CFA Institute®
Investment Foundations

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Module 3: INPUTS AND TOOLS

Chapter 5: Macroeconomics

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Faculty Bio

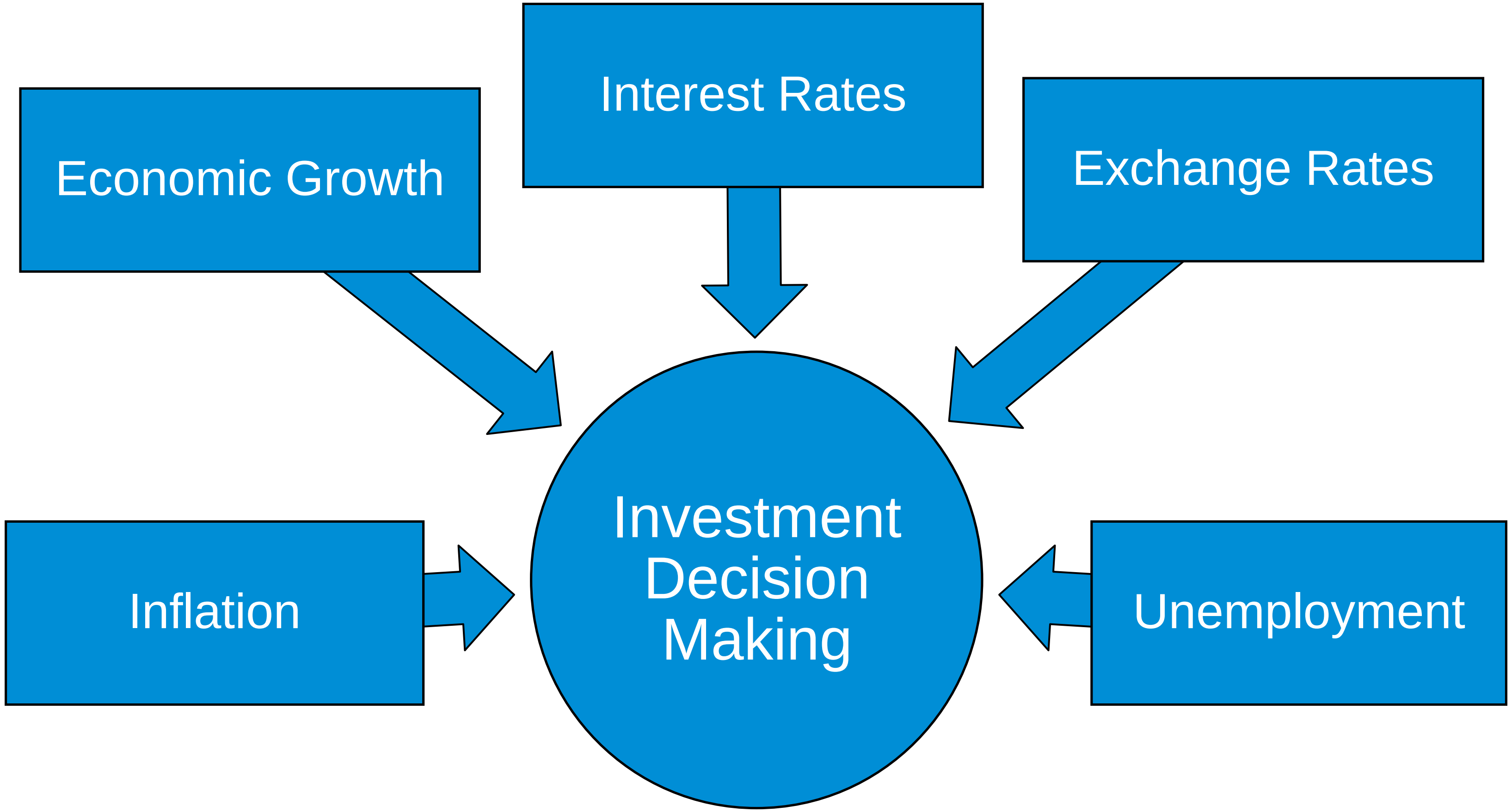
Module	Topic	Weight	LOS	Exam Qs	Hours to Study	Module Practice Qs	Chapter Practice Qs
Module 1	**Industry overview**	5%	7	6	5	28	28
Chapter 1	The Investment Industry: A Top-Down View						
Module 2	**Ethics and regulation**	10%	14	12	10	91	
Chapter 2	Ethics and Investment Professionalism						49
Chapter 3	Regulation						42
Module 3	**Inputs and tools**	20%	50	24	20	291	
Chapter 4	Microeconomics						53
Chapter 5	Macroeconomics						57
Chapter 6	Economics of International Trade						47
Chapter 7	Financial Statements						70
Chapter 8	Quantitative Concepts						64
Module 4	**Investment instruments**	20%	29	24	20	213	
Chapter 9	Debt Securities						69
Chapter 10	Equity Securities						72
Chapter 11	Derivatives						42
Chapter 12	Alternative Investments						30
Module 5	**Industry structure**	20%	27	24	20	96	
Chapter 13	Structure of the Investment Industry						28
Chapter 14	Investment Vehicles						29
Chapter 15	The Functioning of Financial Markets						39
Module 6	**Serving client needs**	5%	12	6	5	76	
Chapter 16	Investors and Their Needs						35
Chapter 17	Investment Management						41
Module 7	**Industry controls**	20%	24	24	20	154	
Chapter 18	Risk Management						51
Chapter 19	Performance Evaluation						53
Chapter 20	Investment Industry Documentation						50
	Total	**100%**	**163**	**120**	**100**	**949**	**949**

AFTER COMPLETING THIS CHAPTER, YOU SHOULD BE ABLE TO DO THE FOLLOWING:

a) Describe why macroeconomic considerations are important to an investment firm and how macroeconomic information may be used;
b) Define gross domestic product (GDP) and GDP per capita;
c) Identify basic components of GDP;
d) Describe economic growth and factors that affect it;
e) Describe phases of a business cycle and their characteristics;
f) Explain the global nature of business cycles;
g) Describe economic indicators and their uses and limitations;
h) Define inflation, deflation, stagflation, and hyperinflation and describe their effects on consumers, businesses, and investments;
i) Describe and compare monetary and fiscal policy;
j) Explain limitations of monetary policy and fiscal policy.

MACROECONOMICS

Macroeconomics is the study of the economy as a whole.



LOS a: Describe why macroeconomic considerations are important to an investment firm and how macroeconomic information may be used.

GROSS DOMESTIC PRODUCT (GDP)

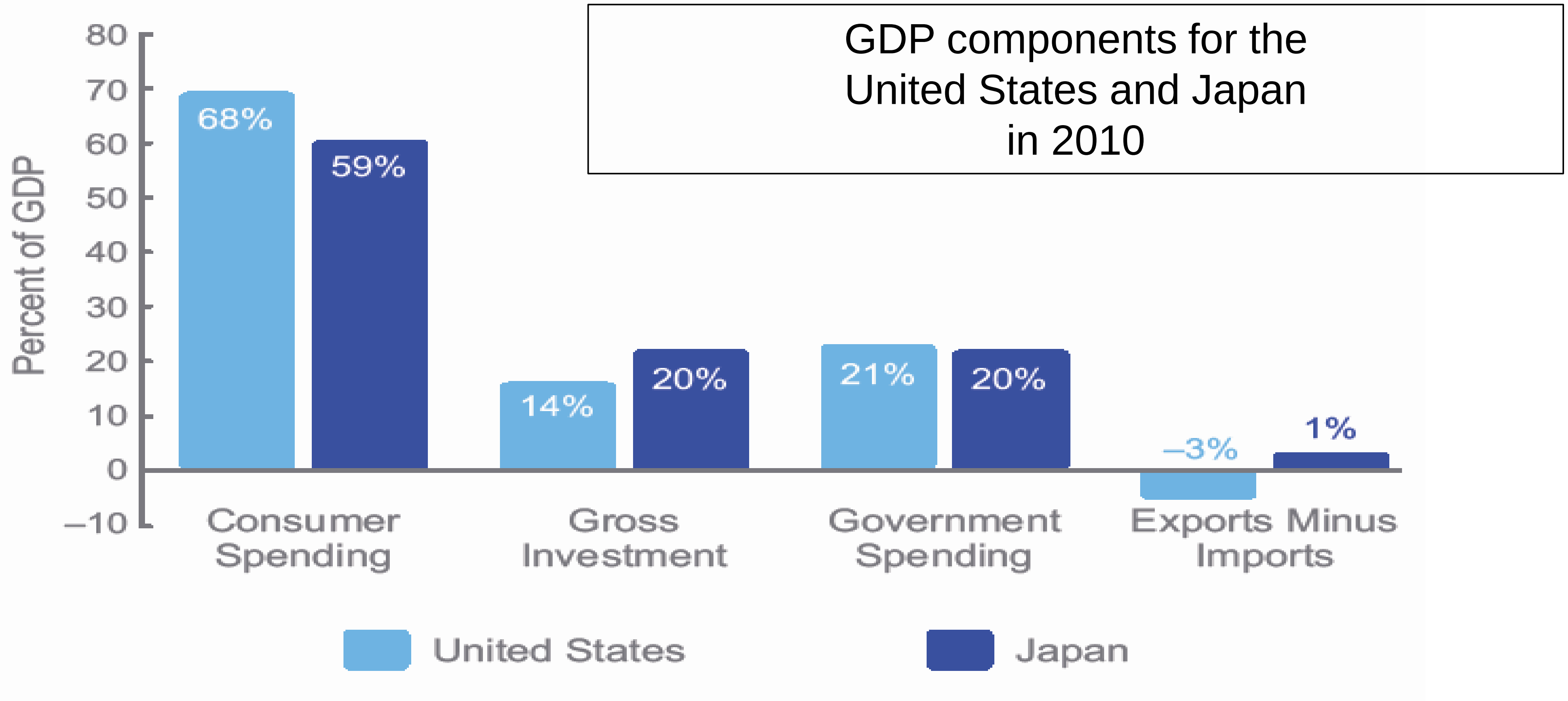
GDP: Value of All Final Products and Services

Expenditure Approach	Income Approach
GDP = $C + I + G + (X - M)$	GDP = Gross Domestic Income

C = Consumer spending
I = Business gross investment
G = Government spending
$(X - M)$ = Exports minus imports

In 2010, the world had a total GDP of $63.3 trillion and an average GDP per capita of $9,200.

COMPONENTS OF GDP



Source: Based on data from www.bea.gov for the United States and www.stat.go.jp for Japan.

LOS b: Define gross domestic product (GDP) and GDP per capita.

THE EXPENDITURES APPROACH

$$\text{GDP} = C + I + G + (X - M)$$

GDP is the sum of the following components:

C = Consumer (or household) spending

I = Gross investment (or business spending)

G = Government spending

$(X - M)$ = Exports minus imports

LOS c: Identify basic components of GDP.

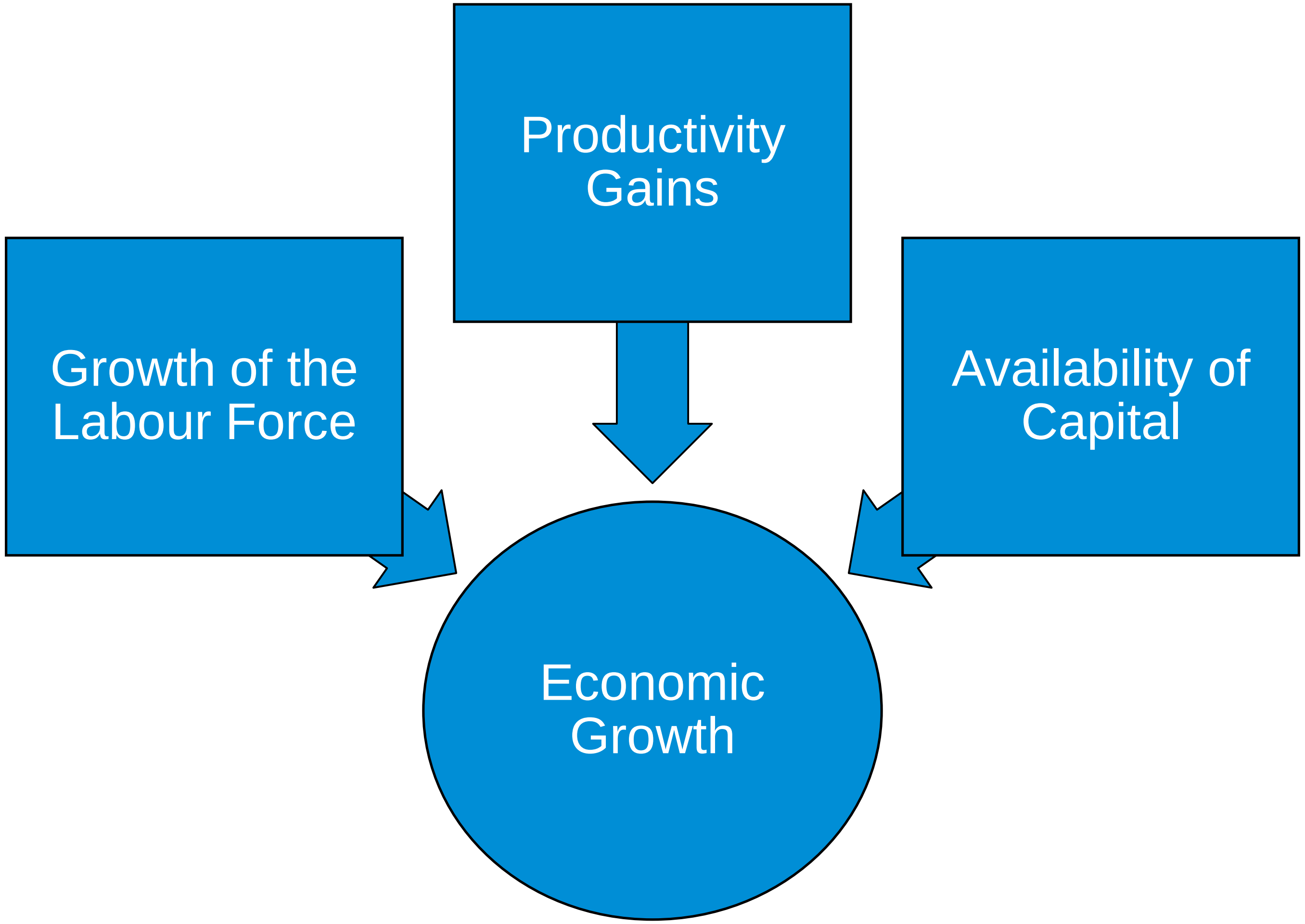
NOMINAL VERSUS REAL GDP

Nominal GDP, which reflects the current market value of products and services unadjusted for price changes, may overstate or understate actual economic growth.

Real GDP is nominal GDP adjusted for **changes in price levels**. Changes in real GDP, which reflect changes in actual physical output, are a better measure of economic growth than changes in nominal GDP.

LOS c: Identify basic components of GDP.

FACTORS AFFECTING GROWTH



LOS d: Describe economic growth and factors that affect it.

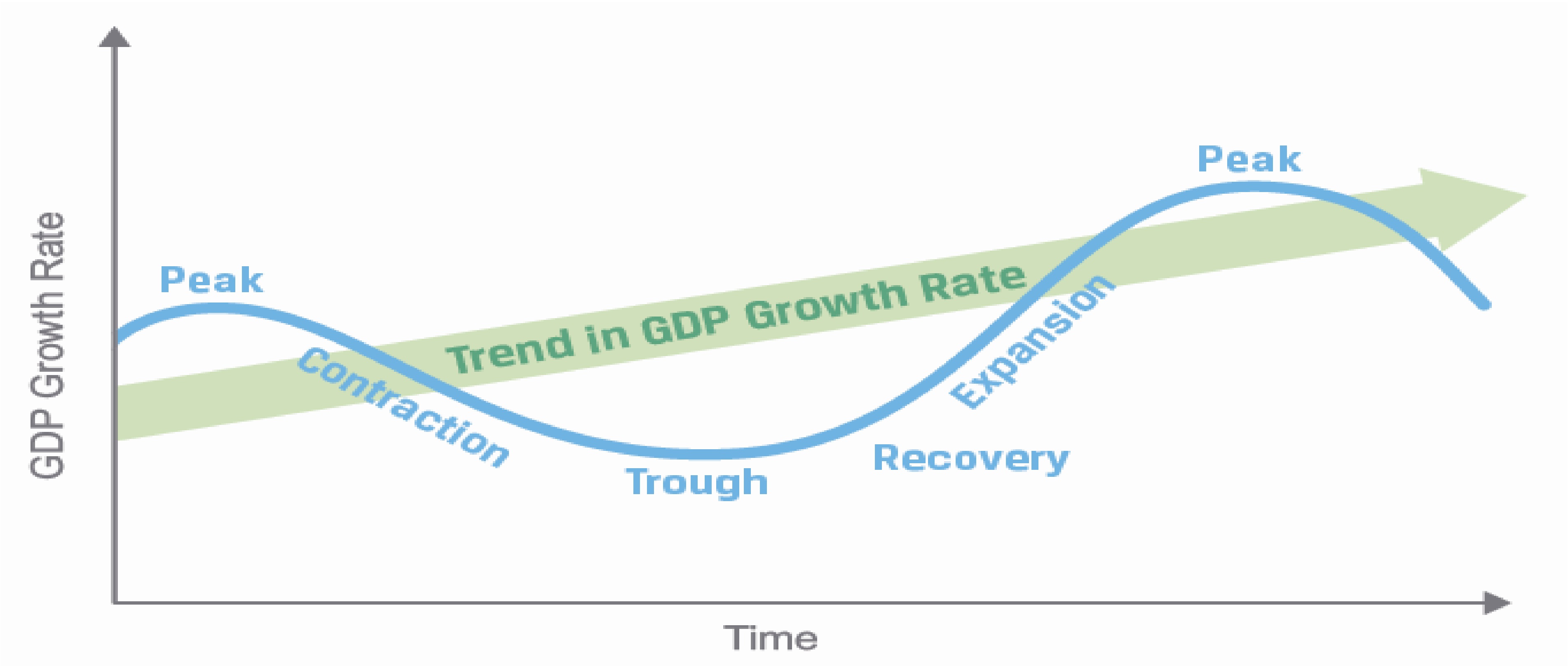
ANNUAL GDP GROWTH RATES AT MARKET PRICES BASED ON LOCAL CURRENCY, 1971–2010

China	9.10%
India	5.40%
Brazil	4.00%
United States	2.90%
Canada	2.90%
Japan	2.60%
France	2.30%
United Kingdom	2.20%
Germany	2.00%
World	3.20%

Source: Based on data from the World Bank.

LOS d: Describe economic growth and factors that affect it.

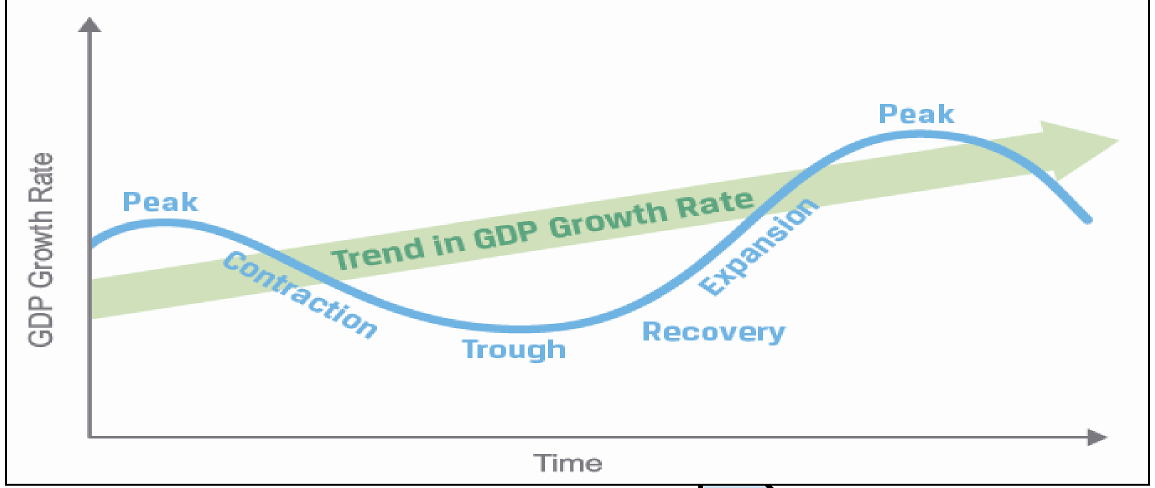
THE BUSINESS CYCLE



The exhibit shows a stylised representation of a business cycle.

LOS e: Describe phases of a business cycle and their characteristics.

PHASES OF THE BUSINESS CYCLE



Expansion

- Production increases.
- Inflation and interest rates tend to rise.
- High rate of employment results in higher wages.

Peak

- Monetary policy is aimed at slowing growth and controlling inflation.
- Economic shocks or other factors may contribute to the end of an expansion.

Contraction

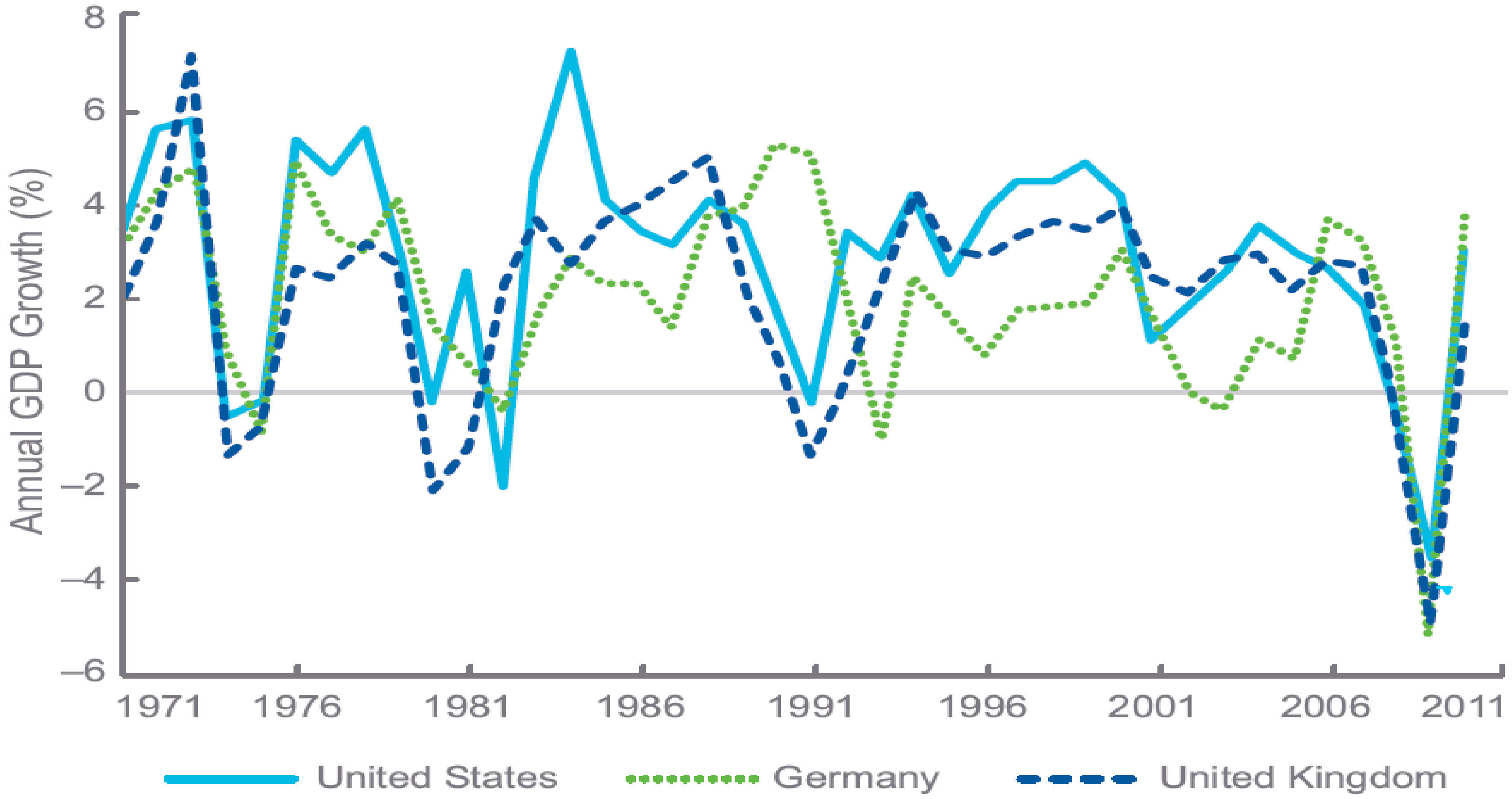
- Unemployment increases.
- Inflation and interest rates tend to fall.
- Monetary and fiscal policies are designed to stimulate growth.

Trough and Recovery

- Contraction ends and economic growth stabilises.
- Business investment and consumer demand pick up, and the economy enters a recovery phase.

LOS e: Describe phases of a business cycle and their characteristics.

INTERNATIONAL BUSINESS CYCLE
1971-2010



Source: Based on data from the World Bank.

LOS f: Explain the global nature of business cycles.

ECONOMIC INDICATORS

Real GDP:

An important measure of the wealth of a country but estimated with a substantial time lag

Economic Indicators:

Offer insight and are reported more frequently

Industrial Production:

The output produced by the industrial sector of the economy

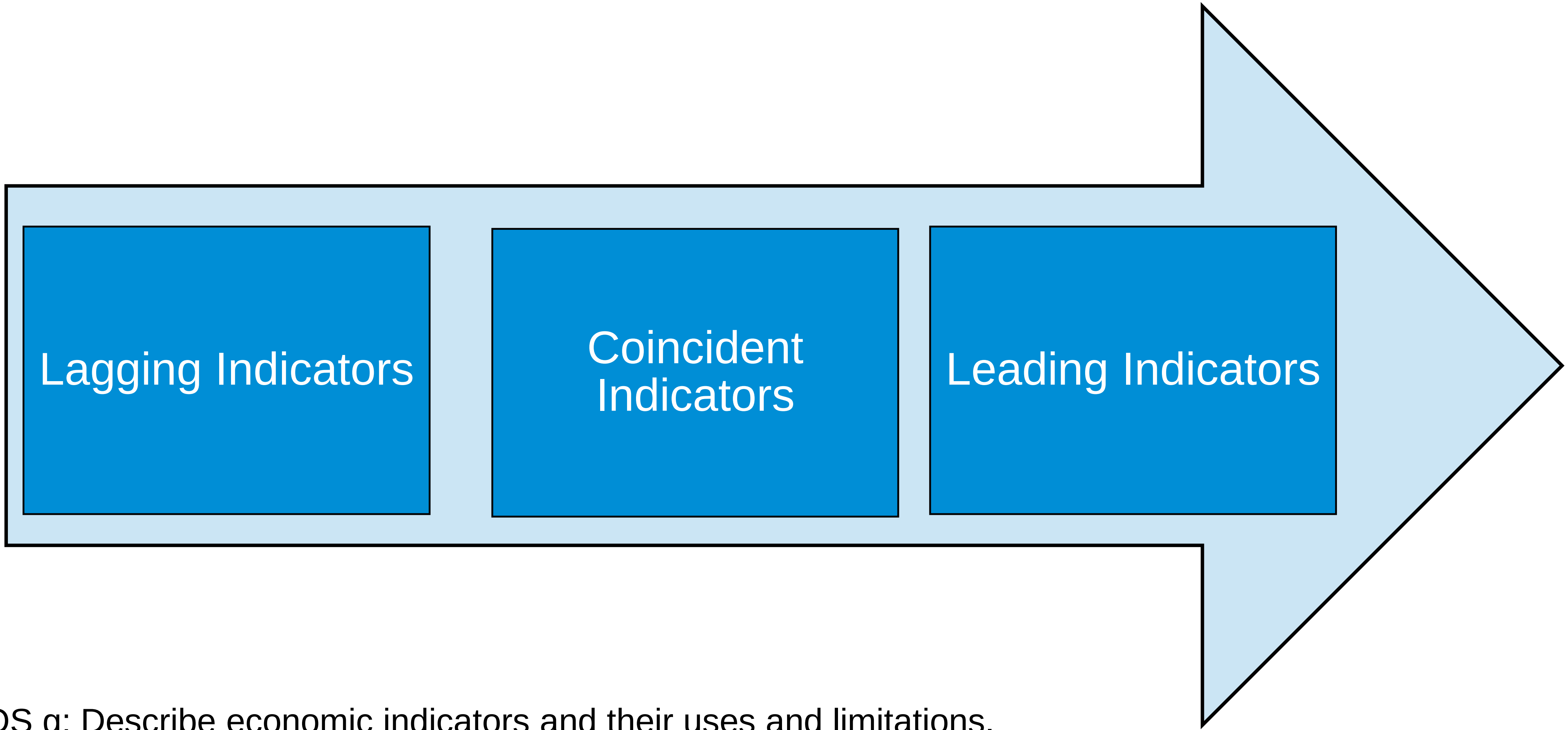
LOS g: Describe economic indicators and their uses and limitations.

ECONOMIC INDICATORS

- Average weekly hours of production workers
- Initial claims for unemployment insurance
- Durable products orders
- Retail sales
- Construction spending
- Sentiment surveys, which measure the confidence that economic entities have in the economy

LOS g: Describe economic indicators and their uses and limitations.

WHEN DID ECONOMIC ACTIVITY OCCUR?



LOS g: Describe economic indicators and their uses and limitations.

INFLATION MEASURES

The **Consumer Price Index (CPI)** is constructed by determining the weight (or relative importance) of each product and service in a typical household's spending (referred to as a basket of goods) in a particular base year and then measuring the overall price change from year to year.

In the United Kingdom, at least two consumer price indices are reported:
• A retail price index (RPI) based on a basket of goods that includes housing costs and
• A CPI with a smaller basket of goods that does not include some items, such as housing.

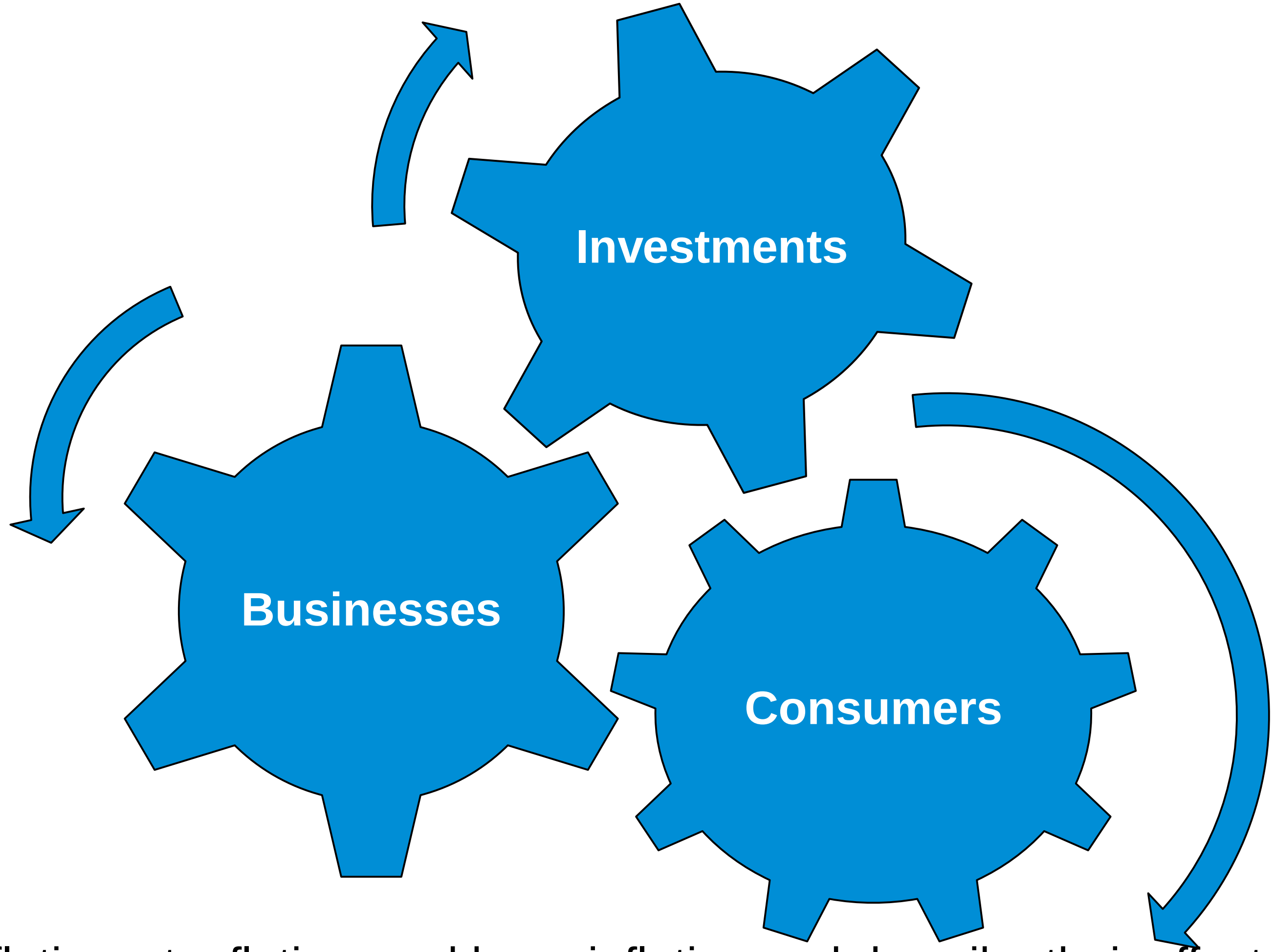
LOS h: Define inflation, deflation, stagflation, and hyperinflation and describe their effects on consumers, businesses, and investments.

INFLATION INDICATORS

Producer Price Index (PPI)	Measures the average selling price of products in the economy
Inflation Rates and Price Indices	Different indices can produce different inflation measures
Implicit GDP Deflator	Nominal GDP divided by real GDP

LOS h: Define inflation, deflation, stagflation, and hyperinflation and describe their effects on consumers, businesses, and investments.

THE EFFECTS OF INFLATION



LOS h: Define inflation, deflation, stagflation, and hyperinflation and describe their effects on consumers, businesses, and investments.

OTHER INFLATION SCENARIOS

Deflation	• Persistent and pronounced decrease in prices across most products and services • Demand declines as a result of expected further price declines
Stagflation	• Combination of little or no economic growth and inflation • Typically results from inflation that originates outside the domestic economy
Hyperinflation	• Involves price increases so large and rapid that people find it difficult to purchase products and services • Most commonly associated with emerging markets; may cause severe damage to the economy

LOS h: Define inflation, deflation, stagflation, and hyperinflation and describe their effects on consumers, businesses, and investments.

MONETARY POLICY

Policy Goals:

Output (or GDP)

Price Stability

Employment

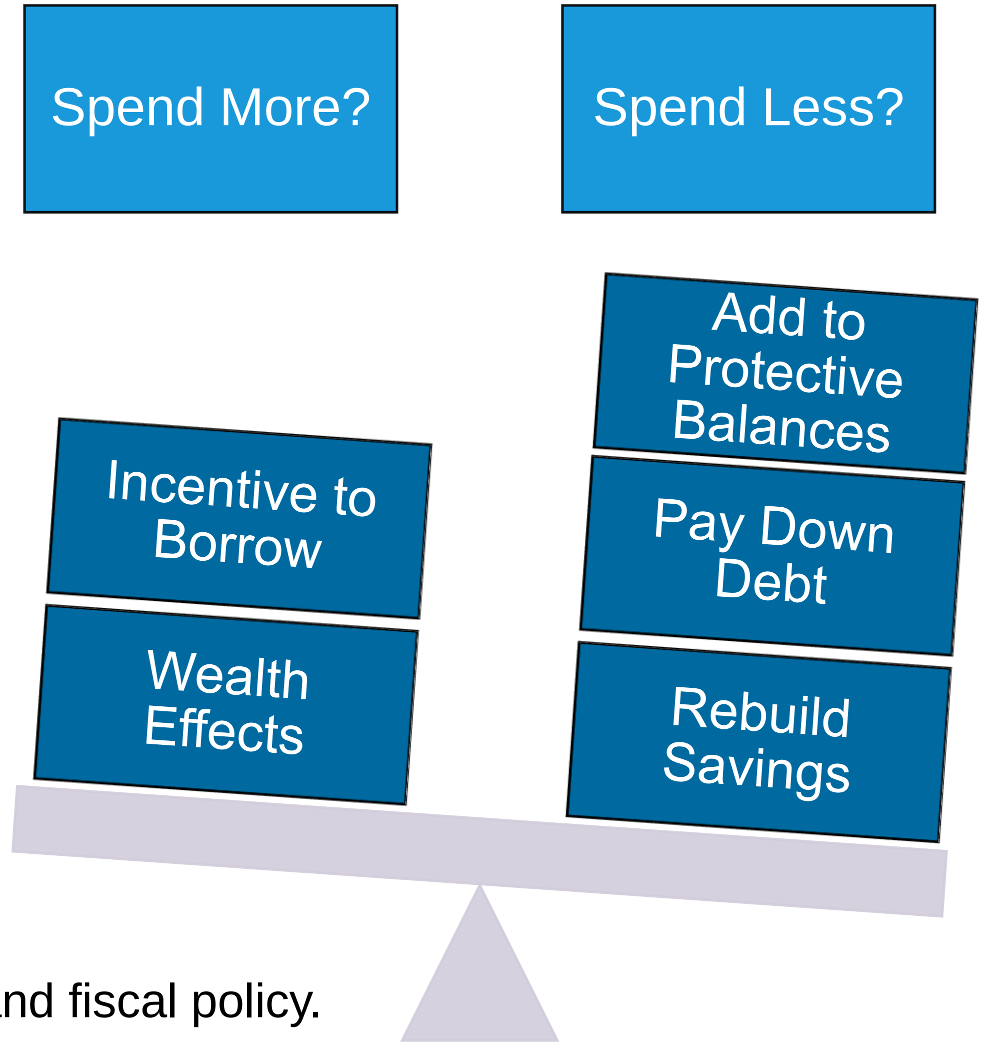
LOS i: Describe and compare monetary and fiscal policy.

MONETARY TOOLS

Open Market Operations	Central Bank Official Interest Rates	Reserve requirements
• Purchases and sales of government notes and bonds	• Changes in central bank lending rates to banks	• Changes in the proportion of deposits that must be held on reserve

LOS i: Describe and compare monetary and fiscal policy.

LIMITATIONS OF MONETARY POLICY



LOS j: Explain limitations of monetary policy and fiscal policy.

TOOLS OF FISCAL POLICY

Fiscal policy involves the use of government spending and tax policies to influence the level of aggregate demand in an economy.

An expansionary policy to stimulate a weak economy would reduce taxes and increase public spending.

The effectiveness of these policies will vary over time and among countries depending on circumstances.

LOS j: Explain limitations of monetary policy and fiscal policy.

LIMITATIONS OF FISCAL POLICY

Time Lags

- Recognition
- Decision
- Implementation
- Responses

Other Factors

- Unexpected Responses
- Unintended Consequences

LOS j: Explain limitations of monetary policy and fiscal policy.

FISCAL OR MONETARY POLICY

Fiscal Policy **OR** **Monetary Policy** **?**

Keynesians
believe that fiscal policy can have powerful effects on aggregate demand, output, and employment.

Monetarists
believe monetary policy is a more effective tool for affecting economic activity.

In practice, both governments and central banks are likely to act in response to economic conditions.

LOS j: Explain limitations of monetary policy and fiscal policy.

SUMMARY

- Macroeconomics
- GDP and its components
- Factors affecting growth
- Phases of the business cycle
- Economic indicators
- Inflation, deflation, stagflation, and hyperinflation
- Monetary policy
- Fiscal policy