



# **MACROECONOMIC PROBLEMS**

**Lecture 5. Circular Flow and GDP**

**Foundations of Economics, WIUT 2021**

## LECTURE OUTLINE

- Introduction to macroeconomics
- Circular flow model
- GDP and business cycles



# DRAWING A LINE BETWEEN MACRO AND MICRO

- Microeconomics
  - How *individual* decision-making units behave
  
- Macroeconomics
  - Behavior of *entire* economies
  - Study economic aggregates such as price level, production, unemployment



# THREE MACROECONOMIC CONCERNS

- Economic growth
- Low Unemployment
- Low inflation

# GROSS DOMESTIC PRODUCT (GDP)

- ▣ *GDP* is the sum of the value of new, final goods produced within the domestic borders of an economy.
- ▣ *Final goods are goods sold to their end-users*



## GDP DOES NOT INCLUDE:

- Intermediate goods which are sold from one firm to another for immediate transformation into other goods.
- financial transactions like buying stocks.
- purchases of used goods which have been sold before.
- goods produced overseas by domestic firms.



# GROSS DOMESTIC PRODUCT

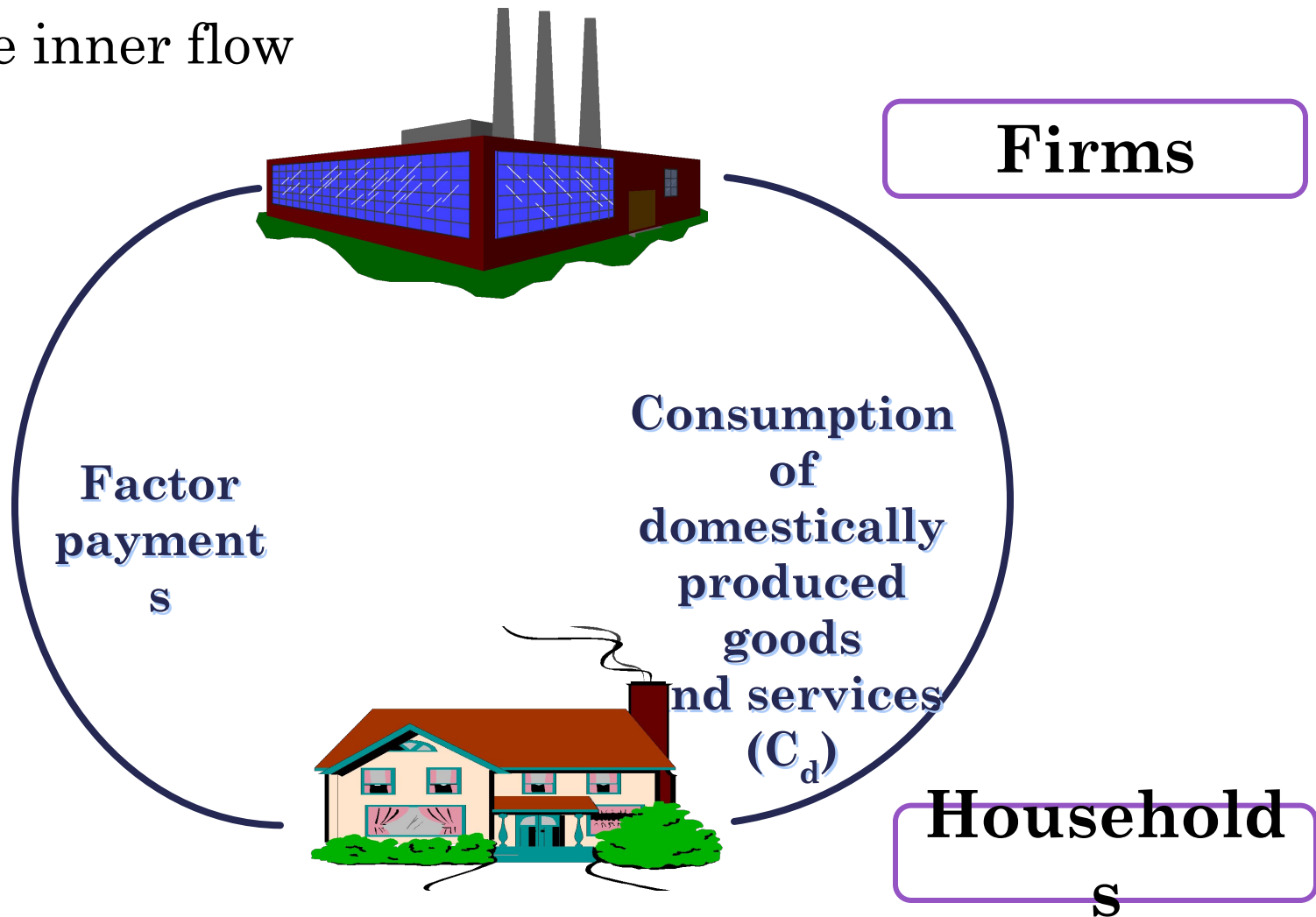
## □ Limitations of GDP

- Not a measure of the nation's economic well-being
- Includes only market activity
  - Creates a problem when making international comparisons
  - Ignores the underground economy
  - Do people in poor countries really live on \$5/week?
- Places no value on leisure



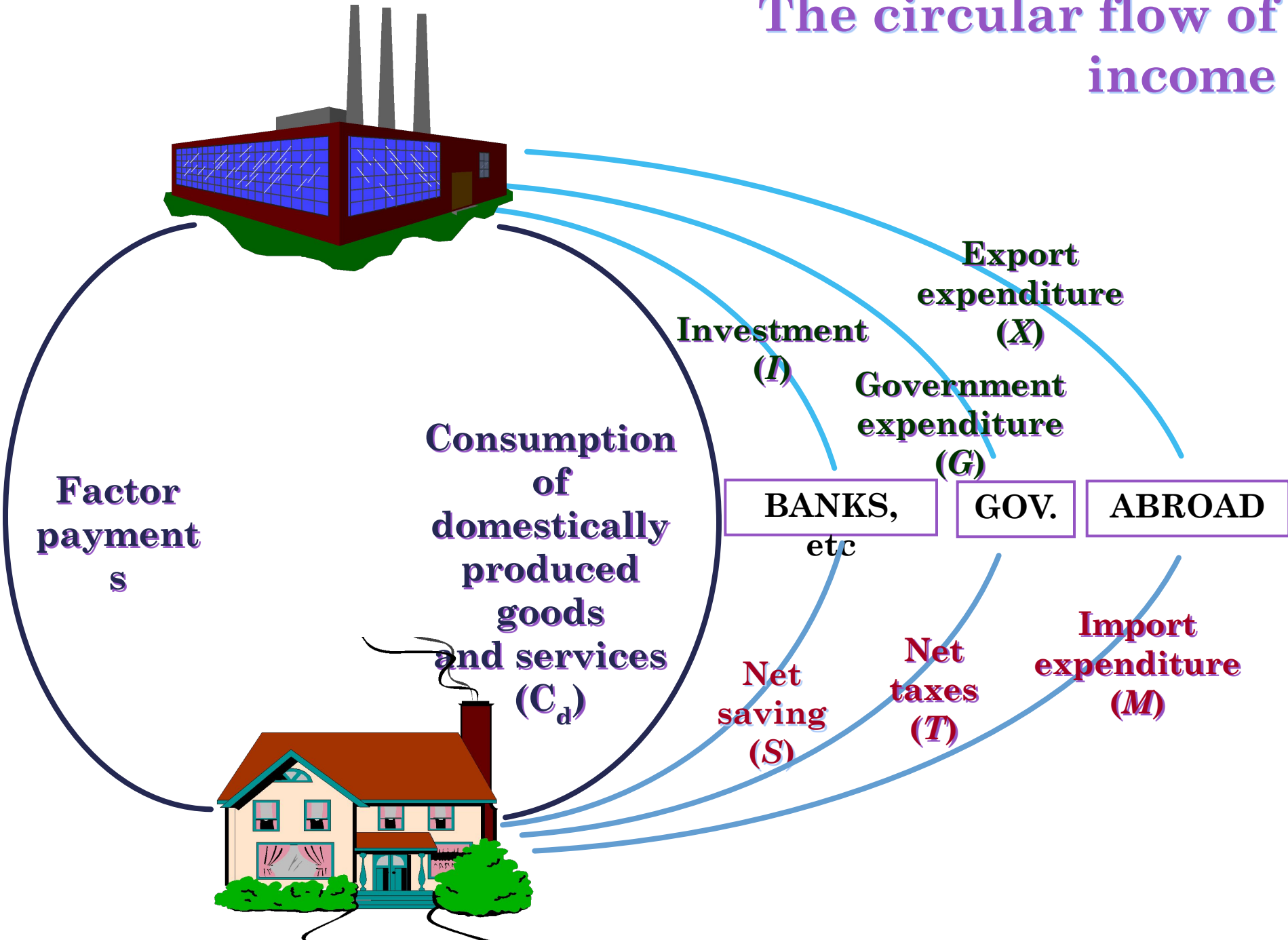
# THE CIRCULAR FLOW OF NATIONAL INCOME CLOSED ECONOMY WITH NO GOVERNMENT

## □ The inner flow

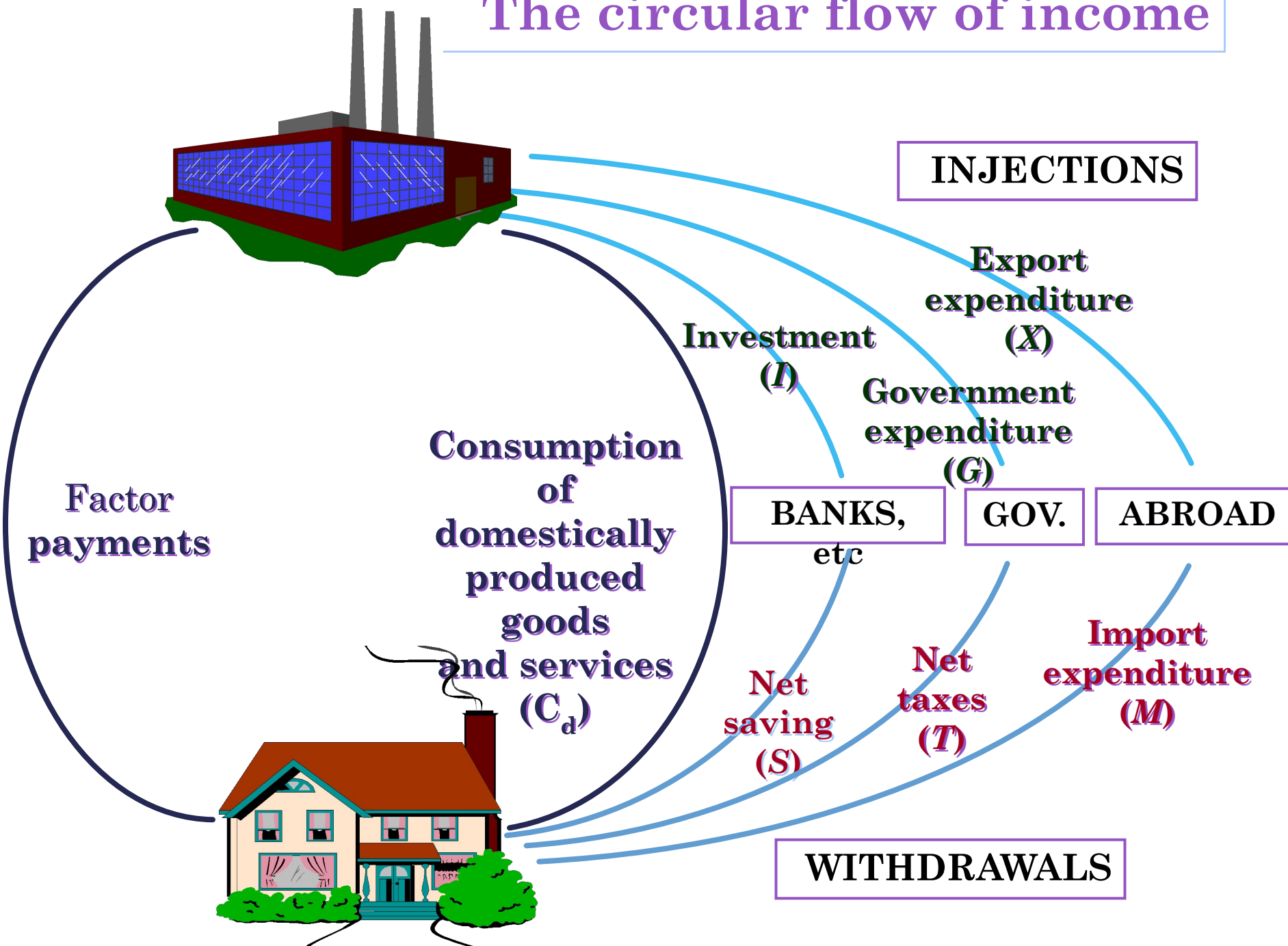




# The circular flow of income



# The circular flow of income



**INJECTIONS**

**Export expenditure ( $X$ )**

**Investment ( $I$ )**

**Government expenditure ( $G$ )**

**BANKS, etc**

**GOV.**

**ABROAD**

**Consumption of domestically produced goods and services ( $C_d$ )**

**Factor payments**

**Net saving ( $S$ )**

**Net taxes ( $T$ )**

**Import expenditure ( $M$ )**

**WITHDRAWALS**

# THE CIRCULAR FLOW OF INCOME

$$\square W = S + T + M$$

$$\square J = I + G + X$$

$$W = J$$
$$(S+T+M) = (I+G+X)$$

**But it does NOT guarantee that**

$$S = I$$
$$G = T$$
$$M = X$$



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# AGGREGATE DEMAND

Aggregate demand – **total spending on the goods and services made within the country**

$$AD = C + I + G + X - M$$

**or**

$$AD = C_d + I + G + X$$



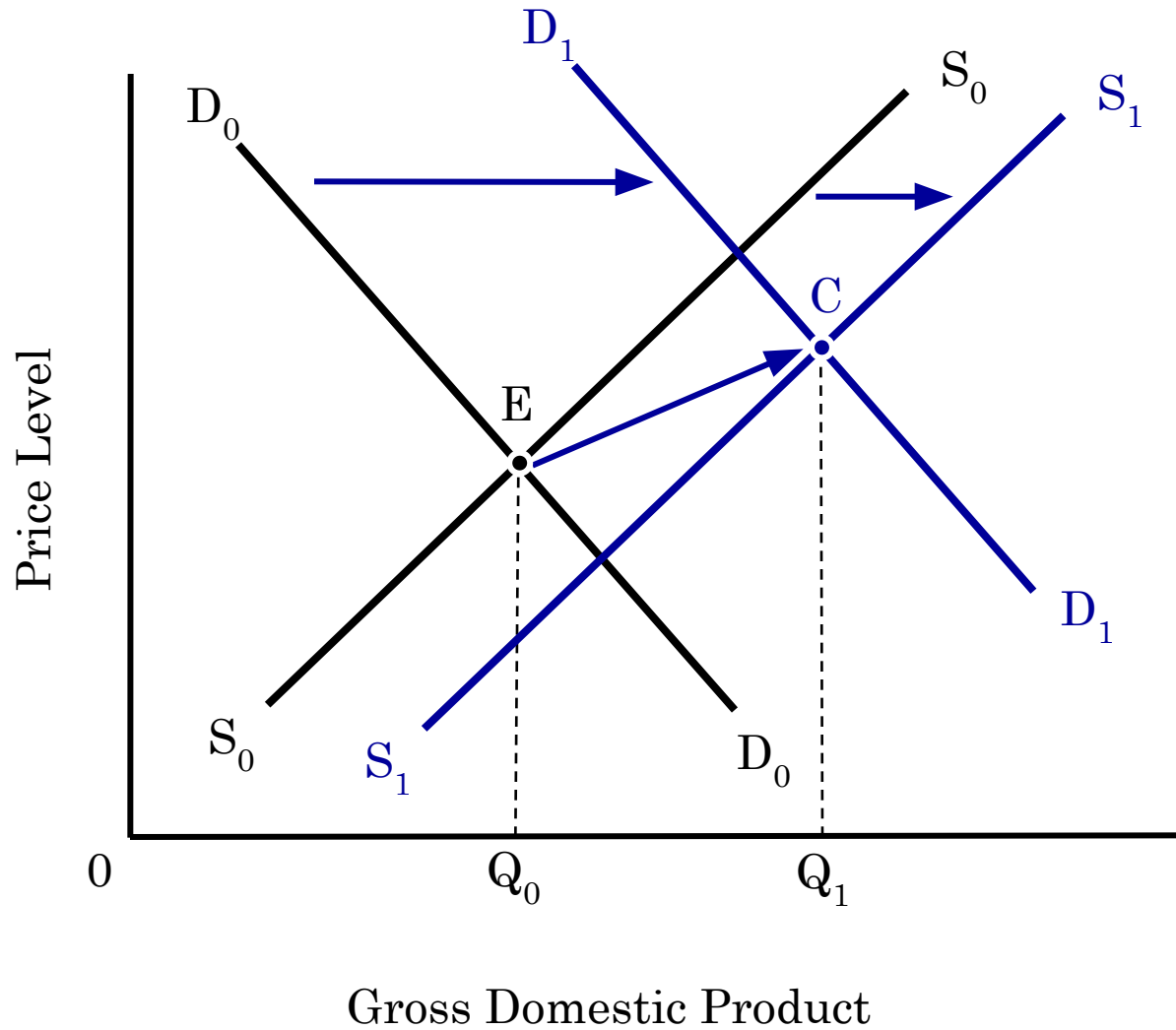
# Circular flow of income and macroeconomic objectives

Rise in AD will lead to:

- Output ↑ or Economic growth
- Unemployment ↓
- Inflation ↑
- Import (M) ↑  
*Balance of payments will deteriorate*



# ECONOMIC GROWTH



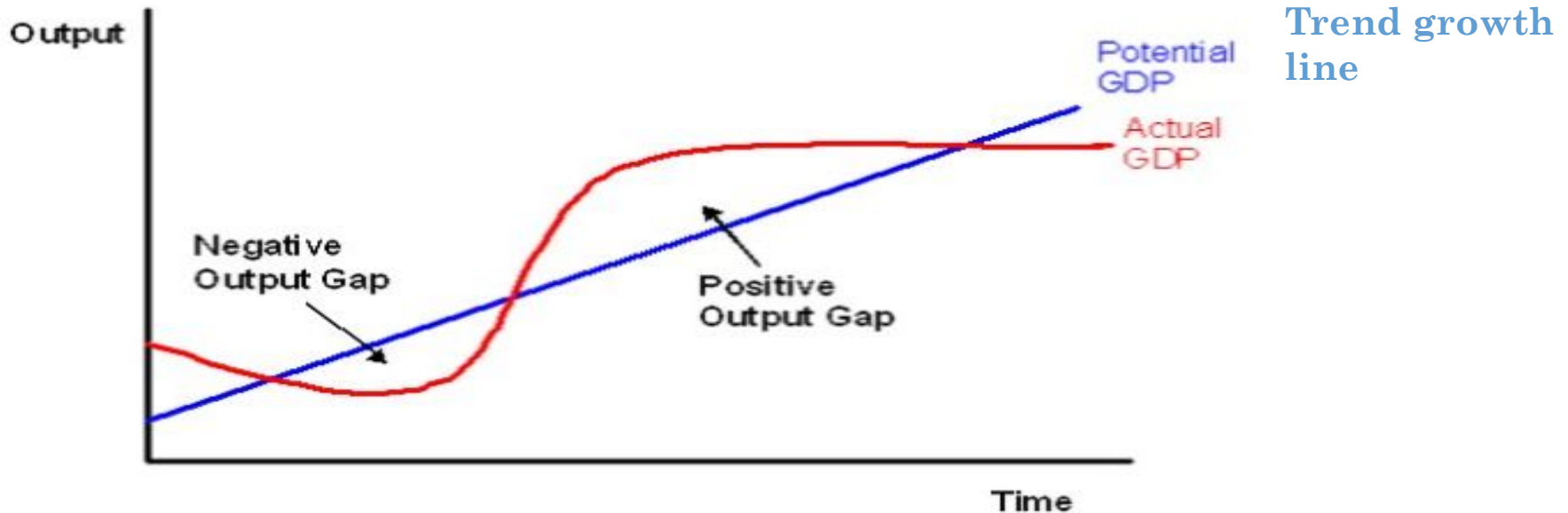
# ECONOMIC GROWTH AND THE BUSINESS CYCLE

Economic growth

Actual

Potential

Output gap = Actual output – Potential output





## ECONOMIC GROWTH AND THE BUSINESS CYCLE

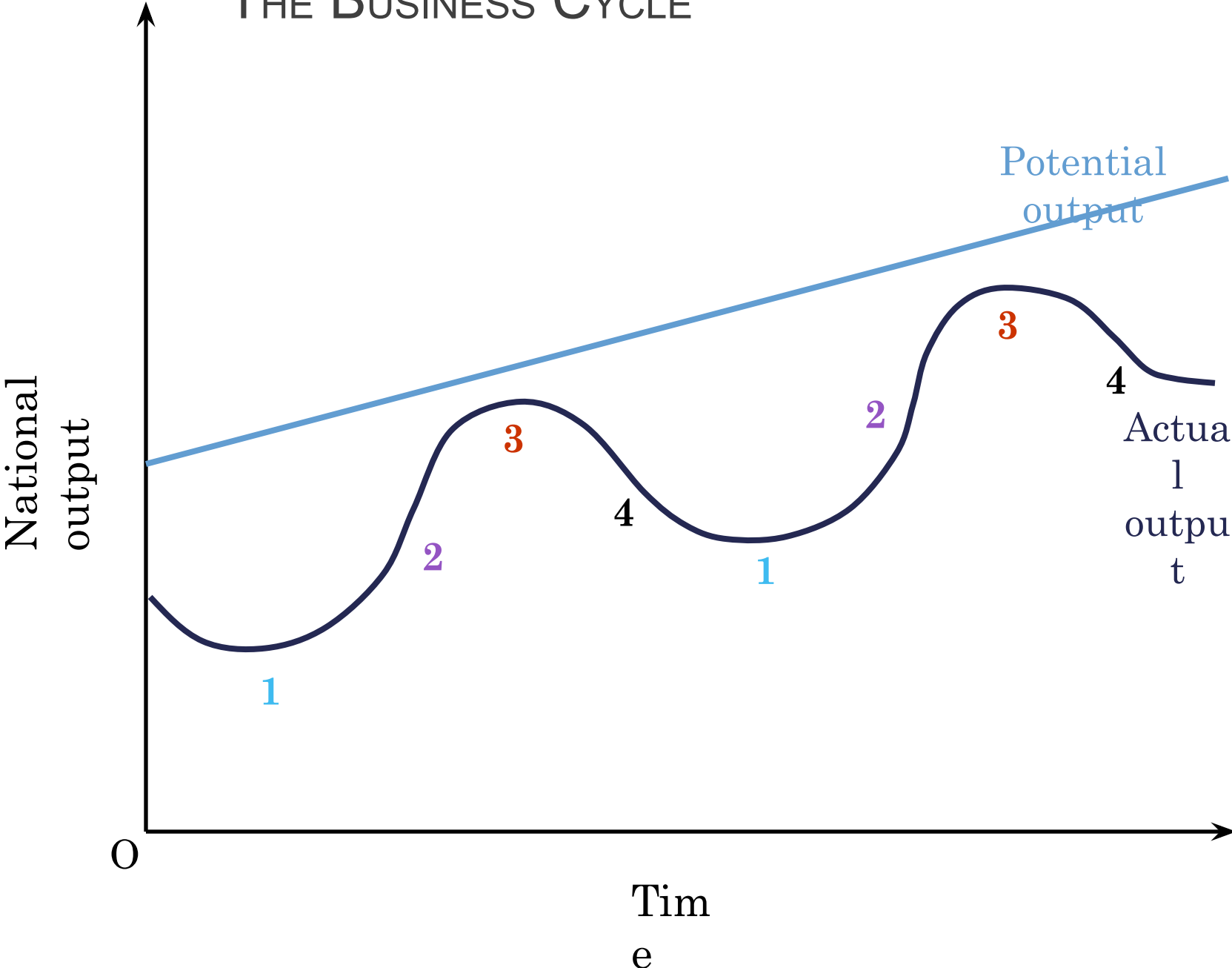
**Business cycle** – the periodic fluctuations of national output round its long-term trend

‘Phases’ of the business cycle:

1. The upturn
2. The rapid expansion
3. The peaking out
4. The slowdown, recession or slump



# THE BUSINESS CYCLE



fig

# BUSINESS CYCLE THEORIES

## □ Endogenous theories

- Innovation theory
- Psychological theory
- Inventory cycle theory
- Monetary theory
- Under-consumption theory

## □ Exogenous theories

- Sunspot theory
- War theory



# UPTURN

□ During a period of expansion:

- Wages increase
- Low unemployment
- People are optimistic and spending money
- High demand for goods
- Businesses start
- Easy to get a bank loan
- Businesses make profits and stock prices increase



# PEAK

- When the economic cycle peaks:
  - The economy stops growing (reached the top)
  - GDP reaches maximum
  - Businesses can't produce any more or hire more people
  - Cycle begins to contract



# CONTRACTION

□ During a period of contraction:

- Businesses cut back production and layoff people
- Unemployment increases
- Number of jobs decline
- People are pessimistic (negative) and stop spending money
- Banks stop lending money



# TROUGH

- When the economic cycle reaches a trough:
  - Economy “bottoms-out” (reaches lowest point)
  - High unemployment and low spending
  - Stock prices drop

But,

when we hit bottom, no where to go but up!

UNLESS....



# READINGS

Sloman J. (2016), *Essentials of Economics*, 7th edition, Prentice Hall, Chapter 8.

Mankiw E. (2018), *Principles of Economics*, 8th edition, Cengage learning. Chapter 8





