

## LECTURE FIVE - PART THREE

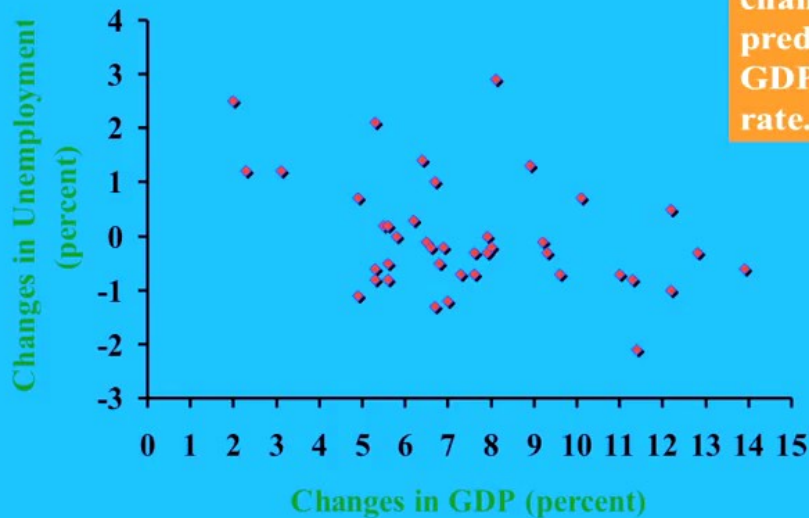
Lost Output			
	Average Unemployment Rate (%)	GDP loss (\$, billion, real)	As percent of GDP during the period
<b>Great Depression</b> (1930-1939)	18.2	4,400	38.5
<b>Sluggish fifties</b> (1954-1960)	5.2	70	0.3
<b><u>Oil and inflation crises</u></b> (1975-1984)	7.7	2,100	3.6

## Okun's Law

- The previous table uses *Okun's Law*.
- Through data analysis, Okun found an important “co-movement” between output and unemployment.

When GDP falls, unemployment rises!

## Okun's Law



Okun's Law: For every 2% GDP falls, unemployment rises by 1%.

## Question

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- Assume GDP begins at 100% of its potential and falls to 98%.
- Further assume unemployment rate is 6%.

**QUESTION**  
How will that rate change?

## Answer

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- According to Okun's Law, the unemployment rate will rise from 6% to 7%.

**REMEMBER OKUN'S LAW**  
For every 2% actual GDP falls relative to potential GDP, the unemployment rate rises by 1 percentage point.



## An Historical Example of Okun's Law

- 1979: Unemployment rate = 5.8%.
- Over next three years, actual real GDP doesn't grow.
- BUT Potential GDP increases 9% percent.

### EXERCISE

Use Okun's Law to predict the unemployment rate in 1982.

## Figuring Out the Answer

- Okun's Law says a 2% fall in GDP should result in a 1% rise in unemployment
- So a 9% GDP shortfall should increase unemployment rate by 4.5%.
- With unemployment rate at 5.8% in 1979, Okun's Law predicts a 10.3% unemployment rate by 1982.
- Actual rate was very close – 9.7%.

## Okun's Law and Potential GDP

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- Okun's Law implies actual GDP must grow as rapidly as potential GDP just to keep the unemployment rate from rising.
- GDP has to keep growing just to keep unemployment in the same place.
- If you want to bring the unemployment rate down, actual GDP must be growing faster than potential GDP.