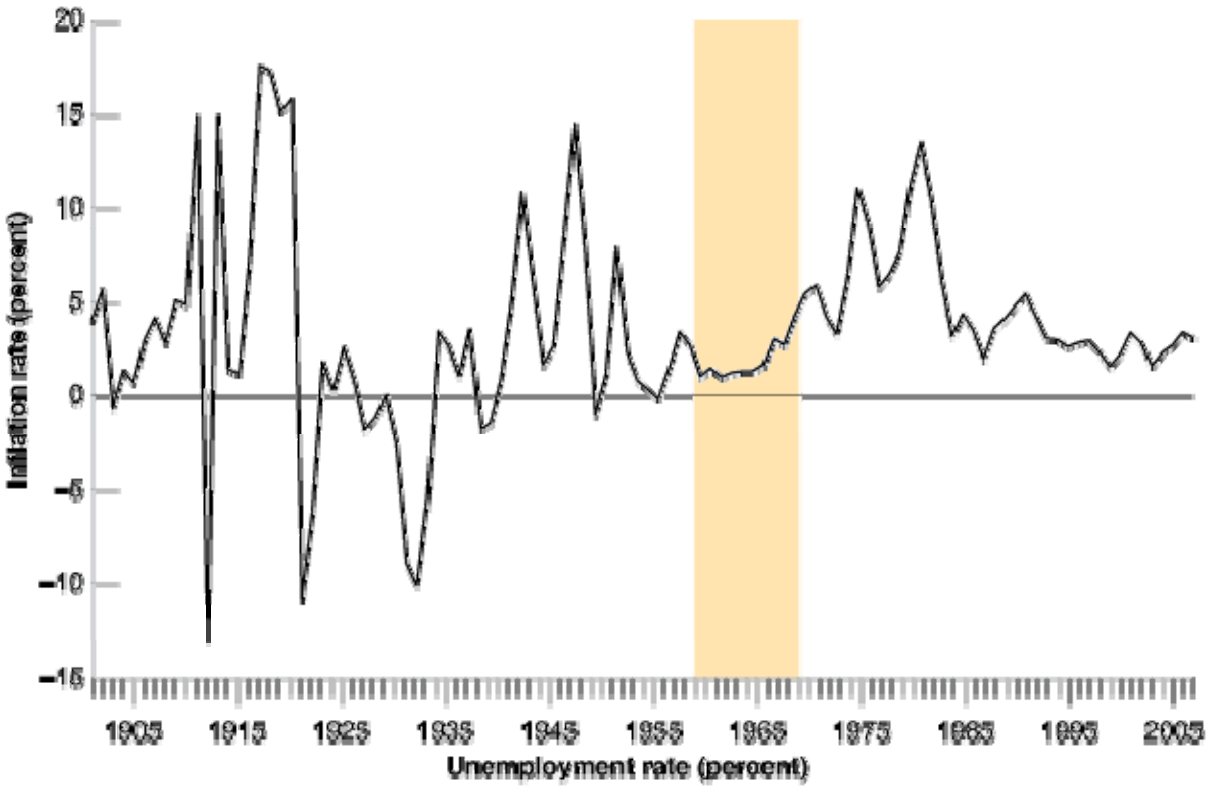
# 8-2 The Phillips Curve

## Mutations

**Figure 8 - 4**

***U.S. Inflation since 1900***

Since the 1960s, the U.S. inflation rate has been consistently positive. Inflation has also become more persistent: A high inflation rate this year is more likely to be followed by a high inflation rate next year.



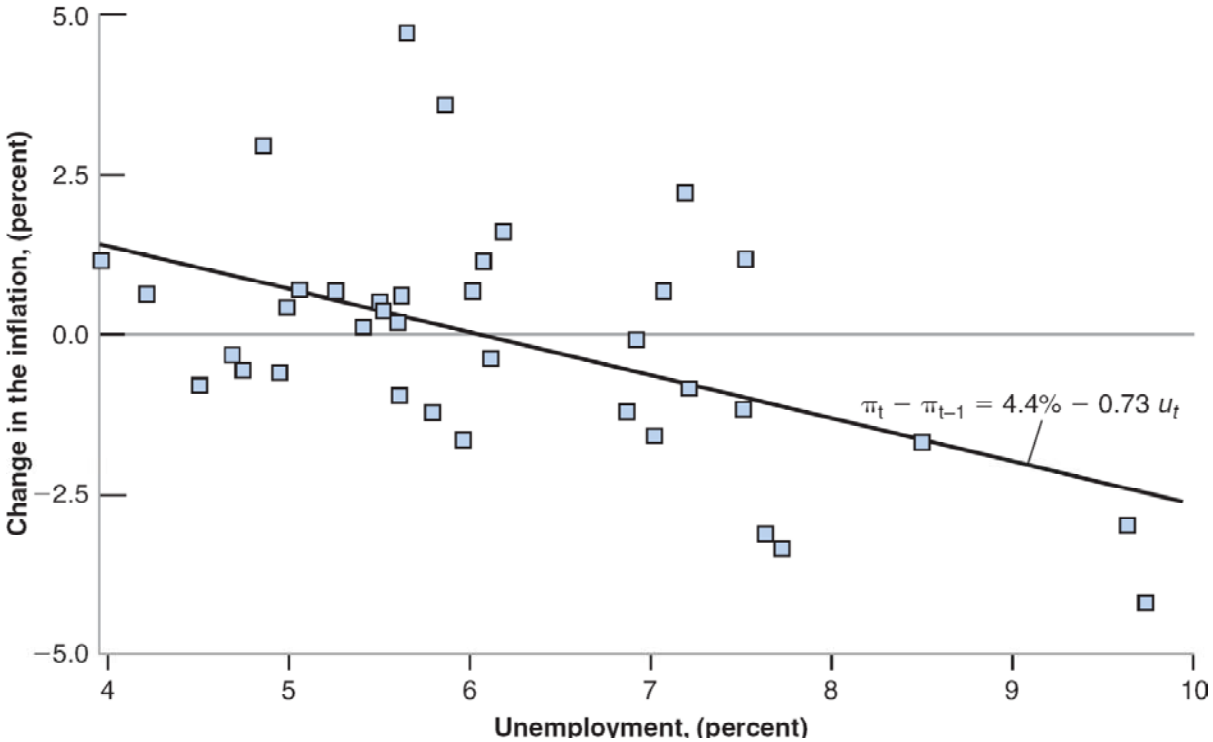
# 8-2 The Phillips Curve

## Mutations

**Figure 8 - 5**

***Change in Inflation Versus Unemployment in the United States Since 1970***

Since 1970, there has been a negative relation between the unemployment rate and the change in the inflation rate in the United States.




•The line that best fits the scatter of points for the period 1970-2006 is:

$$\pi_t - \pi_{t-1} = 4.4\% - 0.73u_t$$

## Has the U.S. Natural Rate of Unemployment Fallen since the Early 1990s and, If So, Why?

FOCUS

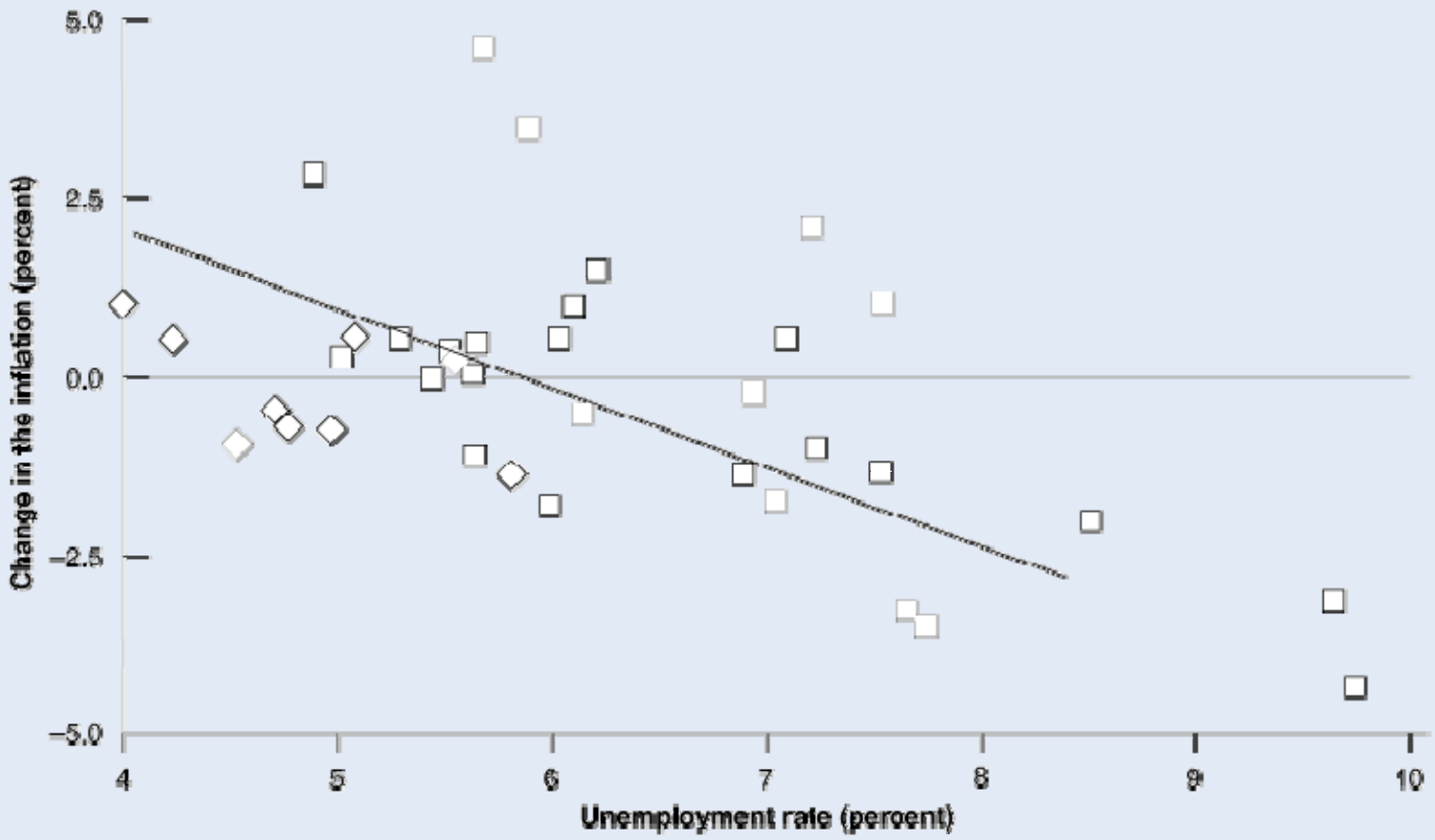



Figure 1 ***Change in Inflation versus Unemployment in the United States since 1997***