Macroeconomics

Learning outcome 5: Macroeconomic objectives and instruments

Macroeconomics

- Macroeconomics is a branch of economics that studies the behavior and functioning of the economy as a whole.
- The founder of macroeconomics is John Maynard Keynes (1883 - 1946) who in 1936 published the work "General Theory of Employment, Interest and Money" where the foundations of macroeconomics are given .
- Unlike microeconomics , which is based on the functioning of the market, macroeconomics is based on state regulation of the economy.

Basic questions:

Selection and functioning of the economic system, total production and employment, national income, general economic balance, general price level, inflation ...

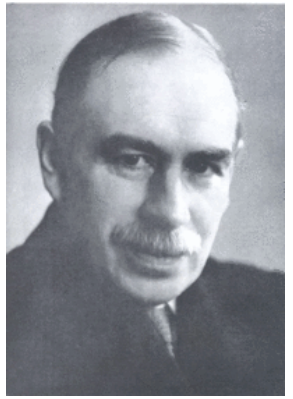
How did macroeconomics come about?

With the advent of the Great Depression, questions began to be asked more and more about how to solve economic crises. JM Keynes was the first to devise a theory that explained the elements that lead to economic fluctuations. He also suggested a way for the government to influence and control the extreme phases of the economic cycle..

The emergence of macroeconomics

- Macroeconomics was created in 1936 with the publication of JM Keynes' "General Theory of Employment, Interest and Money" (abbreviated "General Theory")
- Until the appearance of his book, economics was predominantly concerned with microeconomic problems.
- His work revolutionized economic theory, so there is often talk of a " Keynesian revolution."

Keynes



- English Economist (1883-1946)
- Erudite scholar of mathematics, philosophy, literature, economics
- He was an adviser to the British Ministry of Finance, worked as a bursar in Cambridge, helped run the Bank of England, edited the Economic Journal, collector of works of art and rare books, theater founder, husband of a Russian ballerina and speculator
- One of the few economists who made his fortune in stock market speculation
- The biggest contribution: a new look at macroeconomics and macroeconomic policy
- Before Keynes, cycles of prosperity and recession were considered inevitable
- Keynes argued that government fiscal and monetary policy could influence production/output, thus reducing unemployment and shortening periods of economic downturn.

Keynes and contemporaries

- Keynes's contemporaries believed that the tops and bottoms of economic cycles were inevitable and that there was no effective economic policy to combat them.
- They believed that the market mechanism automatically solves all problems
- Keynes dismissed those thoughts and said that state aid could reduce unemployment and increase production/output
- Measures of Keynesian macroeconomic policy were applied in all capitalist countries of the world, especially during the 50s and 60s of the XX century - then Keynesianism was considered a universal economic doctrine
- It received full recognition in 1946 when the US Congress passed the Employment Act - an act considered as the "birth of macroeconomics"

Employment Act

- US Congress for the first time formally proclaimed federal responsibility for macroeconomic performance.

The Congress hereby declares that it is the continuing policy and responsibility of the federal government to use all practicable means consistent with its needs and obligations . . . to promote maximum employment, production, and purchasing power.

The Crisis of Keynesianism and Milton Friedman

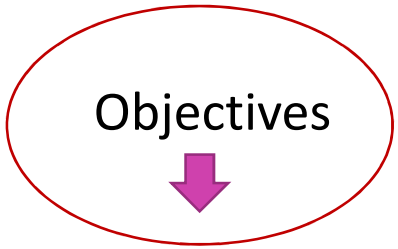
- Early 1970s (Vietnam War)
- Stagflation (stagnation + inflation) - the phenomenon of simultaneous growth of prices and unemployment
- Stagflation could not be solved by the measures of Keynesian economic policy -crisis of the Keynesian concept

- Milton Friedman, the 1976 Nobel laureate, his greatest opponent and advocate of liberalism emerged
  - The state should not interfere in the economy, business should be left to the free market
  - The Great Depression was not caused by the market failures, but by the incompetence of the government, especially the US Federal Reserve
  - The only economic means of influence is the control of the money supply - the monetarist view

Macroeconomics

- A science that studies the behavior of the economy as a whole
- It covers two basic topics:
  - Short-term fluctuations in production, employment and prices - business cycles
  - Longer-term trends in production and living standards - economic growth

Objectives and instruments of macroeconomics



- Output /Production
  - High level and rapid growth of production
- Employment
  - High level of employment with low involuntary unemployment
- Price stability / stable prices – Gentle or stable rise in prices

Instruments

- Monetary policy
  - Controlling the money supply, in order to determine interest rates
- Fiscal policy
  - Government expenditures and taxation

Macroeconomic objectives

Output/production

Output

- The ultimate goal of economic activity is to provide the goods and services that the people want
- The comprehensive measure of total output in the economy is GROSS DOMESTIC PRODUCT (GDP)
- GDP definition - the market value of all final goods and services produced in a country during one year

Two ways to measure GDP

- **Nominal GDP** - measured in actual market (current) prices, changes under the influence of both **price changes** and changes in the **physical volume** of production in the country
- **Real GDP** - calculated in constant or invariant prices and changes due to changes in the **physical volume** of production

- Real GDP trends are the most widely available measure of the level and growth of output.

- By observing the growth of real GDP, we are talking about economic growth achieved by a certain country

- - *Potential GDP* - long-term trend of real GDP; represents the maximum amount that a country's economy can produce while prices remain stable (also called production with a high level of employment). Potential output is determined by the economy's productive capacity, which depends upon the inputs available (capital, labor, land, etc.) and the economy's technological efficiency. Potential GDP tends to grow steadily because inputs like labor and capital and the level of technology change quite slowly over time.

Gdp deflator

$$\text{GDP deflator} = \frac{\text{Nominal GDP}}{\text{Real GDP}} \times 100.$$

- a measure of the price level calculated as the ratio of nominal GDP to real GDP times 100
- The GDP deflator is also an indicator of the price level and is one of the measures used by economists to monitor the average price level within a given economy , ie to determine the rise / fall of prices.
- The reason why we use real GDP is because economists are interested in how much the production (consumption) of goods and services in a given country has actually increased - excluding the impact of rising prices

Example: calculation of real GDP and GDP deflators and price level changes

TABLE 2

Real and Nominal GDP

This table shows how to calculate real GDP, nominal GDP, and the GDP deflator for a hypothetical economy that produces only hot dogs and hamburgers.

Year	Price of Hot Dogs	Quantity of Hot Dogs	Price of Hamburgers	Quantity of Hamburgers
Prices and Quantities				
2016	$1	100	$2	50
2017	$2	150	$3	100
2018	$3	200	$4	150

Calculating Nominal GDP	
2016	($1 per hot dog × 100 hot dogs) + ($2 per hamburger × 50 hamburgers) = $200
2017	($2 per hot dog × 150 hot dogs) + ($3 per hamburger × 100 hamburgers) = $600
2018	($3 per hot dog × 200 hot dogs) + ($4 per hamburger × 150 hamburgers) = $1,200
Calculating Real GDP (base year 2016)	
2016	($1 per hot dog × 100 hot dogs) + ($2 per hamburger × 50 hamburgers) = $200
2017	($1 per hot dog × 150 hot dogs) + ($2 per hamburger × 100 hamburgers) = $350
2018	($1 per hot dog × 200 hot dogs) + ($2 per hamburger × 150 hamburgers) = $500
Calculating the GDP Deflator	
2016	($200/$200) × 100 = 100
2017	($600/$350) × 100 = 171 ← Price level increased by 71% in 2017 compared to 2016
2018	($1,200/$500) × 100 = 240 ← Price level increased by 140% in 2018 compared to 2016

Recession, depression ...

- Recession
  - A period of significant decline in total production/output, incomes and employment
  - It usually lasts 6-12 months
  - General crises in various economic sectors
- Depression
  - Serious and long-lasting decline in economic activity – longer than 12 months

Employment

Employment

- The state has a goal to achieve high employment with low unemployment
- According to the standardized definition of the International Labor Organization (ILO), the unemployed are the people who:

- were without work during a reference period (usually four weeks), which means they were not in paid employment or self-employment

- were available for work

- were seeking work, which means they had taken specific steps in that period to seek paid employment or self-employment

- Unemployment rate - happens due to business cycles - Okun 's law

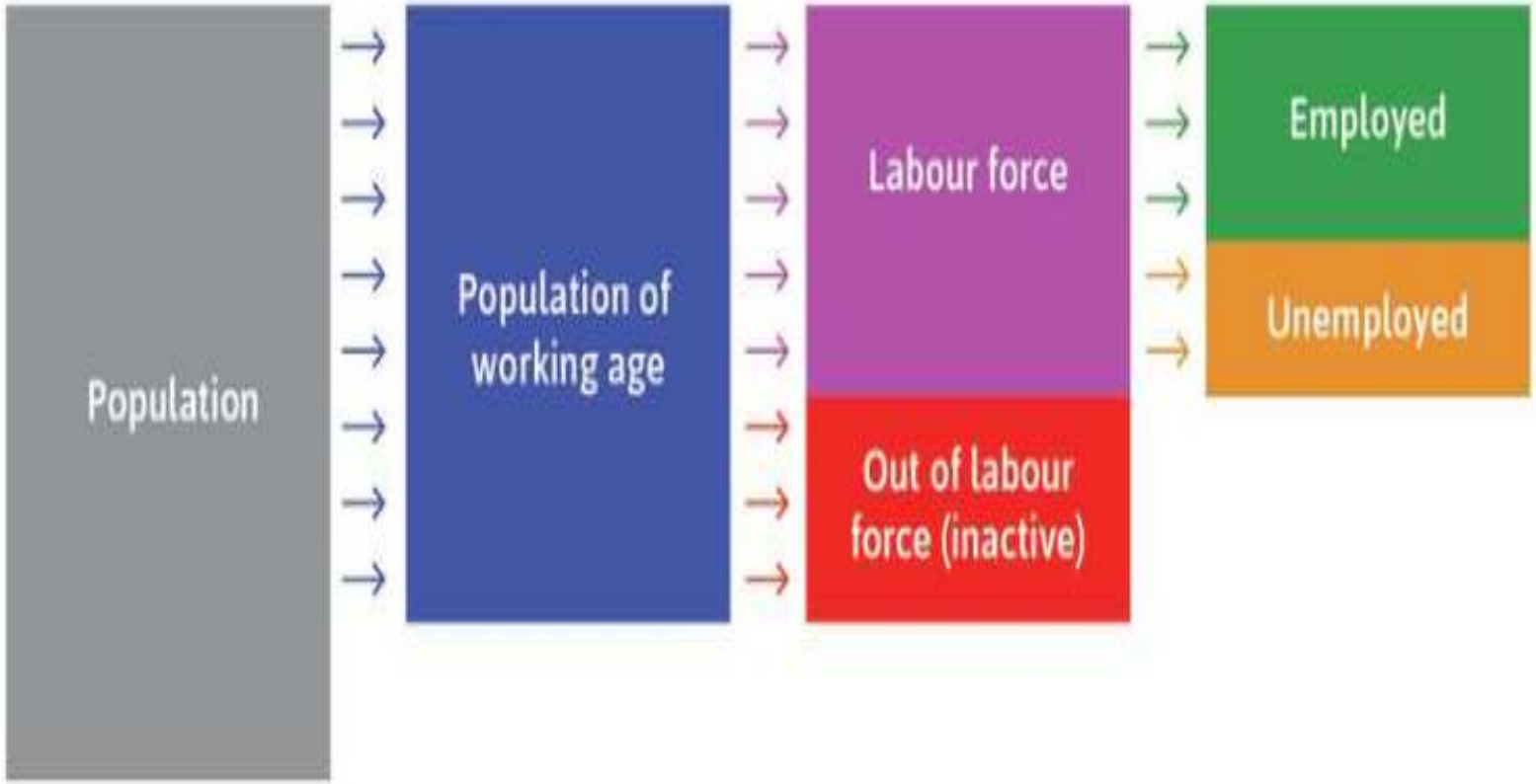
Okun's law The empirical regularity that GDP growth is negatively correlated with the unemployment rate . Arthur Okun , an advisor to US President Kennedy, noted that when a country's output growth was high, unemployment tended to decrease. Okun's law has been a strong and stable empirical relationship in most economies since the Second World War

POPULATION – STATISTICAL NUMBER OF TOTAL POPULATION IN THE COUNTRY, AS GIVEN BY OFFICIAL STATISTICAL MEASUREMENT (E.G. CENSUS)

POPULATION OF WORKING AGE – statistical convention, which in many countries is all people aged between 15 and 65 years. (sometimes between 20 and 64 and/or even 74)

LABOUR FORCE – The number of people in the population of working age who are, or wish to be, in work outside the household. They are either employed (including self-employed) or unemployed.

OUT OF LABOUR FORCE – INACTIVE) – People in the population of working age who are neither employed nor actively looking for paid work. Those working in the home raising children, for example, are not considered as being in the labour force and therefore are classified this way.


Population
Population of working age
Labour force
Out of labour force (inactive)
Employed
Unemployed

PARTICIPATION RATE – The ratio of the number of people in the labour force to the population of working age

$$\text{PARTICIPATION RATE/ACTIVITY RATE} = \frac{\text{EMPLOYED+UNEMPLOYED (LABOUR FORCE)}}{\text{POPULATION OF WORKING AGE}} \times 100$$

EMPLOYMENT RATE – The ratio of the number of employed to the population of working age; it shows the proportion of the population of working age that are in paid work or self-employed

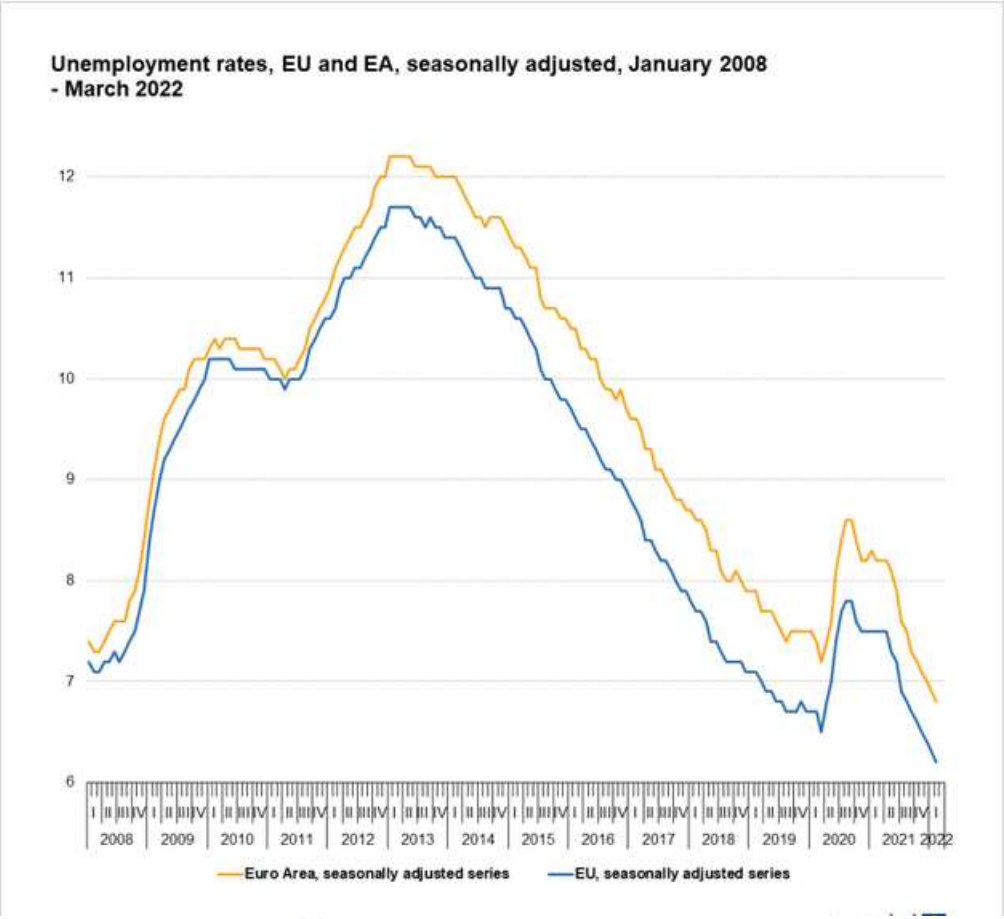
$$\text{EMPLOYMENT RATE} = \frac{\text{EMPLOYED}}{\text{POPULATION OF WORKING AGE}} \times 100$$

UNEMPLOYMENT RATE – The ratio of the number of the unemployed to the total labour force.

$$\text{UNEMPLOYMENT RATE} = \frac{\text{UNEMPLOYED}}{\text{LABOUR FORCE}} \times 100$$

Tweet Euro area unemployment at 6.8 % in March 2022.

Tweet EU unemployment at 6.2 % in March 2022.



Eurostat estimates that 13.374 million men and women in the EU[1], of whom 11.274 million in the euro area (EA)[2], were unemployed in March 2022. Compared with February 2022, the number of persons unemployed decreased by 85 000 in the EU and by 76 000 in the euro area. Compared with March 2021, unemployment decreased by 2.359 million in the EU and by 1.931 million in the euro area.

Price stability

Price stability

- The government should ensure that prices in the country are stable for a longer period of time
- **Inflation** is a general **increase** in prices, while **deflation** is a **decrease** in prices.
  When there is inflation in an economy, the value of money decreases because people would need to spend more money to buy the same products than before.
- **Deflation** is the opposite of inflation: the value of money increases and people would need to spend less money than previously for the same products.

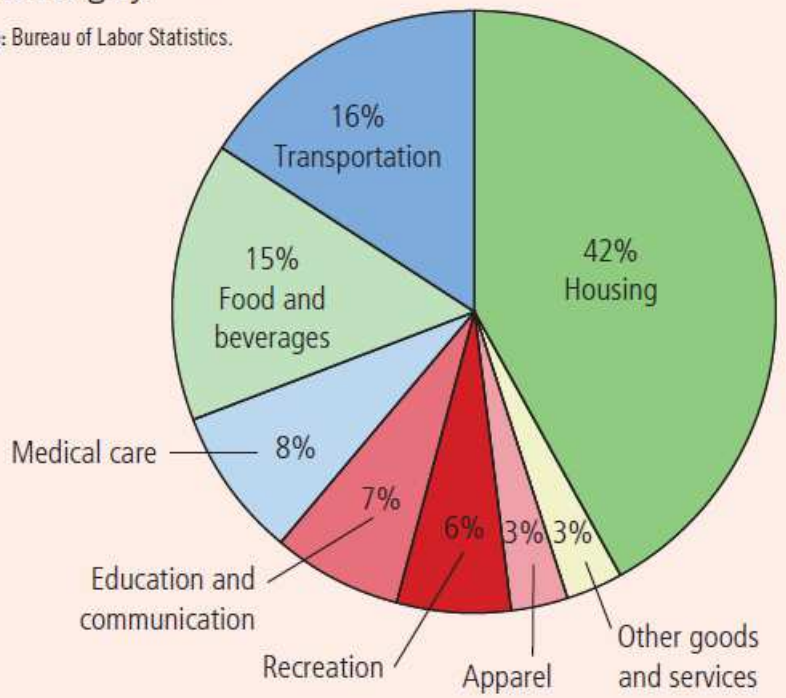
- As inflation is generally more common, the change in prices is often simply referred to as inflation .
- Hyperinflation - large increase in prices (eg 100%)
- Inflation is measured through **consumer price indices (CPI)** , which show the development over time of prices of goods and services paid by people (consumers). In other words, **a price index compares the prices of a set of products at different points in time** . A price index shows how much must be paid for a product at one point in time relative to what would have been paid for the same product at another point in time.
- **CPI on top of GDP deflator is one more measure of price changes in society !**

Example

The Typical Basket of Goods and Services

This figure shows how the typical consumer divides spending among various categories of goods and services. The Bureau of Labor Statistics calls each percentage the "relative importance" of the category.

Source: Bureau of Labor Statistics.



Within the EU, expenditure needed for purchasing a set of goods and services by consumers are structured using the classification of individual consumption by purpose, abbreviated **COICOP**. In general, every type of good and service that consumers can buy is included in this classification. It is made up of 12 divisions, coded from 01 to 12 (see Box 1 for the full list), each of which is analysed in more detail — see Box 2 for a detailed example concerning expenditure on transport.

Box 1: Codes and labels for COICOP divisions

01 Food and non-alcoholic beverages

02 Alcoholic beverages, tobacco and narcotics

03 Clothing and footwear

04 Housing, water, electricity, gas and other fuels

05 Furnishings, household equipment and routine household maintenance

06 Health

07 Transport

08 Communications

09 Recreation and culture

10 Education

11 Restaurants and hotels

12 Miscellaneous goods and services

- In the euro area, consumer price inflation is measured by the “Harmonized Index of Consumer Prices”, often referred to by its acronym of “HICP”. The term “harmonized” denotes the fact that all countries in the European Union follow the same methodology. This ensures that the data for one country can be compared with the data for another.

How is the HICP calculated?

1. **Collecting prices** – Every month, around 1.8 million prices are collected by price observers in more than 200,000 shopping outlets. This happens in nearly 1,600 cities and towns across the euro area. Prices are collected in each country for, on average, around 700 representative goods and services. The exact number of items sampled differs from country to country. For each product, several prices are collected from different outlets and in different regions. Example: book prices take account of various categories of books (fiction, non-fiction, reference, etc.) sold in book shops, supermarkets and by internet suppliers.

2. **Weighting product groups** – Product groups are weighted according to their importance in average household budgets. To make sure the index remains relevant and reflects changing spending patterns, the weights are updated regularly. They are calculated based on the results of surveys in which households are asked to record what they spend their money on. The weights are national averages that reflect the expenditure of all types of consumer (rich and poor, young and old, etc.).

3. **Weighting countries** – Countries are weighted according to their share in total euro area consumption expenditure.

Examples

While Markus in Germany likes to buy vegetables and cheese from the supermarket as part of his grocery shopping, Giulia in Italy prefers to purchase fruit, meat and pasta.

While Annika in Sweden spends a high share of her money on heating her flat, Miguel in Spain spends a greater share of his money on electricity for air conditioning and water for the vegetables he grows in his garden.

Table 1 shows the categories within the transport division of COICOP for Spain and Poland. Rather than showing the value of consumption expenditure in euro or złoty, this table shows the relative importance (**weight**) of each of these transport headings within total household consumption expenditure. The weights are shown as a value which, when all of the weights for Divisions 01 to 12 have been put together, equals 1 000. In other words, these weights are calculated per mille, which is like percentages except that the total adds up to 1 000 rather than 100. For expenditure on transport as a whole, the weight in Spain in 2016 was 148.05 ‰ (approximately 14.8 %); in Poland the weight was 114.93 ‰ (approximately 11.5 %).

Code	COICOP label	Spain	Poland
01 to 12	**All items**	**1 000.00**	**1 000.00**
07	**Transport**	**148.05**	**114.93**
07.1	**Purchase of vehicles**	**42.29**	**37.24**
07.1.1	Motor cars	40.24	28.02
07.1.1.1	*New motor cars*	*35.12*	*22.87*
07.1.1.2	*Second-hand motor cars*	*5.12*	*5.15*
07.1.2	Motor cycles	1.64	2.89
07.1.3	Bicycles	0.41	6.34
07.1.4	Animal drawn vehicles	0.00	0.00
07.2	**Operation of personal transport equipment**	**89.89**	**63.82**
7.2.1	Spare parts and accessories for personal transport equip.	1.68	4.83
07.2.1.1	*Tyres*	*1.01*	*1.08*
07.2.1.2	*Spare parts for personal transport equipment*	*0.67*	*2.66*
07.2.1.3	*Accessories for personal transport equipment*	*0.00*	*1.09*
07.2.2	Fuels and lubricants for personal transport equipment	63.54	36.44
07.2.2.1	*Diesel*	*34.95*	*9.62*
07.2.2.2	*Petrol*	*28.28*	*22.40*
07.2.2.3	*Other fuels for personal transport equipment*	*0.00*	*4.02*
07.2.2.4	*Lubricants*	*0.32*	*0.40*
07.2.3	Maintenance and repair of personal transport equipment	20.45	16.78
07.2.4	Other services in respect of personal transport equipment	4.21	5.77
07.2.4.1	*Hire of garages, parking spaces & personal transp.*	*0.34*	*0.76*
07.2.4.2	*Toll facilities and parking meters*	*1.56*	*1.11*
07.2.4.3	*Driving lessons, tests, licences and road worthiness*	*2.31*	*3.90*
07.3	**Transport services**	**15.87**	**13.87**
07.3.1	Passenger transport by railway	2.17	2.70
07.3.1.1	*Passenger transport by train*	*1.78*	*2.36*
07.3.1.2	*Passenger transport by underground and tram*	*0.39*	*0.34*
07.3.2	Passenger transport by road	6.95	6.91
07.3.2.1	*Passenger transport by bus and coach*	*5.40*	*5.74*
07.3.2.2	*Passenger transport by taxi and hired car with driver*	*1.55*	*1.17*
07.3.3	Passenger transport by air	3.61	1.61
07.3.3.1	*Domestic flights*	*2.04*	*0.03*
07.3.3.2	*International flights*	*1.57*	*1.58*
07.3.4	Passenger transport by sea and inland waterway	0.35	0.04
07.3.4.1	*Passenger transport by sea*	*0.35*	*0.02*
07.3.4.2	*Passenger transport by inland waterway*	*0.00*	*0.01*
07.3.5	Combined passenger transport	2.79	2.30
07.3.6	Other purchased transport services	0.00	0.32
07.3.6.1	*Funicular, cable-car and chair-lift transport*	*0.00*	*0.05*
07.3.6.2	*Removal and storage services*	*0.00*	*0.05*
07.3.6.9	*Other purchased transport services n.e.c.*	*0.00*	*0.22*

Source: Eurostat (online data code: prc_hicp_inw)

CPI and Inflation rate

Step 1: Survey Consumers to Determine a Fixed Basket of Goods

Basket = 4 hot dogs, 2 hamburgers

Step 2: Find the Price of Each Good in Each Year

Year	Price of Hot Dogs	Price of Hamburgers
2016	$1	$2
2017	2	3
2018	3	4

Step 3: Compute the Cost of the Basket of Goods in Each Year

2016	($1 per hot dog × 4 hot dogs) + ($2 per hamburger × 2 hamburgers) = $8 per basket
2017	($2 per hot dog × 4 hot dogs) + ($3 per hamburger × 2 hamburgers) = $14 per basket
2018	($3 per hot dog × 4 hot dogs) + ($4 per hamburger × 2 hamburgers) = $20 per basket

Step 4: Choose One Year as a Base Year (2016) and Compute the CPI in Each Year

2016	($8/$8) × 100 = 100
2017	($14/$8) × 100 = 175
2018	($20/$8) × 100 = 250

Basket of goods which was in 2016 $ 100, in 2017 is $ 175.

Basket of goods which was in 2016 $ 100 in 2018 is $ 250.

Step 5: Use the CPI to Compute the Inflation Rate from Previous Year

2017	(175 – 100)/100 × 100 = 75%
2018	(250 – 175)/175 × 100 = 43%

TABLE 1

Calculating the Consumer Price Index and the Inflation Rate: An Example

This table shows how to calculate the CPI and the inflation rate for a hypothetical economy in which consumers buy only hot dogs and hamburgers.

$$\text{Consumer price index} = \frac{\text{Price of basket of goods and services in current year}}{\text{Price of basket in base year}} \times 100.$$

$$\text{Inflation rate in year 2} = \frac{\text{CPI in year 2} - \text{CPI in year 1}}{\text{CPI in year 1}} \times 100.$$

As shown at the bottom of Table 1, the inflation rate in our example is 75 percent in 2017 and 43 percent in 2018.

Two methods of measuring price changes

- CPI
- GDP deflator
- CPI and GDP deflator usually go in similar direction, however there are differences in calculation. See PDF document on Infoeduka - lectures .
- https : // www.youtube.com/watch?v=Rv5UDHWhgHE - additional material for those who wish to know more

HICP EU

- https://portal.dataviz.ecb.europa.eu/views/HICP_dashboard_ETS_1604939111218O/InflationDashboard?:showAppBanner=false&:display_count=n&:showVizHome=n&:origin=viz_share_lizRedal_

Which is why price stability is important

- It throws a well-established market system out of balance
- Costs are rising
- Taxes are subject to change
- The real value of wages and pensions is changed

Achieving macroeconomic goals

- It is not possible to achieve all the desired macroeconomic goals at the same time, eg price stability (ie low inflation) and high employment rates
- Therefore, economic policy makers must make a choice (trade off) among economic goals, where their decision is determined by political and social factors.

Macroeconomic instruments

Instruments of macroeconomic policy

- A policy instrument is a government-controlled economic variable that can affect one or more macroeconomic objectives
- By changing monetary, fiscal, and other policies, governments can avoid the worst excesses of the business cycle or increase the growth rate of output.

Macroeconomic instruments are

- FISCAL POLICY
- Government expenditures and taxation
- MONETARY POLICY
- Controlling the money supply to determine interest rates

Fiscal policy

- Part of the so called public finance
- The use of fiscal instruments (taxes and expenditures) affects the achievement of economic policy objectives (eg employment, inflation, etc.)
- It can be analyzed from different points of view:

–According to instruments: government expenditures and taxes

–According to the method of implementation: discretionary (or current) fiscal policy and fiscal policy of built-in automatic stabilizers

Fiscal policy - according to the method of implementation

- **Discretionary or ongoing fiscal policy**

- Conscious state regulation of its consumption and tax activities in order to eliminate economic disturbances and ensure maximum employment with the lowest possible inflation (eg Covid19 government support in 2021 – grants, extended tax paying time etc.)

- **Built-in or automatic stabilizers**

- Elements that automatically, without human intervention, act in the direction of stabilizing the economy

- These are, for example, unemployment benefits, social assistance, subsidies programs in agriculture and the overall structure of taxes as prescribed by law (the most important element, and relates to the ratio of income and tax)

Fiscal policy - according to instruments

- **Taxation (revenue) and government expenditure (expenditure)**
- **Taxation**

- Taxes affect citizens' incomes; taxes represent revenue for government

1. The size of income affects consumption and savings

• Consumption and savings affect investment and production

2. Taxes affect commodity prices and factors of production

• They can be formed to encourage or prevent certain behaviors -

• Affect economic activity

- A reduction in taxes leads to an increase in disposable income, which affects the increase in personal consumption (depending on the propensity to spend), and thus increases investment, and consequently employment
- Reduction of business taxes lead to more consumption and investment by companies as well

- **Government expenditures consist of:**

1. Government purchases - consumption of goods and services, salaries of public servants - e.g judges, teacher, doctors

2. Transfer payments - pensions, unemployment benefits

- government expenditure also affects the general level of consumption in the economy, and thus the level of GDP

- It is often used to eliminate the recession… mainly includes public works (facilities of common interest, infrastructure, etc.)

Example of govt. purchase and effect on economy

When the government buys $20 billion of goods from Boeing, that purchase has repercussions. The immediate impact of the higher demand from the government is to raise employment and profits at Boeing.
Then, as the workers see higher earnings and the firm owners see higher profits, they respond to this increase in income by raising their own spending on consumer goods.
As a result, the government purchase from Boeing raises the demand for the products of many other firms in the economy.

- tax cuts have less of an impact on economic activity growth than increases in government expenditures
- Reason: people have propensity to save and propensity to spend – surplus income due to lowering income tax for households thus will not be spend in its entirety, some will be saved; only the part that is focused on consumption has a positive effect on the economy as a whole
- When we speak of government expenditure, larger part of that amount is directed to consumption

Monetary policy

- Management of state money, credit and banking system by the governments
- It is mainly based on the treatment of interest as an important instrument of economic policy
- Monetary policy is implemented by the Central Bank of each country, whose basic function is to supervise the supply of money and credit in the country
- The central bank can regulate the amount of money available to the economy
- This affects interest rates, exchange rates, etc.

The principle of monetary policy

- **When economic activity declines, it is necessary to increase the money supply and credit**
- **When the growth of total consumption begins to cause inflation, the supply of money and credit should be reduced**
- *Limiting the money supply raises interest rates and reduces investment, leading to falling GDP and lower inflation.*
- *Increasing the money supply and lowering interest rates stimulates economic activity.*

The basic duties (functions) of central banks are:
1. issuing banknotes and coins and maintaining existing and introducing new payment instruments
2. control of the amount of money in circulation (money supply)
3. regulating the general liquidity of banks and other financial organizations
4. control of banks and other financial organizations
5. care for maintaining the liquidity of the country in relation to foreign countries

The central banks perform their functions related to the implementation of economic policy through three basic instruments: a) open market operations b) discount rate policy c) reserve requirement policy

Open market operations

- Open market operations conducted by the central bank by buying or selling securities (e.g. shares, bonds etc.) to commercial banks (or other buyers)
- Thus, it can expand or narrow the credit potential of commercial banks
  - Every purchase means an increase in the money supply – e.g. central bank buys securities from the commercial banks thus giving extra money to the banks which they can use to give loans
  - Each sale reduces the money supply – e.g. central bank sells securities to the commercial banks which pay with money they have, thus lowering the supply of money available for loans

Discount rate policy

- Discount rate = interest rate at which the central bank repurchases securities (e.g. bonds, shares) of commercial banks or charges interest on loans granted to commercial banks
- Changes in the amount of the discount rate affect the change in interest rates in the credit market and the demand for loans
- During a recession, the discount rate decreases in order to create easier credit conditions, while in times of inflation the situation is reversed.

Reserve requirement policy

- The central bank decides on the reserve requirement rate i.e. how much money the banks have to hold on as reserve in a separate account administered by central bank- thus regulating the loan offer
- Increasing reserves reduces the money supply, banks can place fewer loans, so the interest rate increases - this leads to a decline in total investment (loans are more expensive), so the companies and households are decreasing their borrowing activities – consumption decreases