

MGM 112

Introduction to Economics

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Lecture 11: Economic Measurements



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Syllabus

**PART I:
THE MEASUREMENT AND
STRUCTURE OF THE
NATIONAL ECONOMY**

**PART II:
Globalisation &
Human and Sustainable
Development**

PART I:

THE MEASUREMENT AND STRUCTURE OF THE NATIONAL ECONOMY

C / I / S / UNEMPLOYMENT

I- THE GDP COMPONENTS

- Economists and statisticians use several methods to track economic growth. The most well-known and frequently tracked is the Gross Domestic Product (GDP).
- Over time, however, some economists have highlighted limitations and biases in the GDP calculation.
- Organizations such as the Bureau of Labor Statistics (BLS) and the Organization for Economic Co-operation and Development (OECD) also keep relative productivity metrics to gauge economic potential.

I- THE GDP COMPONENTS

The **expenditure approach** to measuring GDP

- Measures total spending on final goods and services produced within a nation during a specified period of time
- Four main categories of spending: consumption (**C**), investment (**I**), *Government purchases of goods and services (G)*, and *net exports (NX)*

$$Y = C + I + G + NX$$

- the income-expenditure identity
- exports minus imports

I- THE GDP COMPONENTS

I- 1- Consumption

- **Consumption** can be defined in different ways, but is usually best described as the final purchase of goods and services by individuals. It is also often referred to as **consumer spending**.
- Consumption is one of the biggest concepts in economics and is extremely important because it helps determine the growth and success of the economy.
 - Businesses can open up and offer all kinds of great products, but if we don't purchase or consume their products, they won't stay in business very long

I-1-1- THEORIES OF CONSUMPTION

Absolute Income Theory (Keynes)

According to Keynes, of all the factors it is the *current level of income that determines the consumption of an individual and also of society.*

Keynes put forward a psychological law of consumption, according to which, *as income increases consumption increases but not by as much as the increase in income.* In other words, marginal propensity to consume is less than one.

RELATIVE INCOME THEORY OF CONSUMPTION

Because his relative income has remained the same the individual will spend the same proportion of his income on consumption as he was doing before the absolute increase in his income.

That is, his **average propensity to consume (APC)** will remain the same despite the increase in his absolute income

Demonstration Effect: individuals or households try to imitate or copy the consumption levels of their neighbours or other families in a particular community.



if incomes of all families increase in the same proportion, distribution of relative incomes would remain unchanged and therefore the proportion of consumption expenditure to income which depends on relative income will remain constant.



family with a given income would devote more of his income to consumption if it is living in a community in which that income is regarded as relatively low because of the working of demonstration effect.

Ratchet Effect: when income of individuals or households falls, their consumption expenditure does not fall much

- this is partly due to the demonstration effect
- partly due to the fact that they become accustomed to their previous higher level of consumption and it is quite hard and difficult to reduce their consumption expenditure when their income has fallen.



the fall in their income, as during the period of recession or depression, does not result in decrease in consumption expenditure very much as one would conclude from family budget studies

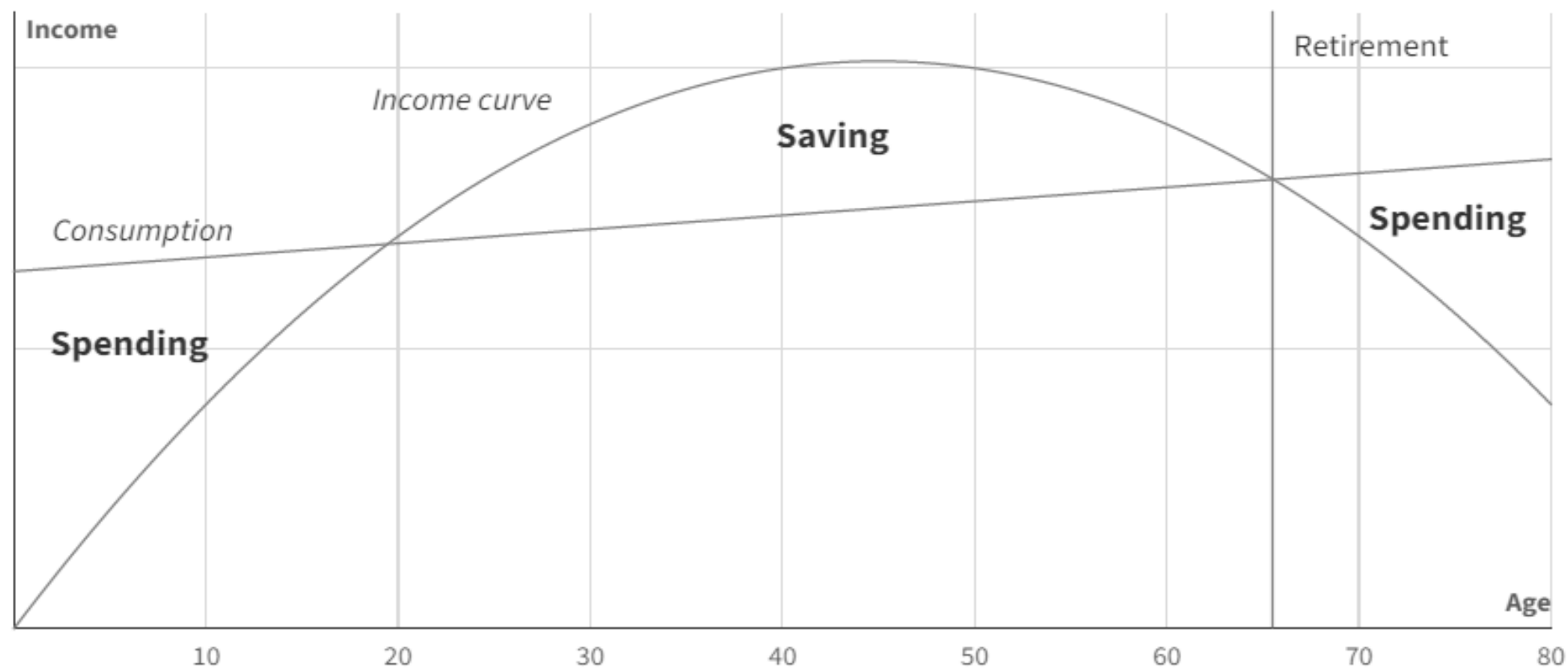
I-1-2-LIFE CYCLE THEORY OF CONSUMPTION (ANDO & MODIGLIANI)

- Idea: the consumption in any period is not the function of current income of that period but of the whole lifetime expected income
- Assumptions:
 - to plan a pattern of consumption expenditure based on expected income in their entire lifetime
 - individual maintains a more or less constant or slightly increasing level of consumption
 - his level of consumption is limited by his expectations of lifetime income

- A typical individual in this theory in his early years of life spends on consumption either by borrowing from others or spending the assets bequeathed from his parents.
- It is in his main working years of his lifetime that he consumes less than the income he earns and therefore makes net positive savings. He invests these savings in assets, that is, accumulates wealth which he consumes in the future years. In his lifetime after retirement he again dissaves, that is, consumes more than his income in these later years of his life but is able to maintain or even slightly increase his consumption in the lifetime after retirement

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Life-Cycle Consumption Theory Visualized



I-1-3- THE CONSUMER PRICE INDEX (CPI)

- **The Consumer Price Index (CPI)** is a measure of the changes in the average price of goods and services that consumers normally purchase such as food, clothing, medicals and others. ...
- **The value of money is the purchasing power of the consumer**, or the ability to buy goods and Services.
- The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation. It may be compared with the Producer Price Index (PPI), which, instead of considering prices paid by consumers, looks at what businesses pay for inputs.

I-1-4- THE Producer Price Index (PPI)

- **The Producer Price Index (PPI)**, published by the Bureau of Labor Statistics (BLS), is a group of indexes that calculates and represents **the average movement in selling prices from domestic production** over time.
- It is a measure of inflation based on input costs to producers

I-2- SAVINGS

- **saving**, process of setting aside a portion of current income for future use, or the flow of resources accumulated in this way over a given period of time. Saving may take the form of increases in bank deposits, purchases of securities, or increased cash holdings. The extent to which individuals save is affected by their preferences for future over present consumption, their expectations of future income, and to some extent by the rate of interest.
- Saving involves income that is not consumed
- Savings can be turned into further increased income through investing in different investment vehicles.

- Saving is often confused with investing, but they are not the same.
- Although most people think of purchases of stocks and BONDS as investments, economists use the term “INVESTMENT” to mean additions to the real stock of capital: plants, factories, equipment....

Types of Saving

Personal savings

- What people save, avoiding to consume all their income, is called "**personal savings**". These savings can remain on the bank accounts for future use or be actively invested in houses, real estate, bonds, shares and other financial instruments

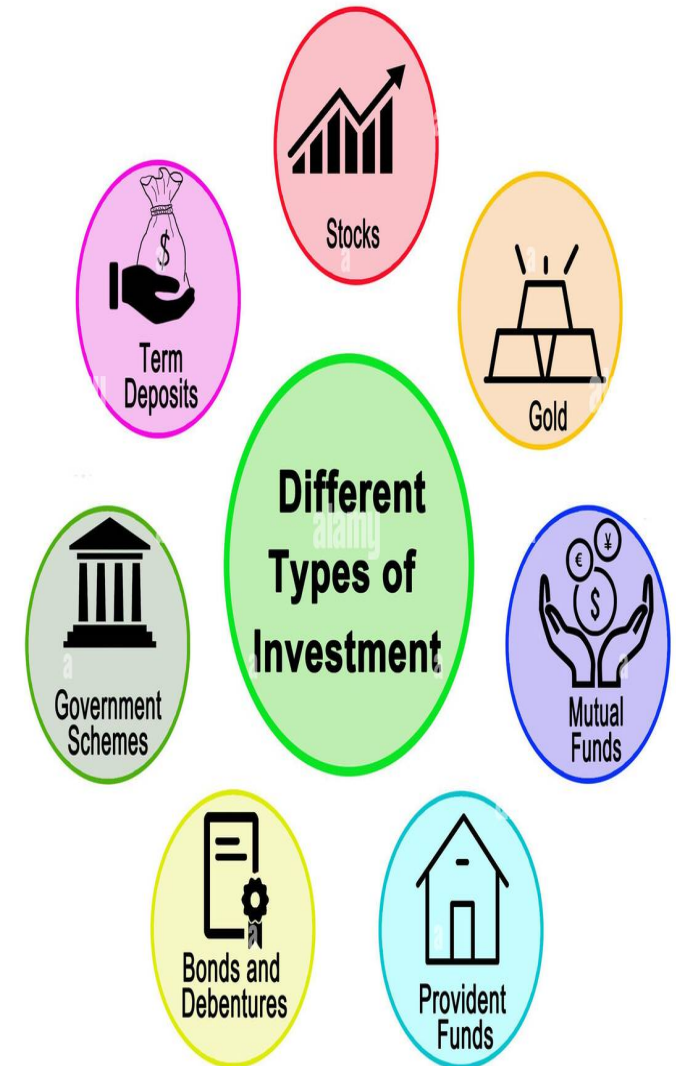
National savings

- **National savings = personal savings + the business savings + public savings.**
- Business savings can be measured by the value of undistributed corporate profits. Public savings are basically tax revenues less public expenditure.

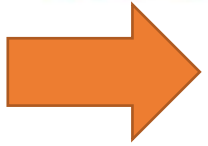
I-3- INVESTMENTS

- **Investment** is the Money committed or property acquired for future income.
- An **investment** is an asset or item that is purchased with the hope that it will generate income or will appreciate in the future.
- In an **economic sense**, an investment is the purchase of goods that are not consumed today but are used in the future to create wealth.
- In **finance**, an investment is a monetary asset purchased with the idea that the asset will provide income in the future or will be sold at a higher price for a profit.

- **Leverage Firms (Companies)** are the best place to invest, because it's Earning per share is high. So, the high amount you put the more profit you gain from your share or stock.
Always invest in that firm or thing whose rate of return or profitability in future is high
- **Fixed Investment** - is spending on new capital machinery and plant, construction, housing, vehicles, etc.
- **Working Capital** - is spending on stocks/ inventories of finished goods and raw materials. The accumulation of stocks by firms, whether voluntary or involuntary, is counted as investment



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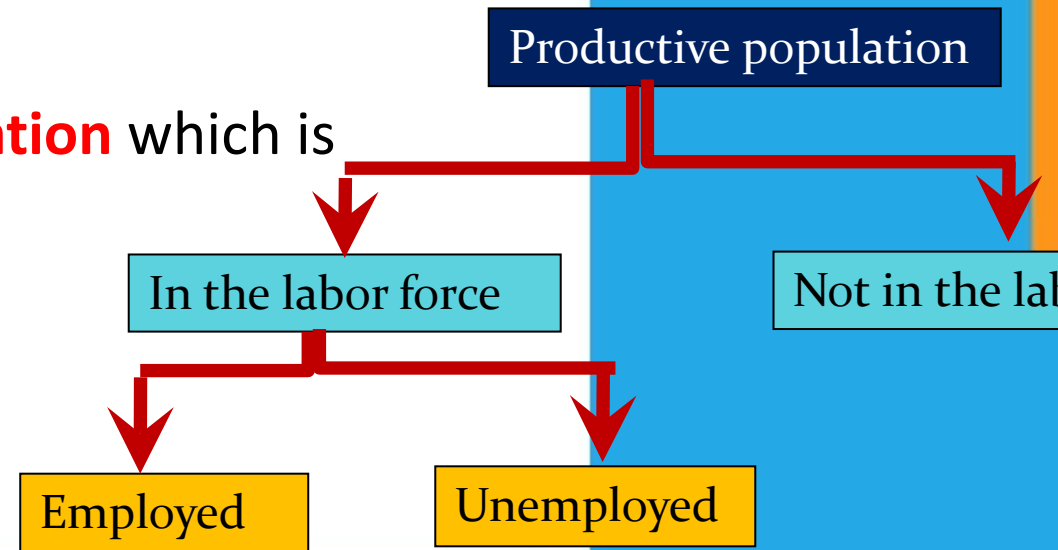


- High **consumption** makes any product to stay long in market.
 - If **consumption** is not high then product will failed.
- **Saving** is what you have after all your expenses.
 - **Saving** is not what you invest.
- **Investment** is for the future profits.

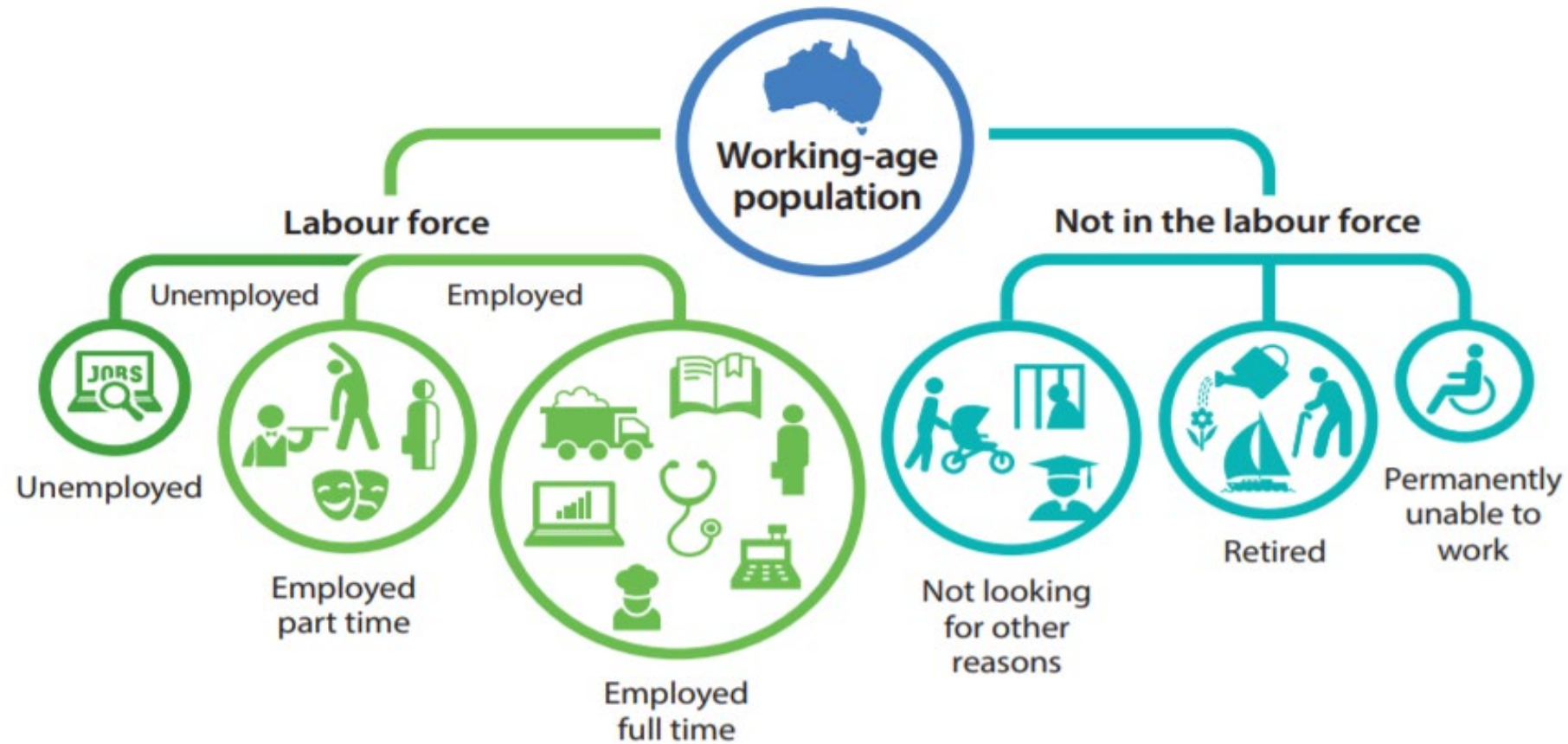
II- The UNEMPLOYMENT

- **UNEMPLOYMENT** is defined by **the International Labor Organization (ILO)** as a situation in which people are without jobs and they have actively looked for a job for the past four weeks.
- According to this definition, people who do not look for a job will not be considered unemployed.
- It's an indicator based on the **The working-age population** which is defined as those **aged 15 to 64**.

→ This indicator measures the share of the working age population in total population.



Groups in the Labour Market



The main types of unemployment

Frictional Unemployment	Structural Unemployment	Seasonal Unemployment	Cyclical Unemployment
Occurs when people change jobs, get laid off from their current jobs, take some time to find the right job after they finish their schooling, or take time off from working for a variety of other reasons	Occurs when workers' skills do not match the jobs that are available. Technological advances are one cause of structural unemployment	Occurs when industries slow or shut down for a season or make seasonal shifts in their production schedules	Unemployment that rises during economic downturns and falls when the economy improves

The Unemployment Rate

$$\text{Unemployment Rate} = \frac{\text{no. of unemployed persons}}{\text{Labor Force}}$$

includes employed and unemployed

III- The Business Cycle

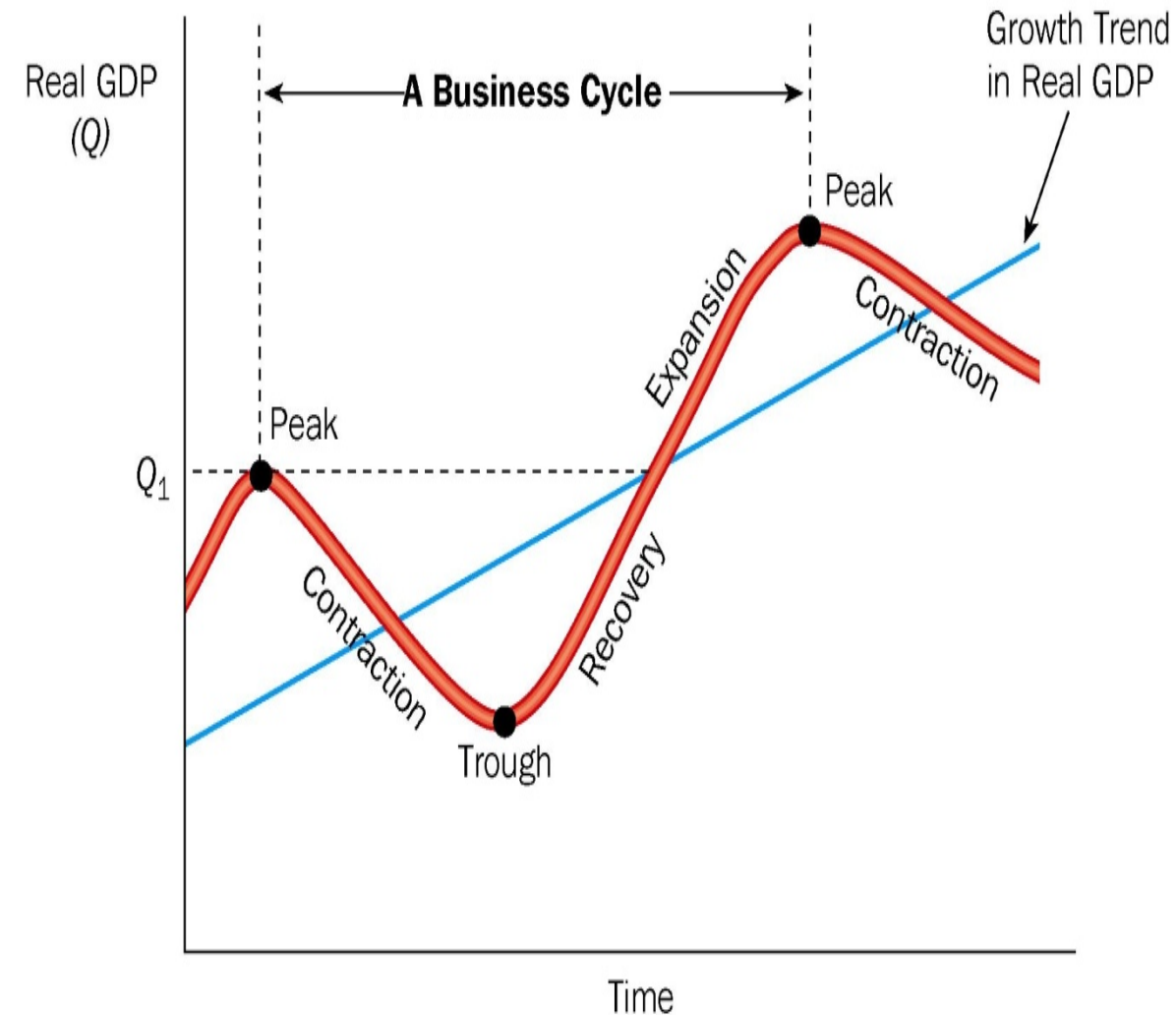
- The **business cycle is the cycle** ups and downs in the economy.
- The main measure of how an economy is doing is **aggregate output** (***the total quantity*** of goods and services produced in an economy in a given period)

The Business cycle is the **rise** and **fall** of **economic activity** relative to the **long-term growth** trend of the economy

III- The Business Cycle

UPS AND DOWNS OF THE BUSINESS CYCLE

- **Peak**: at the peak of the business cycle, Real GDP is at a temporary high.
- **Contraction**: A decline in the real GDP. If it falls for two consecutive quarters, it is said the economy to be in a recession.
- **Trough**: The Low Point of the GDP, just before it begins to turn up.
- **Recovery**: When the GDP is rising from the trough.
- **Expansion**: when the real GDP expands beyond the recovery
- **Recession** : two consecutive quarter declines in Real DP



IV- THE DIFFERENT GOVERNMENT POLICIES

There are three kinds of policies that the Government has used to influence the macroeconomics:

- **Fiscal policy** refers to government policies concerning **taxes** and **spending**.
- **Monetary policy** consists of tools used by the Federal Reserve to control the **quantity of money in the economy**.
- **Growth policies** are government policies that focus on **stimulating aggregate supply** instead of aggregate demand

**PART II:
Globalisation &
Human and Sustainable
Development**

I- Globalisation

I- WHAT IS GLOBALIZATION

- **Globalization** is defined as a process that, based on international strategies, aims to expand business operations on a worldwide level, and was precipitated by the facilitation of global communications due to technological advancements, and socioeconomic, political and environmental developments.
 - **economic globalization**
 - **cultural globalization**
 - **political globalization**

I- Globalisation

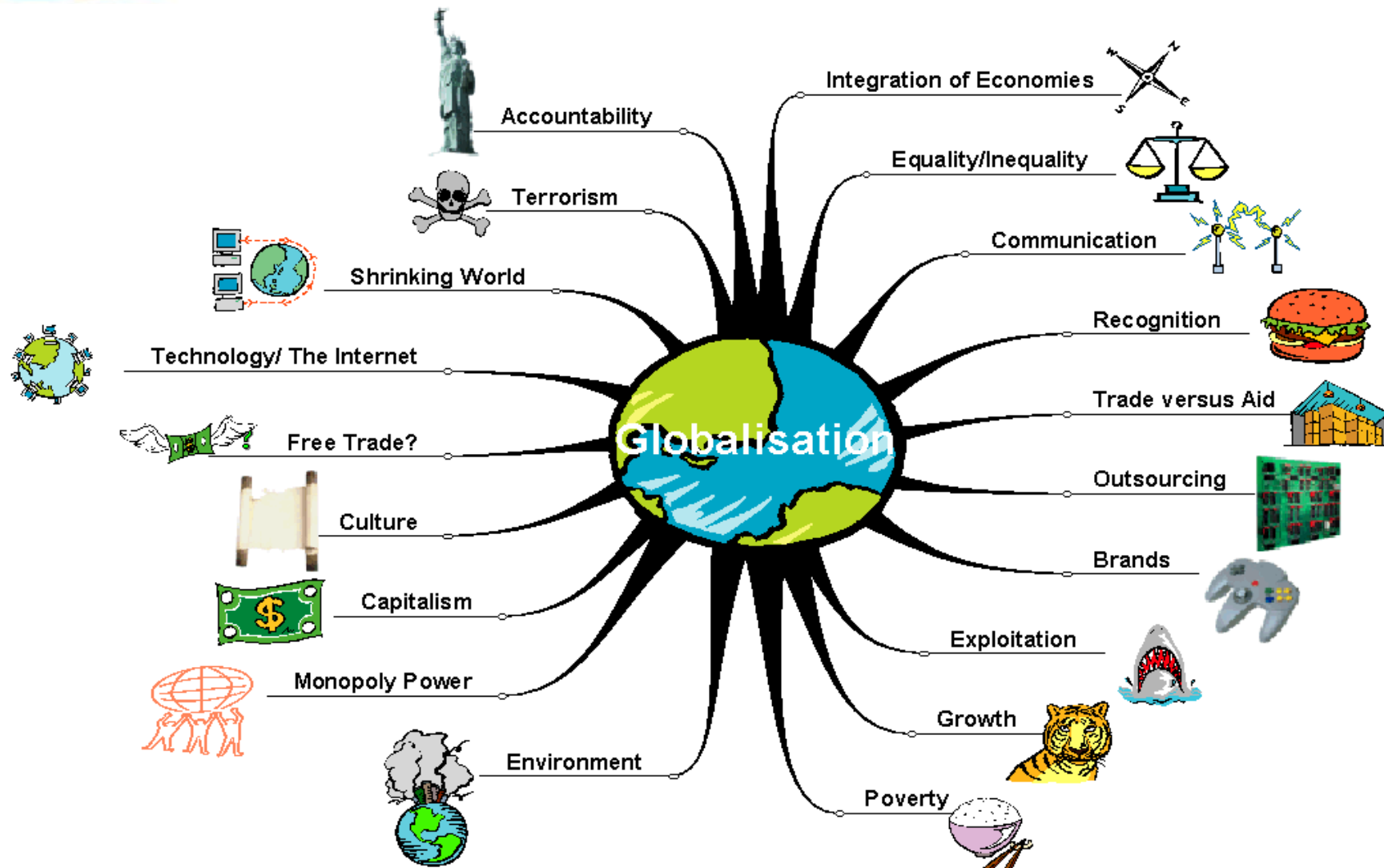
- In 2000, the International Monetary Fund (IMF) identified four basic aspects of globalization:
 - * trade and transactions,
 - * Capital and investment movements,
 - * Migration and movement of people,
 - * the dissemination of knowledge

Globalizing processes affect and are affected by business and work organization, economics, sociocultural resources, and the natural environment

2- THE GLOBALIZATION'S IMPACTS

- **Economic impact**
 - Improvement in standard of living
 - Increased competition among nations
 - Widening income gap between the rich and poor
- **Social impact**
 - Increased awareness of foreign cultures
 - Loss of local culture
- **Environmental impact**
 - Environmental degradation
 - Environmental management

I-Globalisation



I- Globalisation

3- FACTORS WHICH HELP THE SPREAD OF GLOBALISATION

- Low transport costs, containerization
- Telecommunications
- Internet
- Low trade barriers
- Political stability
- Increasing role of TNCs

I- Globalisation

4- Specialization

- **Specialization** is a method of production whereby an entity focuses on the production of a limited scope of goods to gain a greater degree of efficiency. Many countries, for example, specialize in producing the goods and services that are native to their part of the world, and they trade them for other goods and services.
- This specialization is thus the basis of global trade, as few countries have enough production capacity to be completely self-sustaining.

I- Globalisation

5- Comparative Advantage

- **Comparative advantage** is an economy's ability to produce a particular good or service at a lower opportunity cost than its trading partners.
- The theory of comparative advantage introduces opportunity cost as a factor for analysis in choosing between different options for production.
- Comparative advantage suggests that countries will engage in trade with one another, exporting the goods that they have a relative advantage in.
- **Absolute advantage** refers to the uncontested superiority of a country to produce a particular good better.

II-The Human Development

II-The Human Development

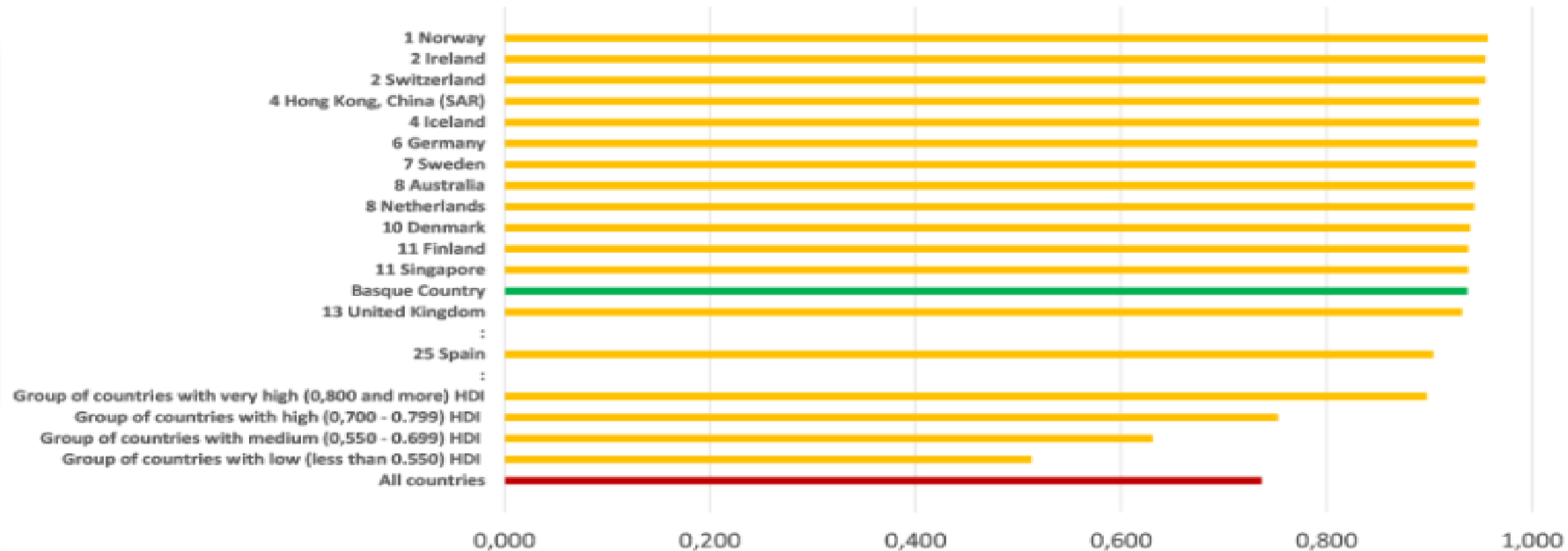
- Human development is defined as **the process of enlarging people's freedoms and opportunities and improving their well-being. ...**
Central to the human development approach is the concept of capabilities.
- Capabilities, what people can do and what they can become, are the equipment one has to pursue a life of value.

II-The Human Development

- This Human Development can be calculated with **The Human Development Index (HDI)** which is a summary measure of average achievement in key dimensions of human development:
 - * a long and healthy life,
 - * being knowledgeable and
 - * have a decent standard of living.

II-The Human Development

Human Development Index

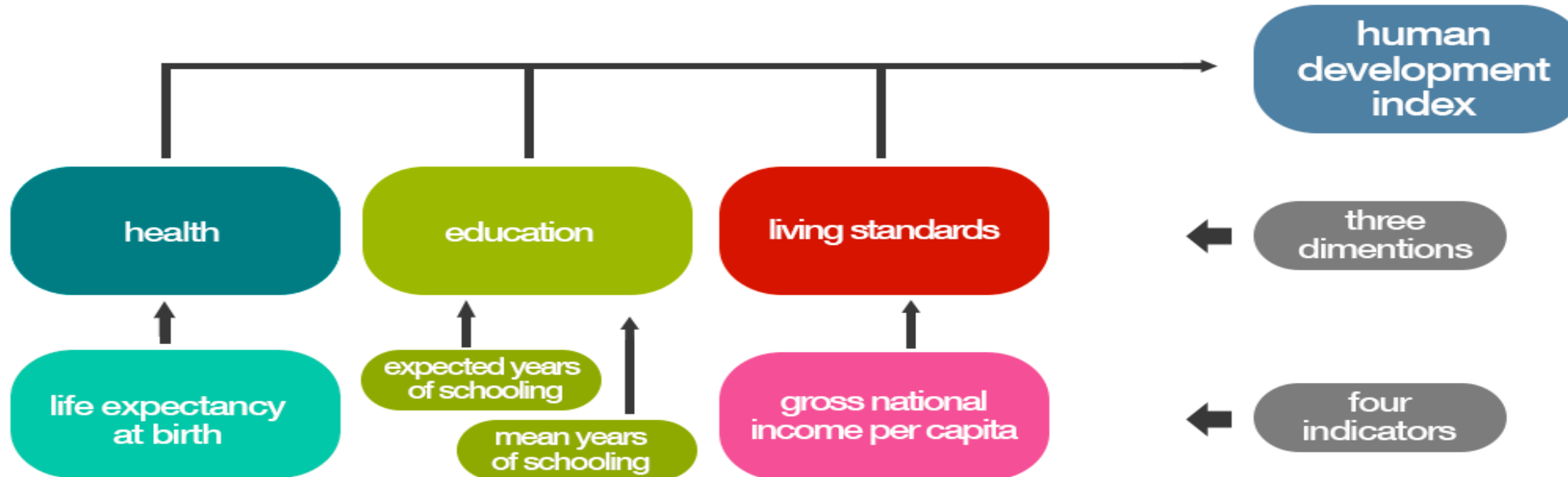


Source: Eustat. Human Development Index

II-The Human Development

components of the human development index

the HDI - three dimensions and four indicators

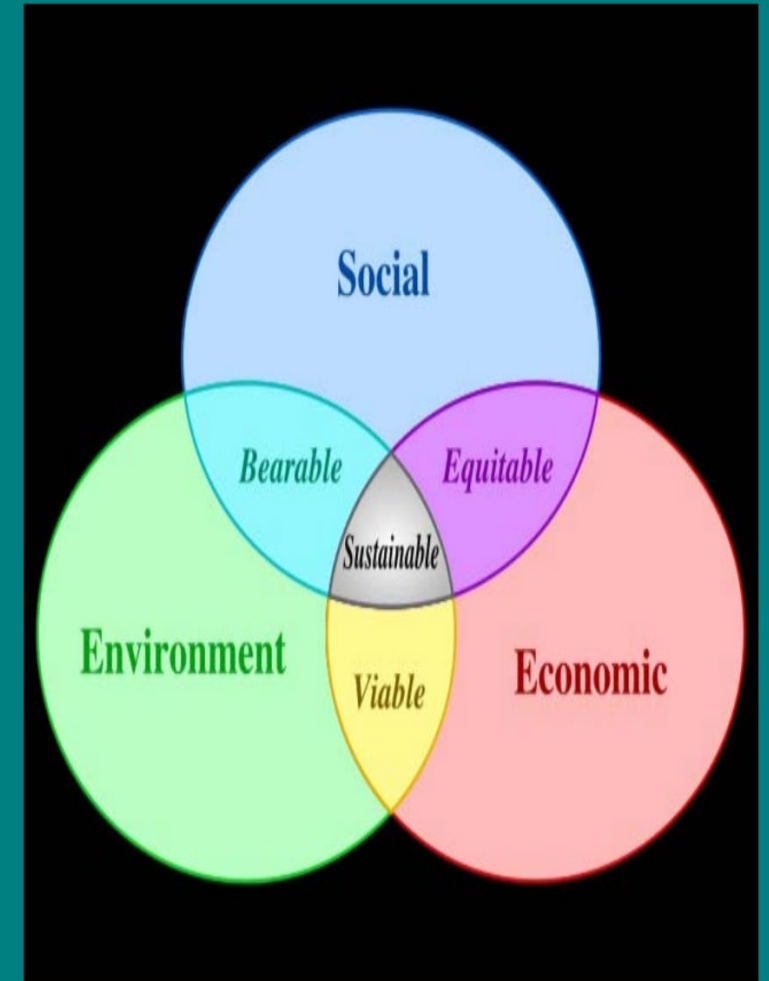


II-The Human Development

II- SUSTAINABLE DEVELOPMENT

Sustainable Development is an organizing principle for meeting human development goals while simultaneously sustaining the ability of natural systems to provide the natural resources and ecosystem services on which the economy and society depend.

What is Sustainable Development?



II-The Human Development

The Sustainable Development Goals (SDGs)

The 17 Sustainable Development Goals (SDGs) and their related 169 targets, which are at the heart of the UN's 2030 Agenda for Sustainable Development, provide a new policy framework worldwide towards ending all forms of poverty, fighting inequalities and tackling climate change, while ensuring that no one is left behind.

All 232 SDG Indicators: What data is available?

This visualization shows for which of the 230 Sustainable Development Goals (SDGs) Indicators data is available at [SDG-Tracker.org](https://sdg-tracker.org).

- = Indicators for which recent global official metrics are available, or for which alternative good-quality cross-country source are available (e.g. estimates from independent research institutes).
- = Indicators that do have official metrics, but for which available data is very incomplete or outdated. Yellow boxes also mark Indicators for which there are no official metrics, but for which closely related estimates are available that allow informative but imperfect monitoring.
- = Indicators for which – to the best of our knowledge – global monitoring is not currently possible.



1 NO
POVERTY



2 ZERO
HUNGER



3 GOOD HEALTH
AND WELL-BEING



4 QUALITY
EDUCATION



5 GENDER
EQUALITY



6 CLEAN WATER
AND SANITATION



7 AFFORDABLE AND
CLEAN ENERGY



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



10 REDUCED
INEQUALITIES



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



14 LIFE
BELOW WATER



15 LIFE
ON LAND



16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS



17 PARTNERSHIPS
FOR THE GOALS



SUMMARY

A

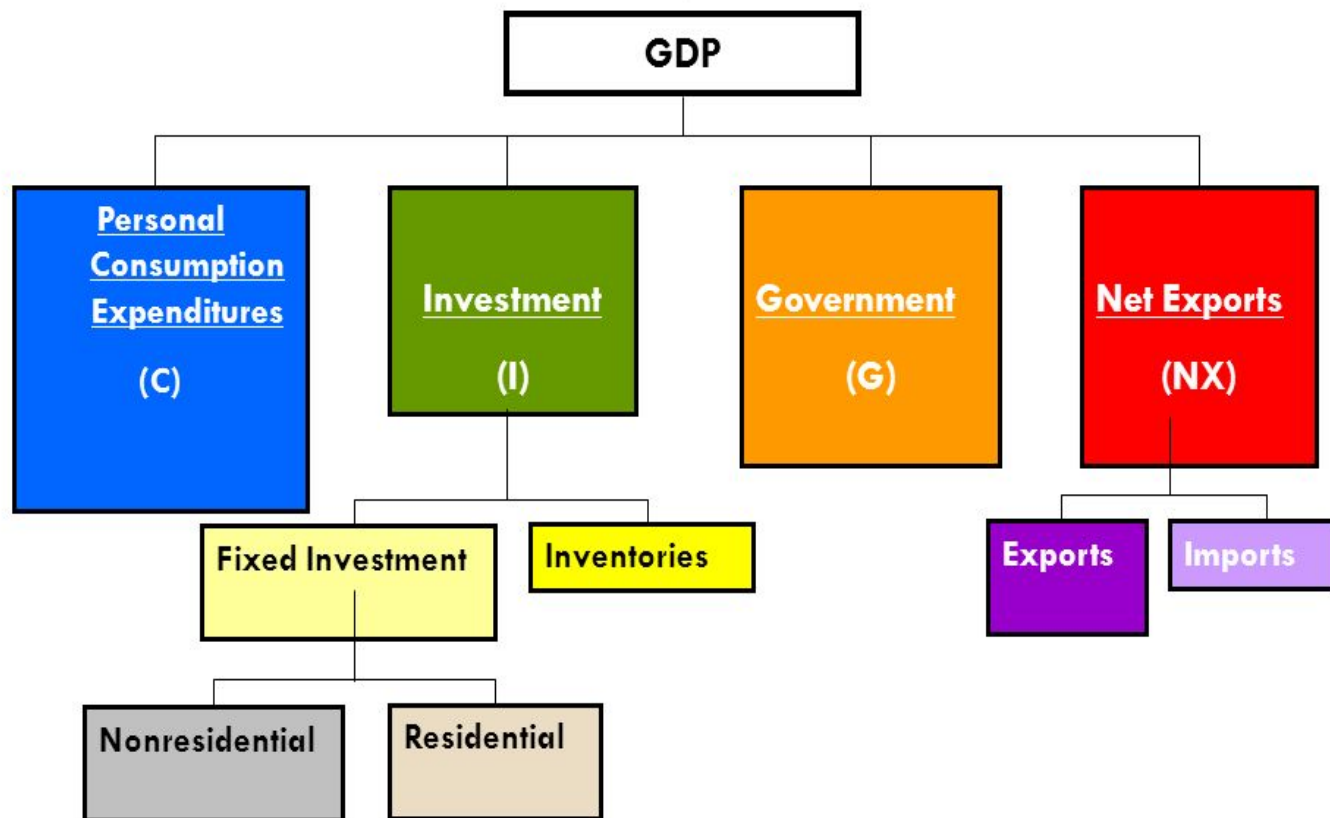
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Y

E

THE GDP COMPONENTS

What are the components of GDP?

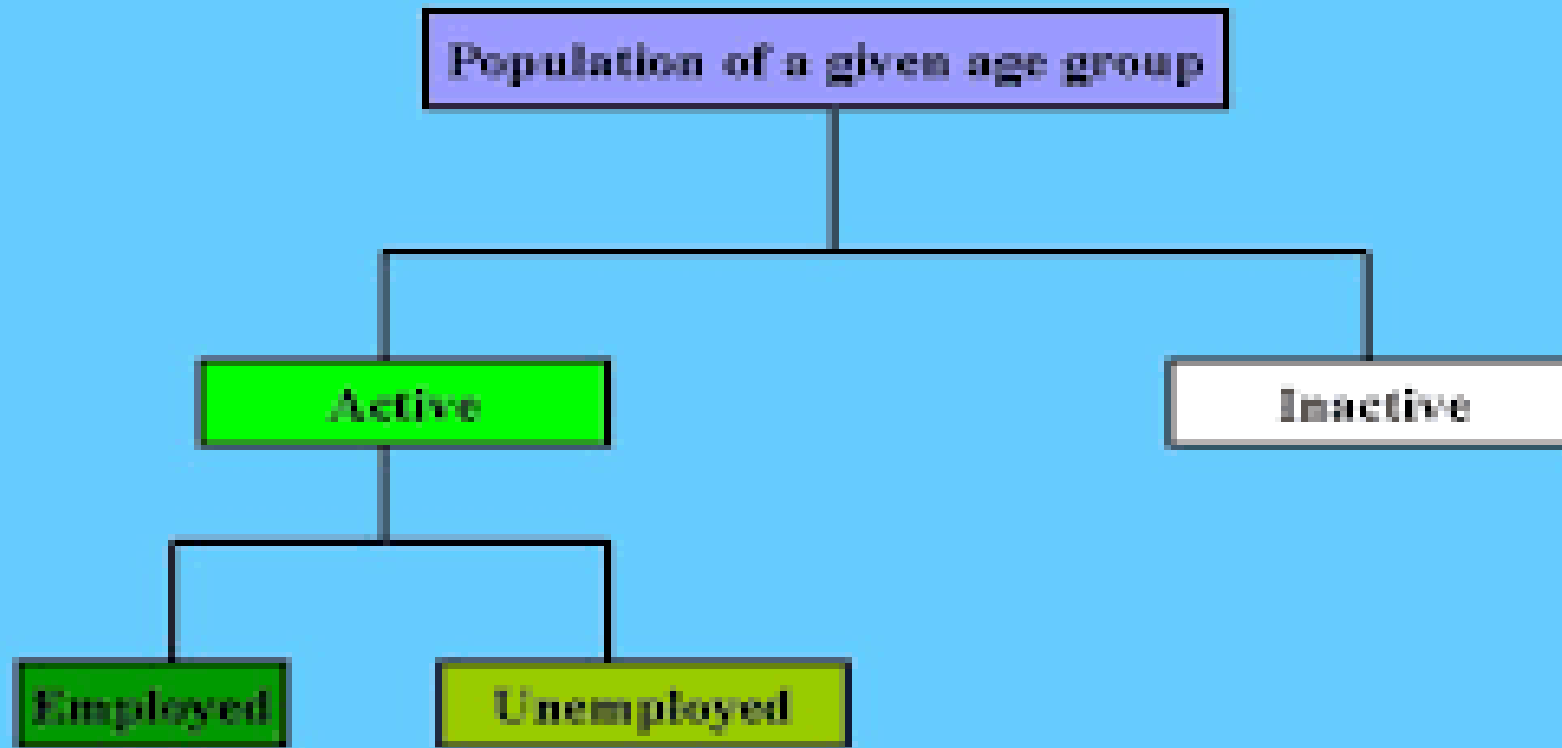


$$\text{GDP} = C + I + G + NX$$

Consumption, Savings &
Investment
G3

The UNEMPLOYMENT

Main categories

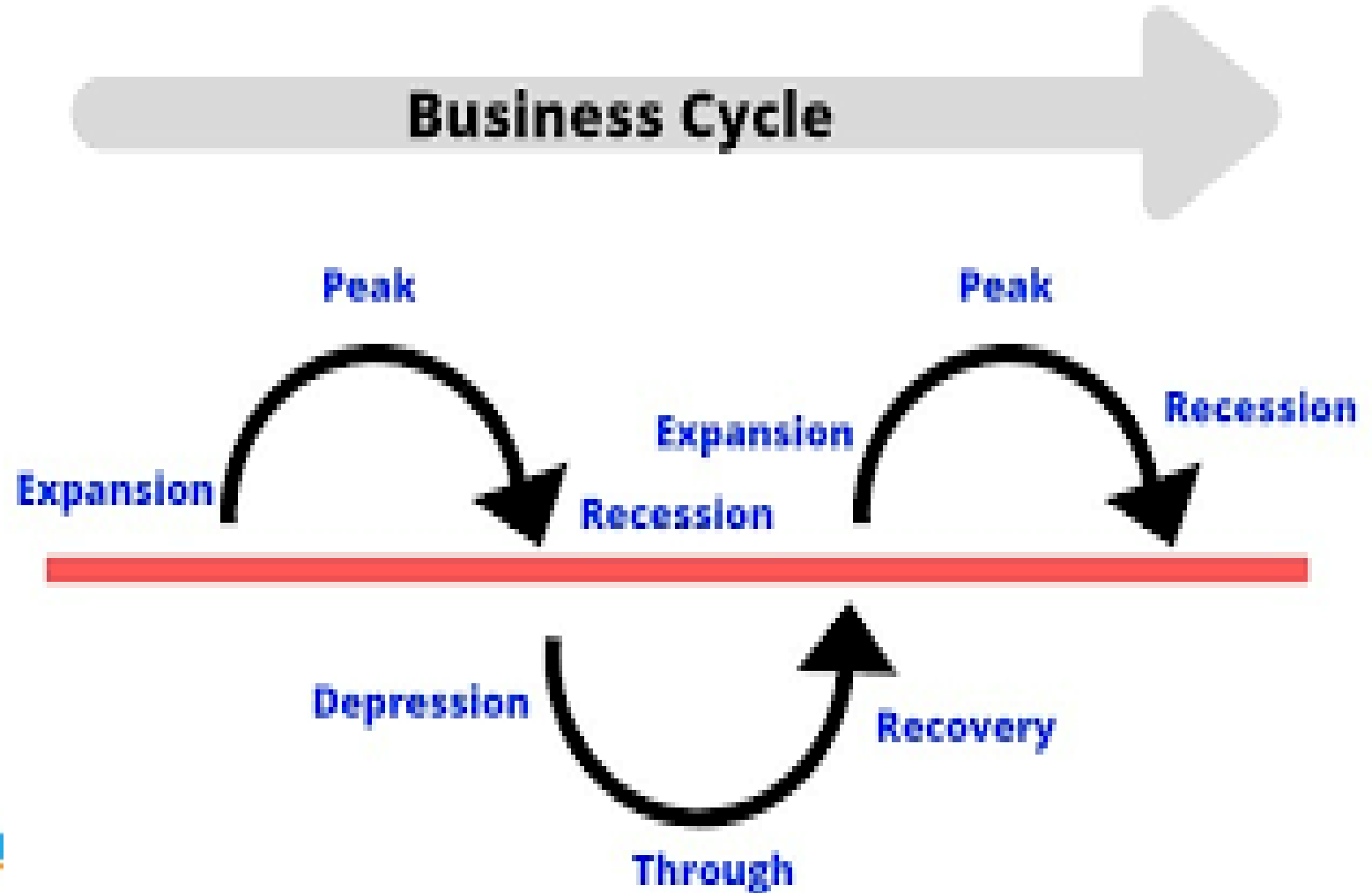
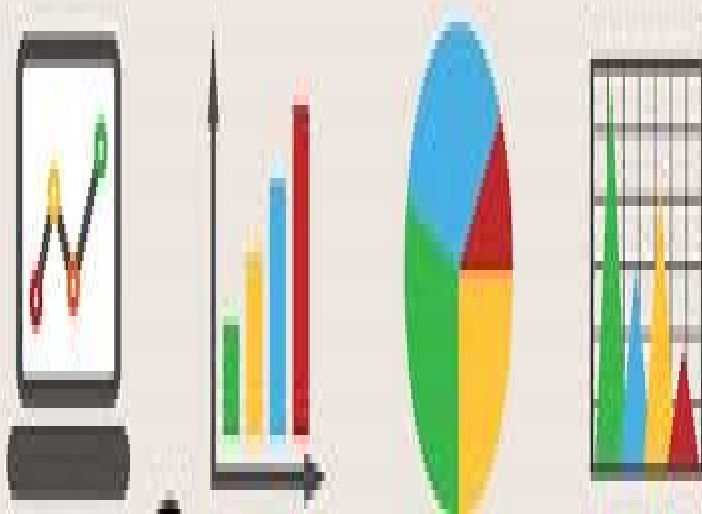


People looking for work
↓
$$\text{Unemployment Rate} = \frac{\# \text{Unemployed}}{\# \text{Labor Force}} \times 100$$

↑
people working + people looking for work

THE DIFFERENT GOVERNMENT POLICIES & The Business Cycle

Economic Policies



Globalisation





SUSTAINABLE DEVELOPMENT GOALS





Thank
You

The End