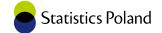


# **Inflation in the Visegrad Group**











**Domain:** Comprehensive publications

Release date: June 2023

#### Prepared by:

Statistical Office of the Slovak Republic Product Portfolio and Communication Department

in cooperation with statistical offices Czech Statistical Office Hungarian Central Statistical Office Statistics Poland

Statistical Office of the Slovak Republic Information service Lamačská cesta 3/C 840 05 Bratislava 45 **Telephone**: +421 2 50236 339 **E-mail**: info@statistics.sk

www.statistics.sk

ISBN 978-80-8121-950-4 (online)

Copying contents of this publication either whole or single parts, both in original and adjusted form for commercial purposes is possible only unless the Statistical Office of the Slovak Republic gives written permission. Data of this publication can be used only with identification of the source.

# CONTENTS

Prefa	ce	6
1. Comprehensive information		10
	1.1 General information	12
	1.2 Selected geographical facts	14
<b>2</b> . Ecc	onomic development	16
	2.1 Indicators of economic development	18
<b>3.</b> Inf	lation - development of consumption prices	22
	3.1 National and harmonized inflation	24
	3.2 Consumer baskets	28
	3.3 Consumer prices by divisions	32
4. Selected groups of consumer basket		38
	<b>4.1</b> Food	40
	4.2 Housing and energy	46
	4.3 Transport	50



**Marek Rojíček**President
Czech Statistical Office





**Gabriella Vukovich**President
Hungarian Central
Statistical Office

pruside pruiella



**Dominik Rozkrut**President
Statistics Poland

Gerland



Peter Petko
President
Statistical Office
of the Slovak Republic

1-600

## Dear readers,

The countries of the Czech Republic, Hungary, Poland and the Slovak Republic have been cooperating for a long time in the field of political, economic and social life and together form the so-called Visegrad Group block. A substantial part of the activities of this cooperation is implemented in the form of cross-border projects. Above-standard mutual cooperation is also set up in the field of official statistics, through the cooperation of national statistical offices. Experts have been communicating with each other since 1991, sharing experiences, supporting joint projects, solving problematic issues and challenges. Common topics within statistical areas are also formally reflected in the "Memorandum of Understanding on Cooperation between the Statistical Offices of the Visegrad Group countries", in which new areas of mutual cooperation are specified every year.



Slovakia chaired the Visegrad Group - from July 2022 to the end of June 2023.

The economic development after the COVID-19 pandemic was mainly marked by the rapid dynamics of price growth - inflation. The population's living costs reached new historic highs, especially during the years 2022 and 2023, and until now they are a challenge for political and financial authorities who are trying to moderate this growth.

The cooperation of the V4 statistical experts focused, among other things, on price growth and inflation indicators. A professional workshop focused on the introduction of innovations and new methods for measuring price growth, held in April 2023, enabled the exchange of valuable experience. Thus it will contribute to the improvement of statistical products, necessary for making effective and useful decisions.

The topic of inflation was also chosen for the publication "Inflation in the Visegrad Group". The current price growth in the V4 countries has been among the highest averages of the EU member states in recent months and is well above the EU. Therefore, both professional and lay users increased the demand for statistical products in this field.

The publication offers answers to many questions, for example: How did the prices of food, fuel and transport develop in the Visegrad Four countries? Is the growth of inflation already at its maximum and are there already any signs of changes in the development trend? How do 'national' and 'harmonised' inflation differ?

We believe that the selected statistics presented in an attractive and easy-to-read form will be useful both for laymen and experts.



# From the history of the Visegrad Group

#### 1335 - meeting of the three monarchs

A meeting of the Polish, Bohemian and Hungarian kings took place at the Visegrad castle, at that time a prominent seat of the Hungarian kings. An agreement was established on close cooperation in the field of politics and trade, and a follow-up successful Central European cooperation started to be built.

#### 1991 - meeting of the three government officials

The meeting of the President of the Czech and Slovak Federal Republic, the President of the Republic of Poland and the Prime Minister of the Republic of Hungary was held in the North Hungarian town, Visegrad. A grouping of three countries was formed, the so-called "Visegrad Triangle" and a declaration on mutual cooperation towards European integration was signed.

#### 1993 - formation of the Visegrad Four

After the dissolution of Czechoslovakia, the group has been extended to four countries - the Visegrad Four. It currently consists of the Czech Republic, Hungary, Poland and the Slovak Republic.

#### 2023

The Visegrad Group forms an active regional structure with similar socioeconomic, economic and cultural-historical values. Its goal is to strengthen and coordinate joint positions and opinions on current issues of foreign and European policy, regional development, economic and cultural cooperation.









# 1.1 General information



**311** 928 km<sup>2</sup> **37** 654 247 inhabitants<sup>1)</sup> 8.4 % of the EU27 population 122.9 inhabitants / km²



78 871 km²
10 516 707 inhabitants<sup>1)</sup> **2.4** % of the EU27 population 136.1 inhabitants / km²



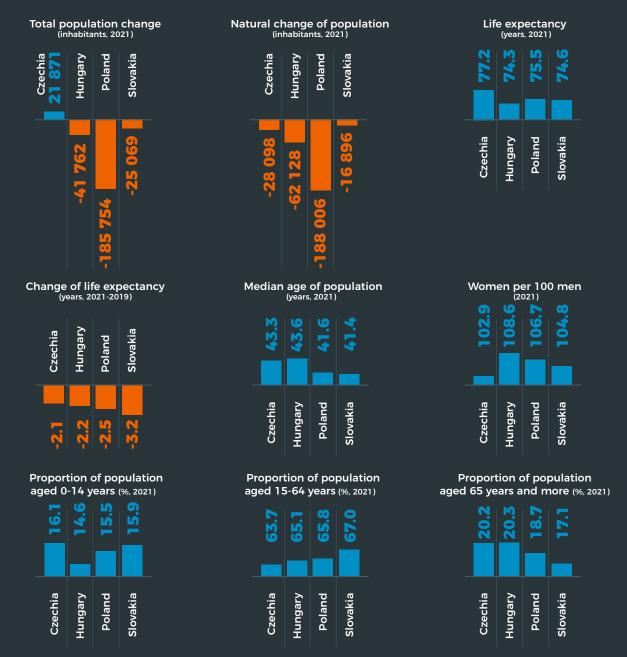
49 035 km<sup>2</sup> 5 434 712 inhabitants<sup>1)</sup> 1.2 % of the EU27 population inhabitants / km²



93 012 km<sup>2</sup> 9 689 010 inhabitants<sup>1)</sup> 2.2 % of the EU27 population 106.4 inhabitants / km²



#### 1. Comprehensive information I 1.1 General information



# 1.2 Selected geographical information

## The highest point

GERLACHOVSKÝ ŠTÍT 2 655 m Slovakia

RYSY 2 499 m Poland

SNĚŽKA 1 602 m Czechia

KÉKES 1 014 m Hungary

## The longest river

VISTULA 1 022 km Poland

TISZA 597 km Hungary

VLTAVA 433 km Czechia

VÁH 406 km Slovakia

### The largest lake

BALATON 600 km<sup>2</sup> Hungary

ŚNIARDWY 113.4 km² Poland

HINCOVO PLESO 0.201 km<sup>2</sup> Slovakia

ČERNÉ JAZERO 0.184 km² Czechia

## The longest cave

Demänova cave system 30 km

Baradla Domica cave system 25 km

Wielka Śnieżna 24 km

Koněpruská 2 km (



## Area of wooded land (2020)



Slovakia



**Czechia** 



Poland



## Natura 2000 protected areas (2020)

29.8 % Slovakia

21.4 % Hungary

19.6 % Poland

14.1<sub>%</sub> Czechia

## **World Heritage Sites on the UNESCO list**

17 Poland

16 Czechia

8 Hungary

8 Slovakia







# 2.1 Indicators of economic development

**Gross domestic product (GDP)** is a measure of the economic activity, defined as the value of all goods and services produced less the value of any goods or services used in their creation.

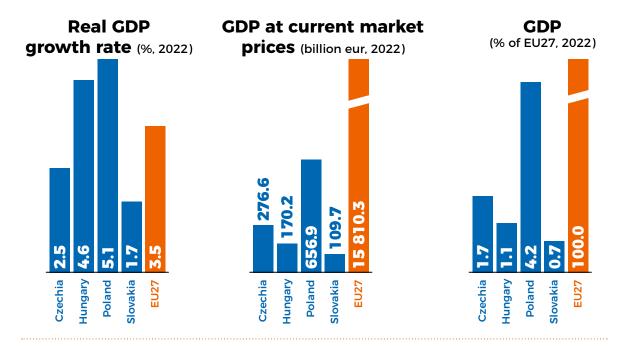
**Government finance statistics** contain crucial indicators for determining the health of the economies of the EU Member States. Under the terms of the EU's Stability and Growth Pact (SGP), Member States pledged to keep their deficits below certain limits.

International trade in goods statistics measure the value and quantity of goods moving between the EU Member States and goods traded by the EU Member States with non-EU countries. Goods means all movable property including electricity. **The production index** measures changes in the volume of output. It provides a measure of the volume trend in value added over a given reference period.

**Unemployment rate** represents unemployed persons as a percentage of the labour force. The labour force is the total number of people employed and unemployed. Unemployed persons comprise persons aged 15 to 74.

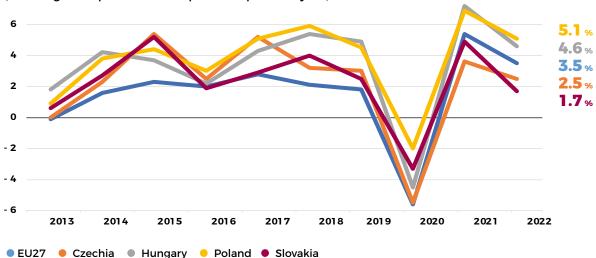
**The employment rate** represents employed persons as a percentage of the population in the same age group. Employed persons are all persons who worked at least one hour for pay or profit during the reference week or were temporarily absent from such work.

#### 2. Economic development I 2.1 Indicators of economic development



#### **Real GDP growth rate**

(% change compared to same period in previous year)



**Source**: Eurostat database, data extraxtion by 20 June, 2023, n.a not available NAMA 10R 3GDP

#### **Production in industry**

(% change compared to same period in previous year, 2022)

Czechia

Hungary

Poland

Slovakia

EU27

2.5

5.7

11.0

-3.7

**3.2** 

#### **Production in construction**

(% change compared to same period in previous year, 2022)

Czechia

Hungary

Poland

Slovakia

EU27

2.6

3.3

8.2

-1.1

2.7

#### **Buildings**

(% change compared to same period in previous year, 2022)

Czechia

Hungary

Poland

Slovakia

**EU27** 

2.3

6.6

11.1

-0.2

2.7

#### **Civil engineering works**

(% change compared to same period in previous year, 2022)

Czechia

Hungary

Poland

Slovakia

**EU27** 

**3.2** 

-1.1

3.3

0.1

2.5

#### **Imports**

(billion eur, 2022)

Czechia

Hungary

Poland

Slovakia

EU27

224.8

156.4

362.5

106.9

n.a.

#### **Exports**

(billion eur, 2022)

Czechia **230.1** 

Hungary 144.1

Poland **342.9** 

Slovakia

EU27

102.4

n.a.

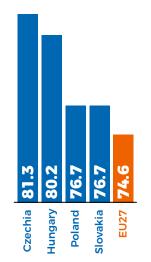
Source: Eurostat database, data extraxtion by 20 June, 2023, n.a. not available EXT LT INTERTRD, STS INPR A. STS COPR A

#### Government deficit/ surplus (% od GDP, 2022)

# -3.6 Czechia -6.2 Hungary -3.7 Poland -2.0 Slovakia

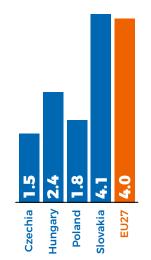
# Employment, from 20 to 64 years

(% of total population, 2022)



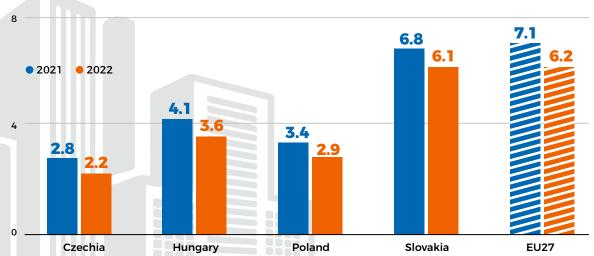
# Unemployment from 15 to 74 years

(% of total population, 2022)



#### **Total unemployment rate**

(% of population in the labour force, from 15 to 74 years)



**Source**: Eurostat database, data extraxtion by 20 June, 2023, n.a. not available GOV 10DD EDPT1, UNE RT A, LFSI EMP A







# 3.1 National and harmonized inflation

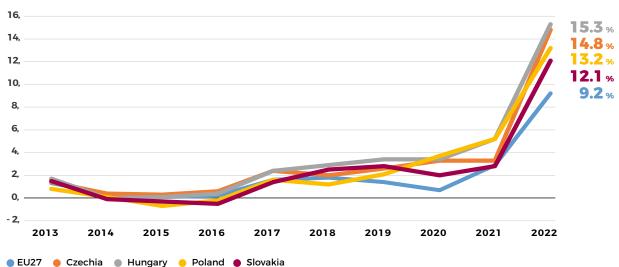
The Harmonised Index of Consumer Prices (HICP) gives comparable measures of inflation for the countries and country groups for which it is produced. It is an economic indicator that measures the change over time of the prices of consumer goods and services acquired by households. In other words, it is a set of consumer price indices (CPIs) calculated according to a harmonised approach and a set of defini-

tions as laid down in Regulations and Recommendations. The data released monthly include price indices and rates of change (monthly, annual and 12-month moving average changes).

Most EU countries also publish national inflation (CPI) in advance with a slightly different methodology.

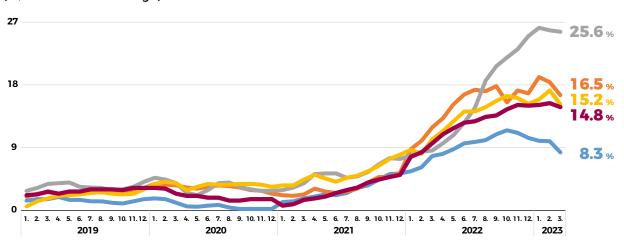
#### **HICP** - annual data





#### **HICP - monthly data**

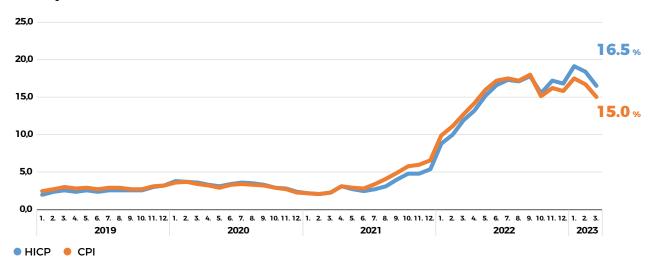
(%, annual rate of change)



**Source**: Eurostat database PRC HICP AIND, PRC HICP MANR,

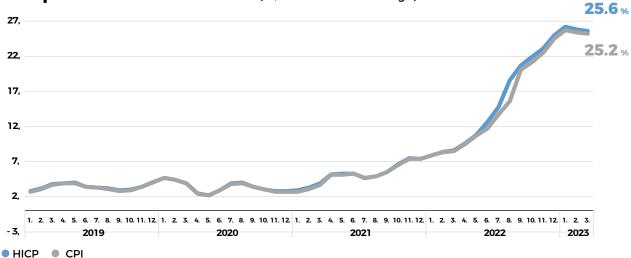
#### Czechia

#### Comparison of HICP and CPI (%, annual rate of change)



#### Hungary

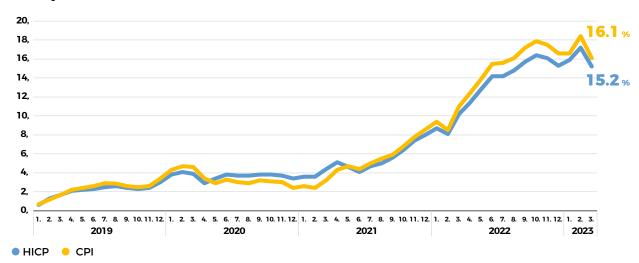
#### Comparison of HICP and CPI (%, annual rate of change)



Source: Eurostat database PRC HICP MANR, CZSO Public database, HCSO Summary tables

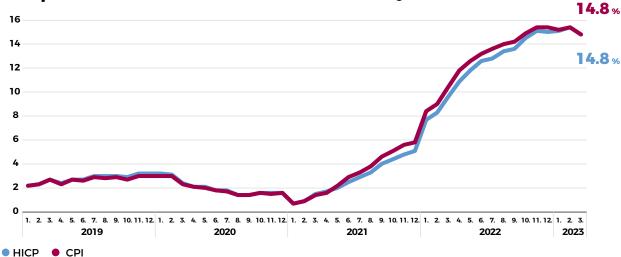
#### **Poland**

#### Comparison of HICP and CPI (%, annual rate of change)



#### **Slovakia**

## Comparison of HICP and CPI (%, annual rate of change)



Source: Eurostat database PRC HICP MANR, Statistics Poland, SO SR DATAcube



# 3.2 Consumer baskets

**Inflation** measured by the Harmonized Index of Consumer Prices (HICP) is a weighted average of price growth in the consumer basket. An essential part for calculating the level of inflation is the structure of household expenditure, because it determines the weights of expenditure items. It indicates how much the household spends on specific expenditure groups of goods and services in everyday life. Weights are updated at the beginning of the calendar year and are fixed during the year.

The prices of selected types of goods and services are monitored on the **universal consumer basket**, they are classified according to the common European methodology into **12 divi** 

**sions, 42 groups, 84 classes and 275 sub-classes** according to the COICOP classification. The change in the weights of individual divisions in the consumer basket reflects the development of household behaviour.

In the current consumer basket for the year 2023, the largest expenditure item of households in the **V4 countries** is expenditure on food and non-alcoholic beverages. Their share has increased over the past five years, most significantly in Slovakia and least in Hungary. Housing costs are also one of the significant expenditure items of households. On the other hand, their share has decreased in the last five years in three V4 countries, with the exception of Czechia.

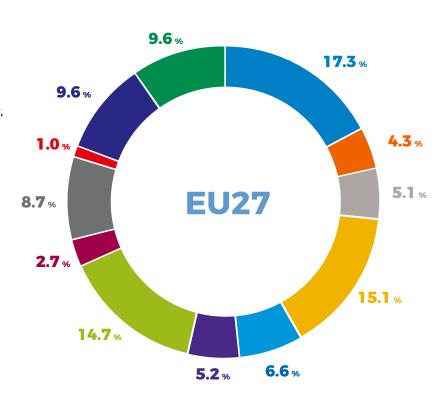
#### 3. Inflation - development of consumption prices I 3.2. Consumer baskets

Financial expenditure on food and housing represent the largest items of household budgets for residents of EU27 member countries. Over the past five years, however, the share of household spending on restaurants and hotels has

grown most significantly, and the share of spending on housing, together with energy (gas, electricity, water), has decreased the most. Sum and share differences arise from rounding of absolute data.

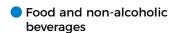
# The structure of consumption expenditure of households as weights for the year 2023 (percentage shares)

- Food and non-alcoholic beverages
- Alcoholic beverages, tobacco and narcotics
- Clothing and footwear
- Housing, water, electricity, gas and other fuels
- Furnishings, household equipment and routine household maintenance
- Health
- Transport
- Communications
- Recreation and culture
- Education
- Restaurants and hotels
- Miscellaneous goods and services



**Source**: Eurostat database PRC HICP INW

# The structure of consumption expenditure of households as weights for the year 2023 (percentage shares)

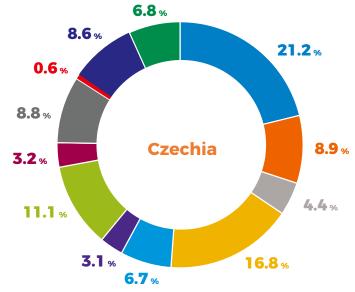


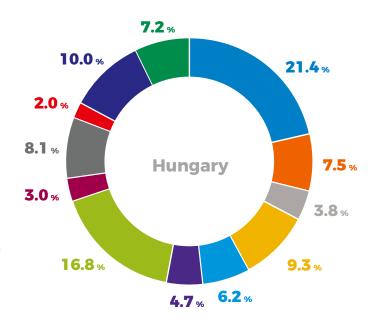
- Alcoholic beverages, tobacco and narcotics
- Clothing and footwear
- Housing, water, electricity, gas and other fuels
- Furnishings, household equipment and routine household maintenance
- Health
- Transport
- Communications
- Recreation and culture
- Education
- Restaurants and hotels



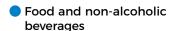
Source: Eurostat database

PRC HICP INW

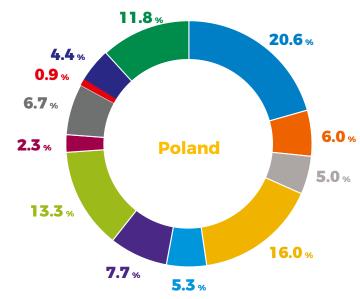


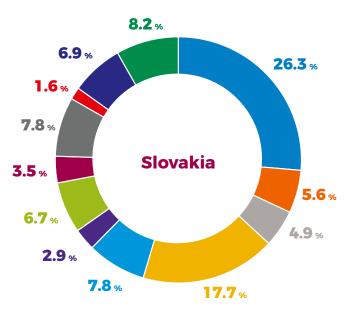


# The structure of consumption expenditure of households as weights for the year 2023 (percentage shares)



- Alcoholic beverages, tobacco and narcotics
- Clothing and footwear
- Housing, water, electricity, gas and other fuels
- Furnishings, household equipment and routine household maintenance
- Health
- Transport
- Communications
- Recreation and culture
- Education
- Restaurants and hotels
- Miscellaneous goods and services





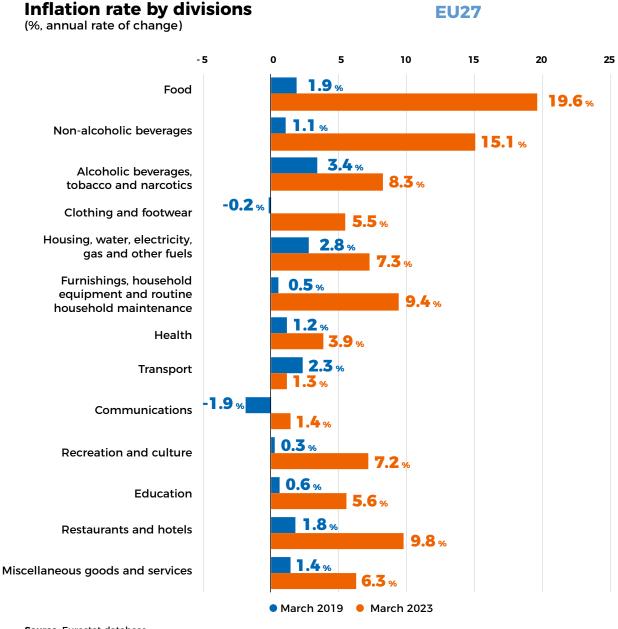
**Source**: Eurostat database PRC HICP INW

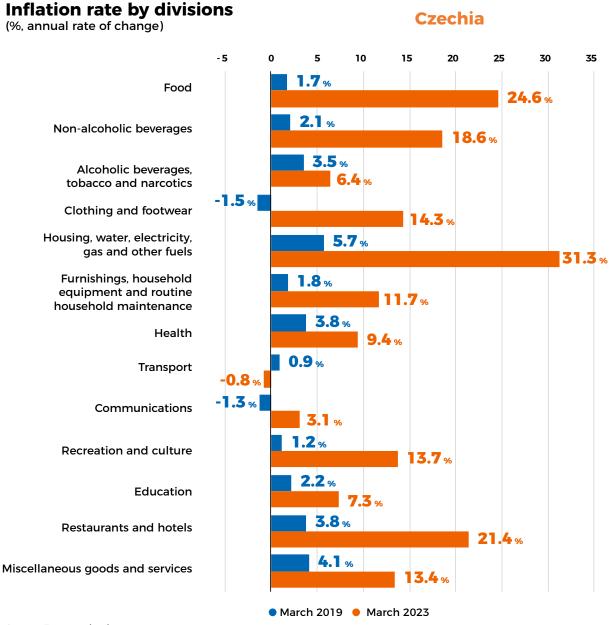


# 3.3 Consumer prices by divisions

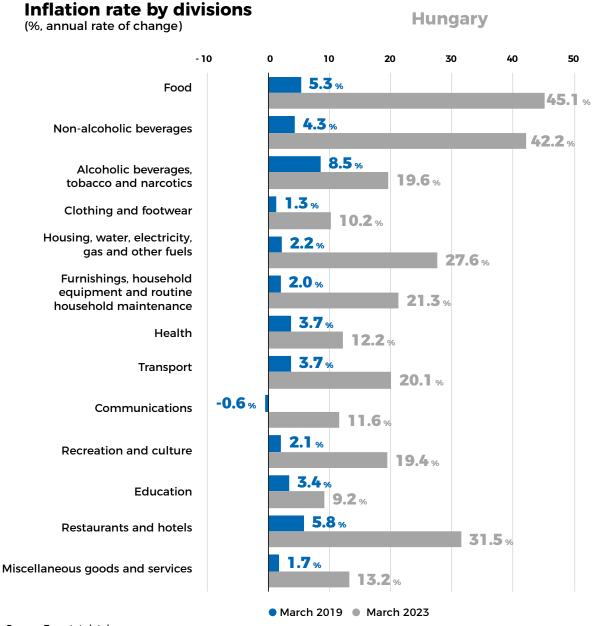
The Classification of individual consumption by purpose, abbreviated as COICOP, is a classification developed by the United Nations Statistics Division to classify and analyze individual consumption expenditures incurred by households, non-profit institutions serving households and general government according to their purpose. Consumer basket representatives are classified into 12 divisions.

Adapting COICOP to the HICP calculation involved a number of changes. Some sub-indices of the COICOP, such as narcotics and owner-occupied housing, had to be excluded because they are not within the HICP coverage. Certain sub-classes (those with 4 digits) have been combined to ensure their weight was above one part per thousand in most of the Member States.

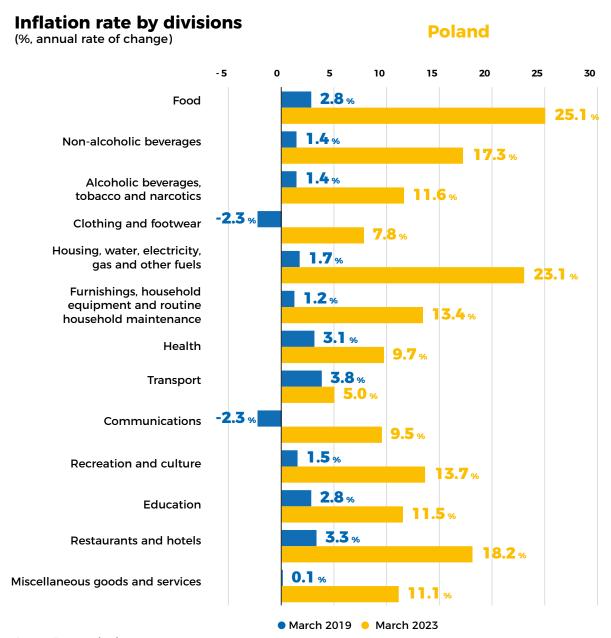




**Source**: Eurostat database PRC HICP MANR



**Source**: Eurostat database PRC HICP MANR



**Source**: Eurostat database PRC HICP MANR

#### Inflation rate by divisions **Slovakia** (%, annual rate of change) - 5. 0. 5. 10. 15. 20. 25. 30. 35. 3.5% Food **29.1** % -0.1 % Non-alcoholic beverages 19.6% 4.4% Alcoholic beverages, tobacco and narcotics **7.5** % 1.0% Clothing and footwear 7.9% Housing, water, electricity, **5.2**% gas and other fuels 13.5% Furnishings, household 1.6% equipment and routine 11.9% household maintenance 2.1 % Health 9.8% 0.9% Transport 2.2% 0.8% Communications 0.2% Recreation and culture 8.7% 0.9% Education 10.8% **3.7**% Restaurants and hotels 20.2% 2.9% Miscellaneous goods and services 13.1<sub>%</sub>

March 2019March 2023





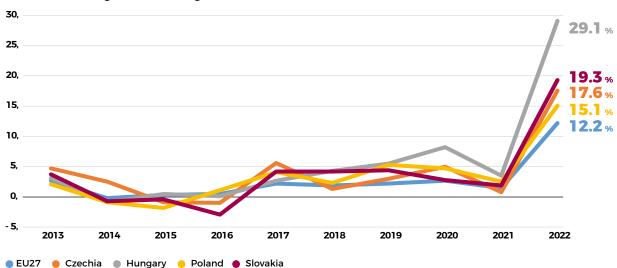


## 4.1 Food

The division **Food and non-alcoholic beverages** includes two groups: food products and non-alcoholic beverages. Food includes all sorts of food products, divided into nine basic classes: bread and cereals, meat, fish and seafood, milk, cheese and eggs, oils and fats, fruit, vegetables, sugar, jam, honey, chocolate and confectionery and food products n.e.c.

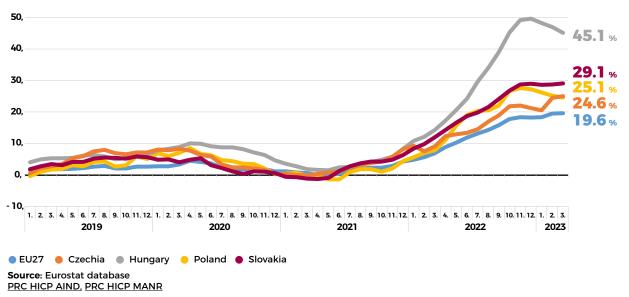
#### Inflation rate for food - annual data

(%, annual average rate of change)



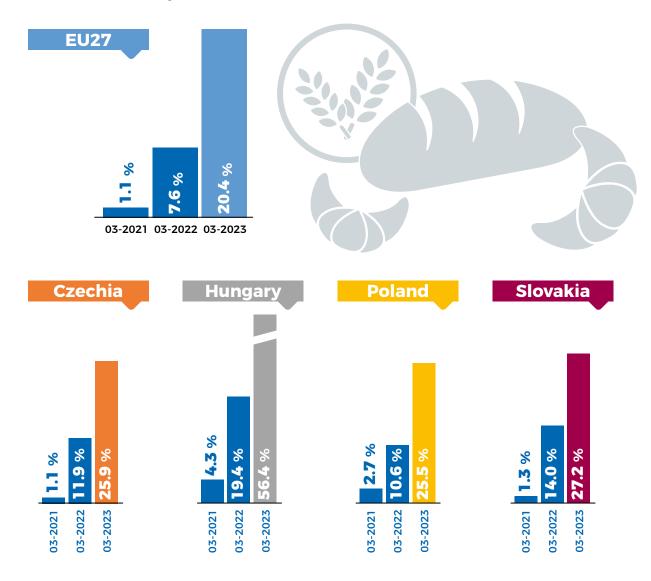
### Inflation rate for food - monthly data

(%, annual rate of change)



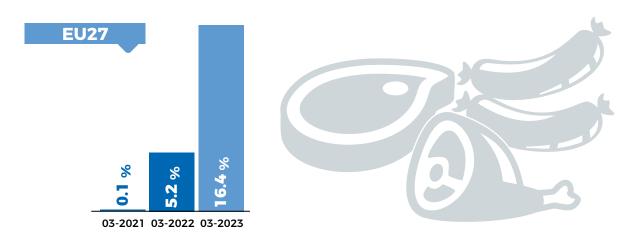
### Inflation rate for bread and cereals

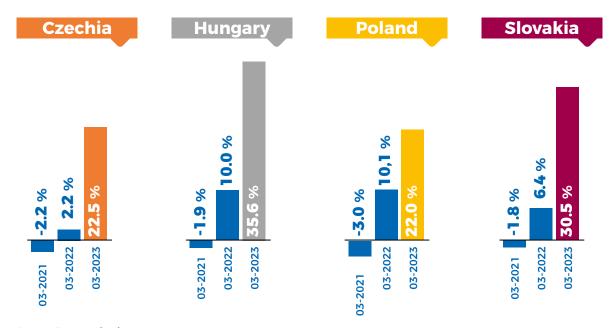
(%, annual rate of change)



#### Inflation rate for meat

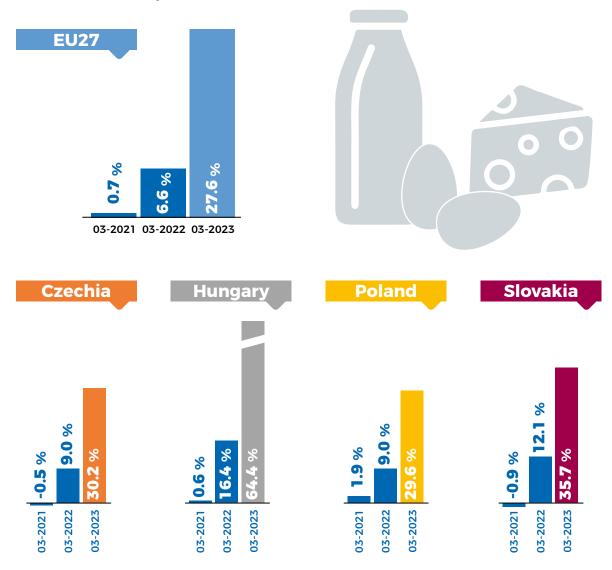
(%, annual rate of change)





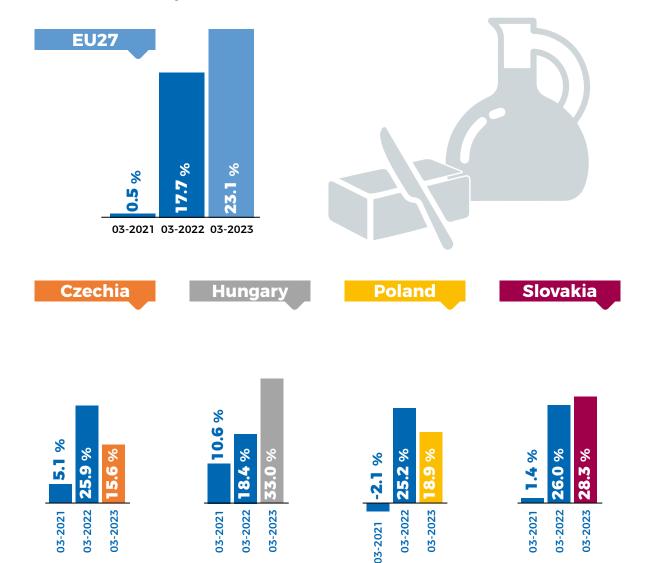
### Inflation rate for milk, cheese and eggs

(%, annual rate of change)



### Inflation rate for oils and fats

(%, annual rate of change)





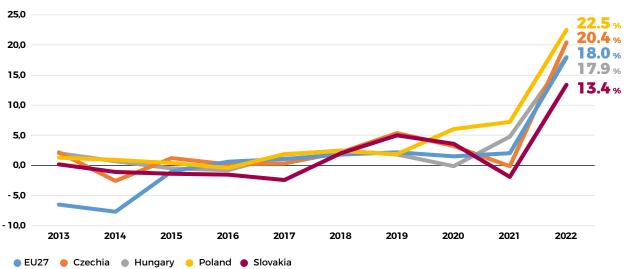
## 4.2 Housing and energy

The division **Housing, water, electricity, gas and other fuels** includes rents, payments for using co-operative flats, goods and services for

regular maintenance and repair of dwellings, water supply and salvage, all kinds of energy (electricity, gas, heating, solid fuels).

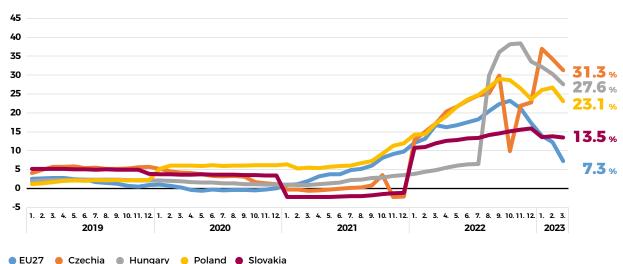
### Inflation rate for housing and energy - annual data

(%, annual average rate of change)



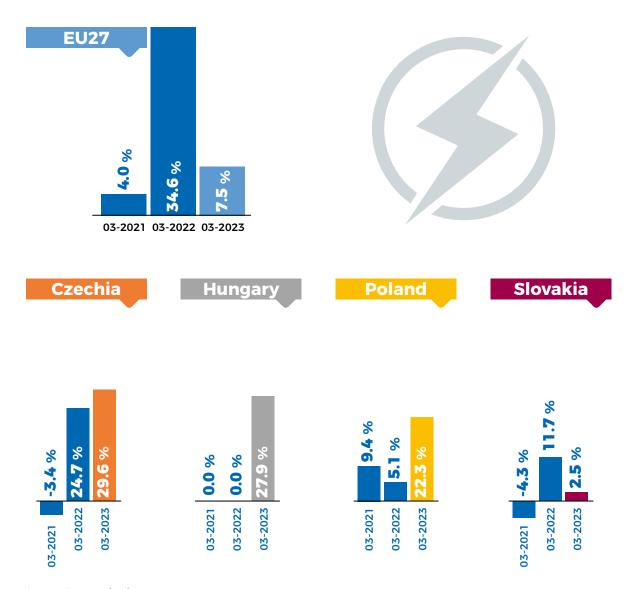
### Inflation rate for housing and energy - monthly data

(%, annual rate of change)

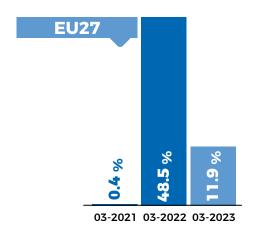


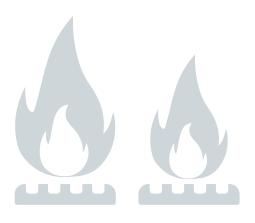
Source: Eurostat database PRC HICP AIND, PRC HICP MANR

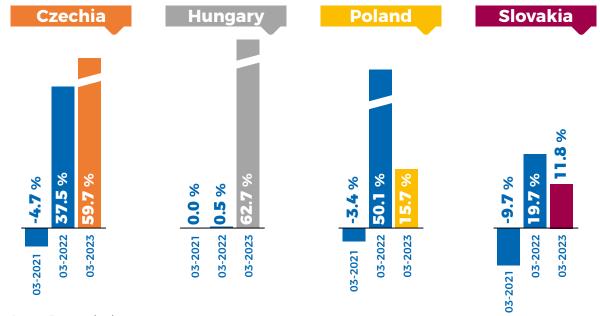
## Inflation rate for electricity (%, annual rate of change)



## Inflation rate for gas (%, annual rate of change)







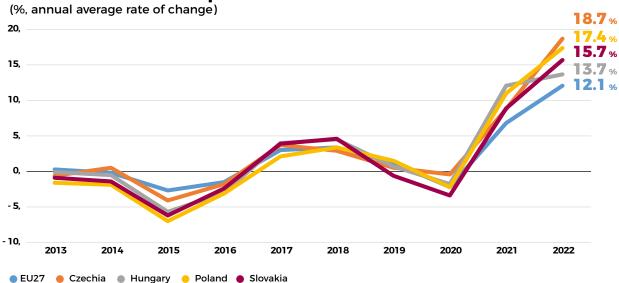


## 4.3 Transport

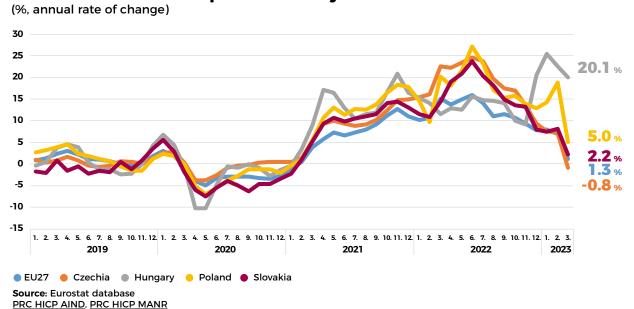
The division **Transport** includes personal transport equipment including repairs and spare

parts, fuels, lubricants and public transport (by railway, road, air).

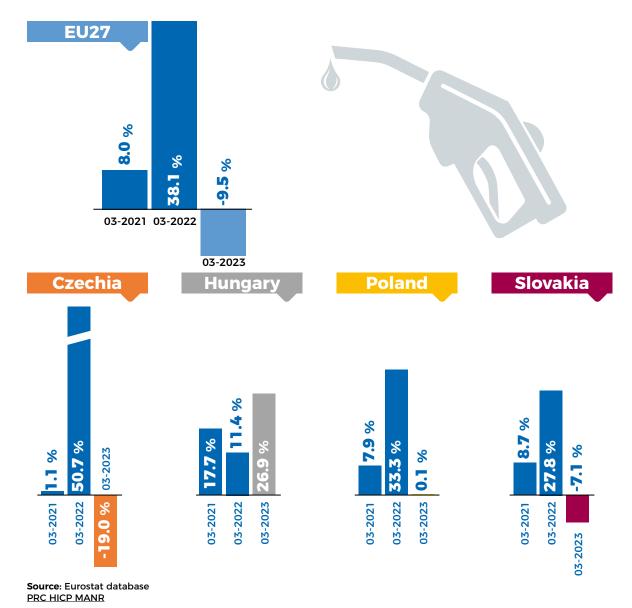
### Inflation rate for transport - annual data



### Inflation rate for transport - monthly data

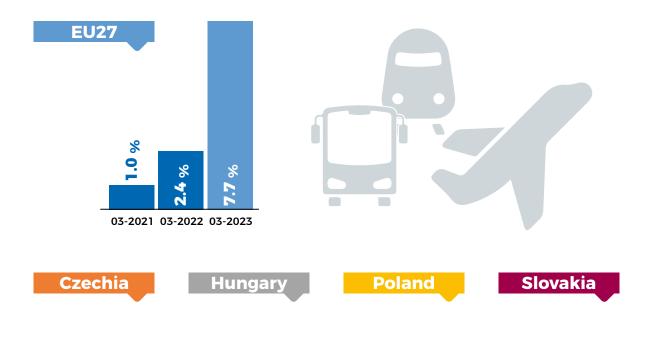


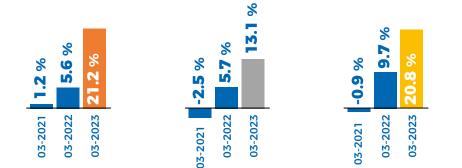
# Inflation rate for fuels and lubricants for personal transport equipment (%, annual rate of change)



### Inflation rate for transport services

(%, annual rate of change)





**Source**: Eurostat database PRC HICP MANR

03-2021

03-2022

03-2023

### Inflation in the Visegrad Group

#### **Publisher:**

Statistical Office of the Slovak Republic Bratislava 2023

ISBN 978-80-8121-950-4 (online)

#### Inflation in the Visegrad Group











Czech Statistical Office www.czso.cz



Hungarian Central Statistical Office www.ksh.hu



Statistics Poland www.stat.gov.pl



Statistical Office of the Slovak Republic www.statistics.sk



"We bring quality and relevant statistical information useful for society."