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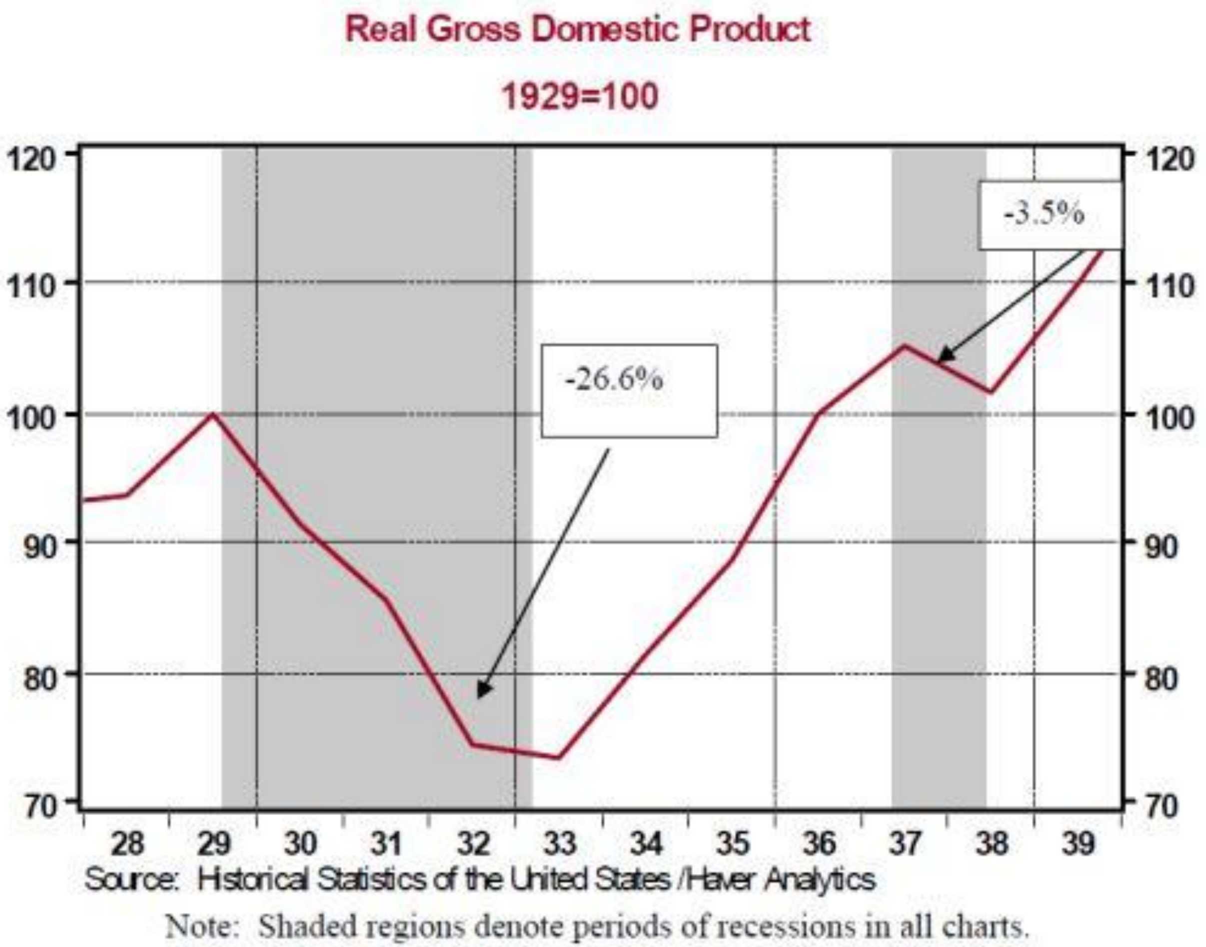
Macroeconomics: overview

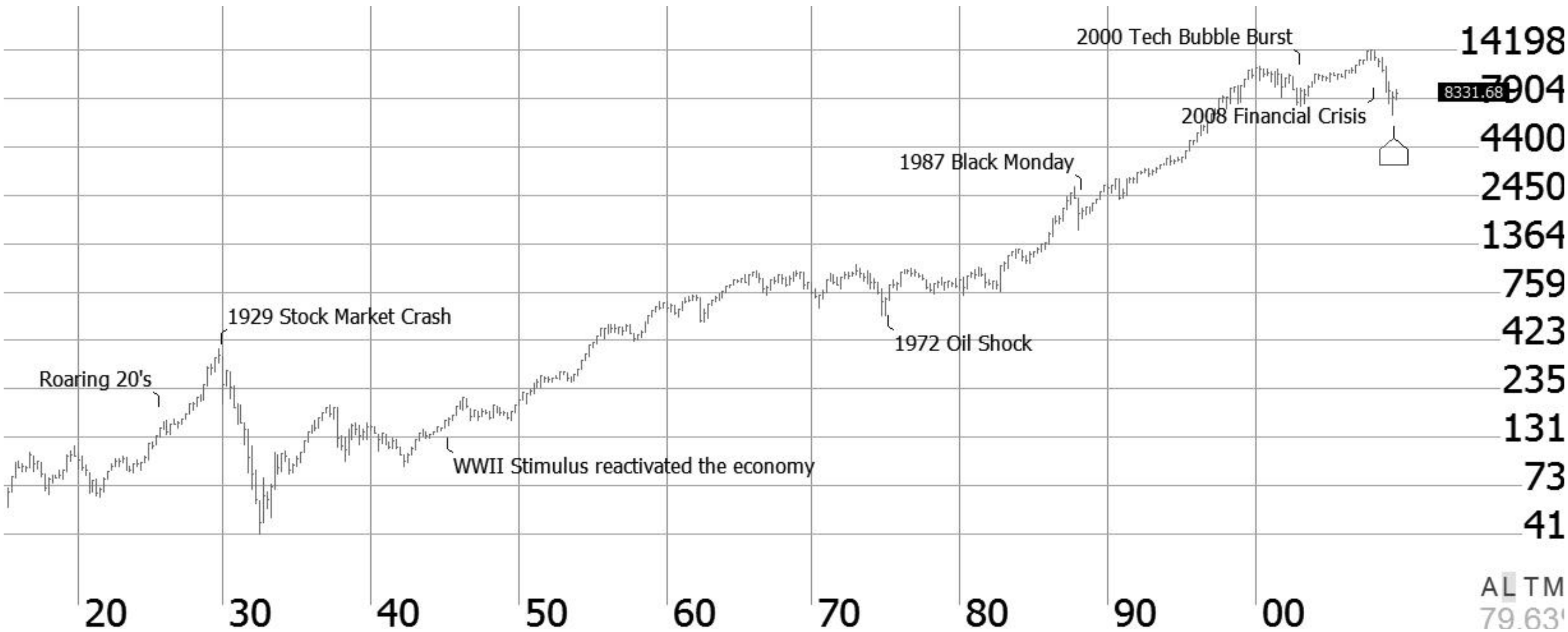
Lecture objectives

- How does the economy operate in short-run and in long-run?
- What are the main indicators of economic condition?
- What is the centerpiece of macroeconomics?

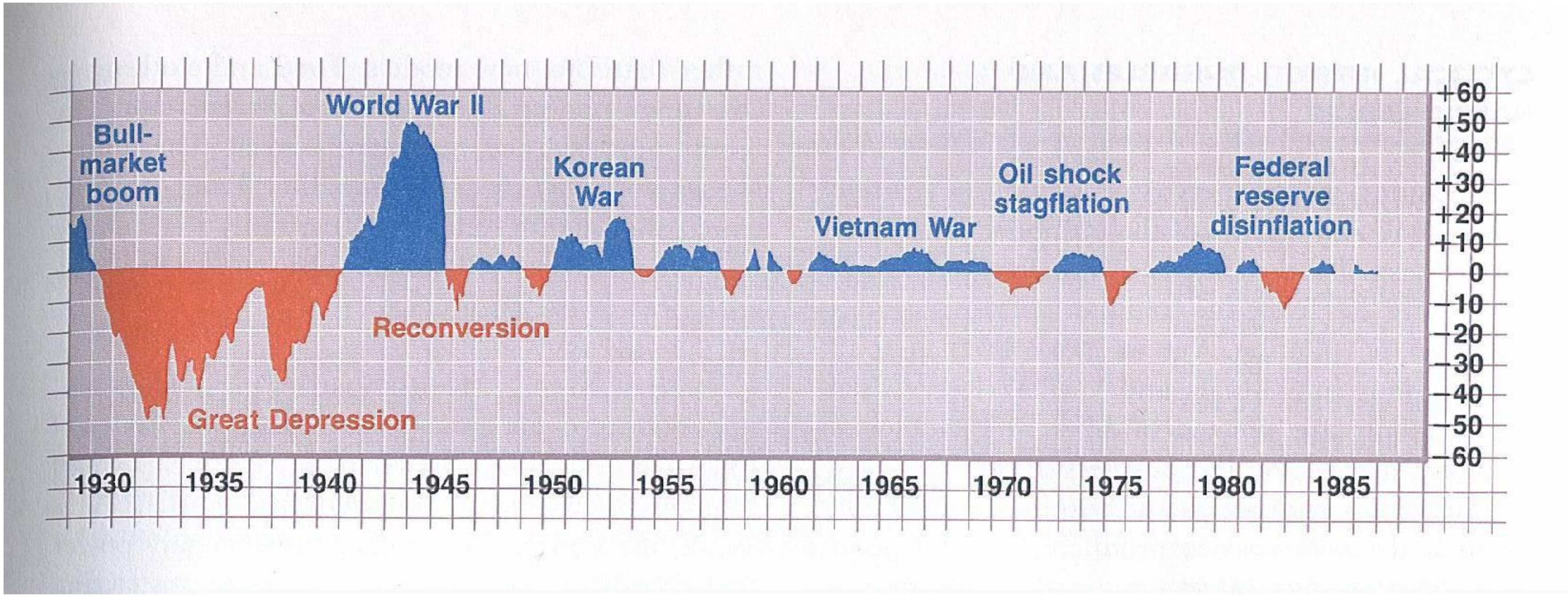
Great Depression (1929-1933)



US real GDP in perspective



GDP fluctuations: US, XXth cent.



McConnell & Brue

Business (economic) cycle

- **Business cycle** refers to the expansions and contractions in the economic activity (basically – GDP) that take place over time. In other words it reflects changes in the actual production around the long-run trend.

US real GDP: key findings

- GDP ups and downs repeat in a cyclical way
- Yet, GDP permanently increases
- TWO PERSPECTIVES:
  - short-run: temporary GDP fluctuations
  - long-run: sustainable GDP increase

The essence of macroeconomics

- GDP behavior (both short-run and long-run) is at the heart of macroeconomic analyses.

- The issue is of special importance because of its influence on the standard of living and negative results of its decline.

Causes of economic cycles

- Spontaneous shifts in private spending
- Economic policy of government
- External shocks
- Disasters of any kind

Causes of long-run GDP increase

- Growing substance of production factors:
  - labour,
  - capital,
  - technology.

Basic macroeconomic indicators

- GDP change (economic growth)
- Unemployment
- Inflation

Gross domestic product (GDP)

- **GDP** is the market value of the final goods and services produced within a country in a given time period (typically one year).

Economic growth rate

- **Economic growth rate** is the annual percentage change of real GDP.

$$EGR = \frac{realGDP_t - realGDP_{t-1}}{realGDP_{t-1}} \times 100\%$$

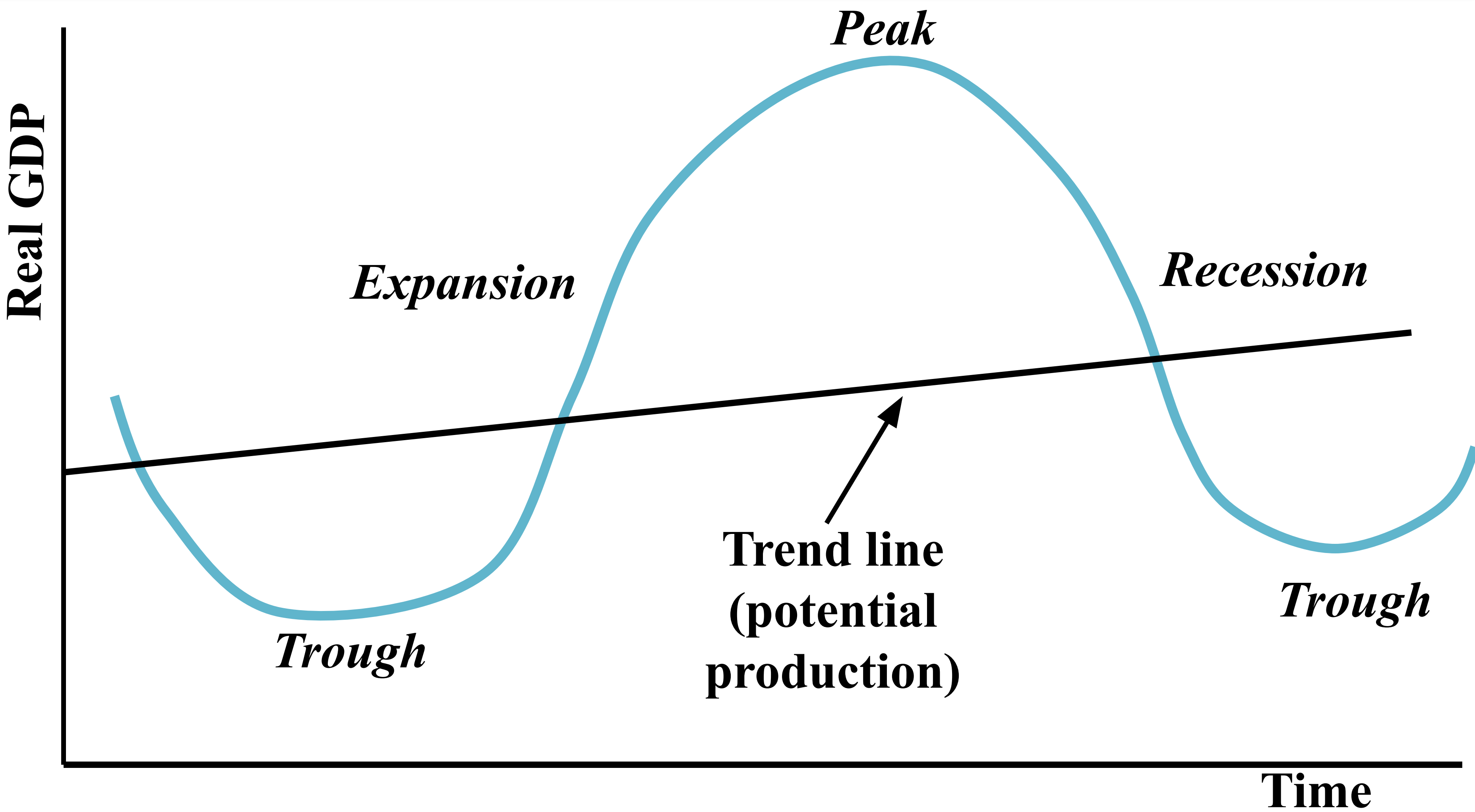
Expanssion and recession

- Periods of positive real GDP growth are called **expansions**.
- Periods of negative real GDP growth are called **recessions** (more precisely – recession means that real GDP falls for at least two succesive quarters).

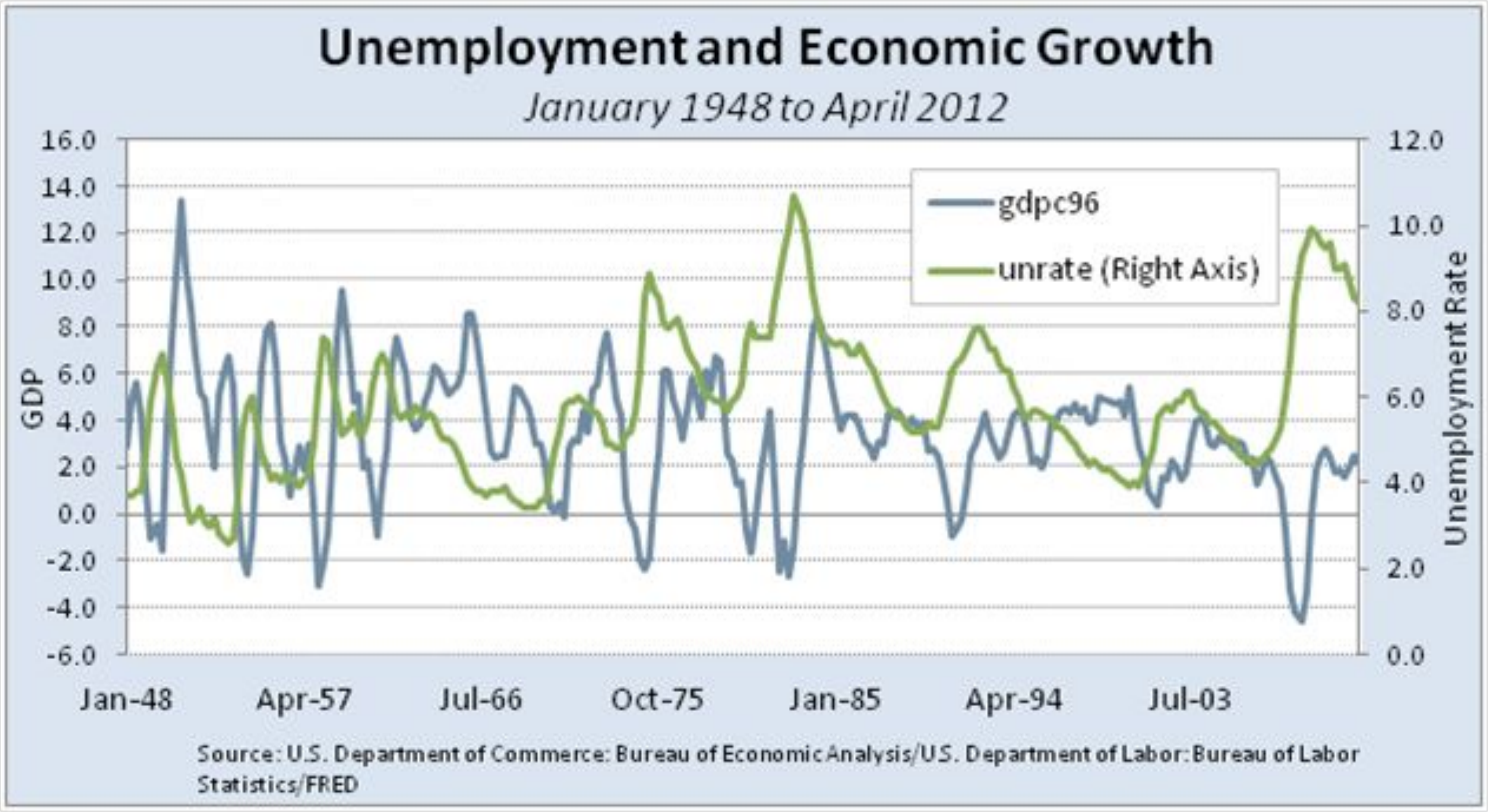
Peak and through

- Periodic maximum of real GDP is called **peak**.
- Periodic minimum of real GDP is called **through**.

Business cycle model

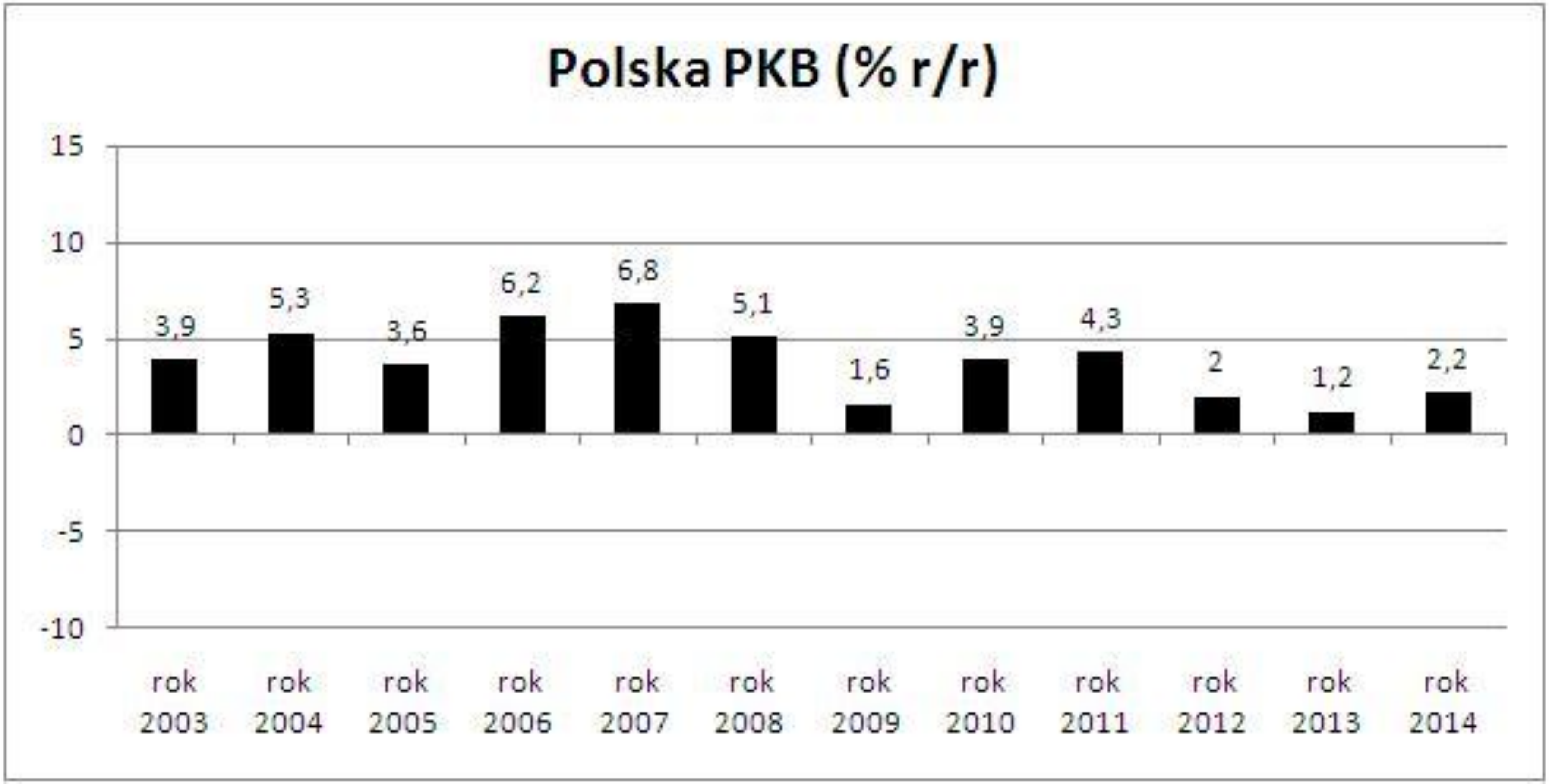


GDP fluctuations and unemployment



forbes.com

Poland: GDP growth (year on year)



Poland: unemployment rate

euro-dane.com.pl

GDP fluctuations and unemployment (short-run model)

- GDP change and unemployment are inversely related: as GDP increases, unemployment drops (and vice versa).
- This type of unemployment is known as **cyclical**.

GDP fluctuations and inflation (short-run model)

- Decrease in GDP usually leads to lower inflation (long-lasting GDP downturn implies deflation).

- Increase in GDP usually leads to higher inflation.

Economic growth and inflation: the case of Latvia 2005 and Japan 2001

- LATVIA:
  - Real GDP growth rate: ≈ 9% (EU record)
  - inflation rate: ≈ 7% (EU record)
- JAPAN:
  - Real GDP growth rate: -0,7%
  - inflation rate: -1,6%

Unemployment-inflation trade-off in short-run

- Recession is normally accompanied by rising unemployment, yet inflation decelerates.
- Expanssion is normally accompanied by declining uneployment, yet inflation accelerates.

Potential production vs. actual production: additional perspective

- **Potential GDP** is the value of real GDP that *would exist* if all resources in the economy were fully and efficiently employed.

- Production at potential output level means that the economy achieves **full employment**.

„Economic overheating": US economy during Vietnam War

- In the mid-1960s US economy was at full employment.
- Johnsons administration accelerated military spending for Vietnam while simultaneously increasing expenditures on domestic „war on poverty" programs.
- The result was double-digit inflation of the 1970s.

Summary: macroeconomic goals

- GDP growth
- Full employment
- Stable prices

Check point: true / false test

- The period of time during which real GDP increases in named economic peak
- It is possible to produce more than potential output (actual production > potential production)
- In short-run inflation is independent of economic growth and unemployment
- Economic growth rate cannot be negative
- In business cycle each through is followed by economic downturn

Check point: interpretations

Observation	Interpretation
Economic growth rate of a country reached 8% last year	Quite impressive result, but it is always possible to grow faster and that would be more beneficial
Economy of a country operates below its potential output level	The economy is experiencing economic downturn or recession
GDP of a country reached $ 100 billion in 2014	The economy must be prospering – its output is really striking
Economy of a county reached full employment	The economy achieved the state at which it can't produce more
Real GDP of an economy remained flat last year in comparison with its level in the previous year	The economy experienced recession last year

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Textbooks

- O’Sullivan & Sheffrin: chapter 5, „Measuring a Nation’s Production and Income”
- Krugman & Wells: chapter 22, „Makroekonomia: ogólny zarys”