



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM



# REPORT ON THE SLOVAK ECONOMY

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## ABBREVIATIONS

CPI	consumer price index
EA	euro area
ECB	European Central Bank
EC	European Commission
EMEs	emerging market economies
EONIA	euro overnight index average
ESA 2010	European System of Accounts 2010
ESI	Economic Sentiment Indicator (European Commission)
EU	European Union
EUR	euro
EURIBOR	euro interbank offered rate
Eurostat	statistical office of the European Union
FDI	foreign direct investment
GDP	gross domestic product
GNDI	gross national disposable income
GNI	gross national income
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
MFI	monetary financial institutions
MF SR	Ministry of Finance of the Slovak Republic
MMF	money market fund
MTF	NBS's Medium-Term Forecast (published on a quarterly basis)
NACE	Statistical Classification of Economic Activities in the European Community (Rev. 2)
NARKS	National Association of Real Estate Offices of Slovakia
NBS	Národná banka Slovenska
NEER	nominal effective exchange rate
NFC	non-financial corporation
NPISHs	non-profit institutions serving households
OECD	Organisation for Economic Co-operation and Development
p.a.	per annum
p.p.	percentage point
PMI	Purchasing Managers' Index
REER	real effective exchange rate
SASS	Slovenská asociácia správcovských spoločností – Slovak Association of Asset Management Companies
SME	small and medium-sized enterprise
SO SR	Statistical Office of the Slovak Republic
ULC	unit labour costs
ÚPSVR	Ústredie práce, sociálnych vecí a rodiny – Central Office of Labour, Social Affairs and Family
ÚRSO	Úrad pre reguláciu sieťových odvetví – Regulatory Office for Network Industries
USD	US dollar
VAT	value-added tax

Symbols used in the tables

- . – Data are not yet available.
- – Data do not exist / data are not applicable.
- (p) – Preliminary data



# 1 SUMMARY

Slovakia's economic growth slowed in the fourth quarter of 2018, to 3.6% year on year, from 4.6% in the previous quarter. The quarter-on-quarter rate of growth reached 0.8%. The decline in the annual growth rate was caused mainly by a negative contribution from net exports. The main drivers of economic growth were investment and consumption.

Employment growth weakened in the period under review, to 1.7% year on year, from 1.9% in the third quarter of 2018. Slower job growth

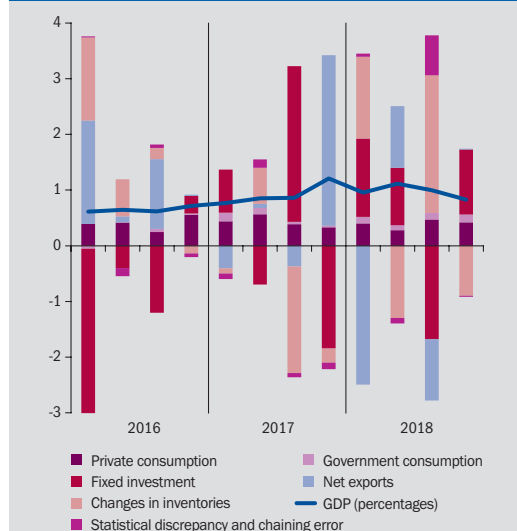
was observed in most segments of the private sector. The average wage in the economy increased, year on year, by 5.8% in the fourth quarter (compared with 6.1% in the previous quarter). Smaller wage increases were recorded in the private sector, especially in industry and services.

Annual HICP inflation slowed in the last quarter of 2018, to 2.1% (from 2.7% in the previous quarter), owing mainly to a slowdown in the rate of increase in food prices.

## 2 GROSS DOMESTIC PRODUCT

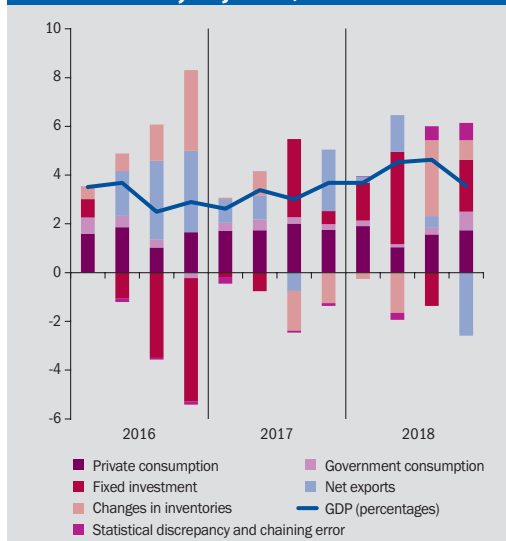
Slovakia's annual GDP growth slowed considerably in the fourth quarter of 2018, to 3.6% (from 4.6% in the previous quarter), mainly as a result of a negative contribution from net exports. Exports continued to grow, year on year, at a decelerating pace, but still profited from the manufacturing of new car models. Consumer demand maintained its positive influence, mainly through accelerated growth in public consumption. After falling sharply in the third quarter, investment increased again in the fourth quarter, particularly in the public sector.

**Chart 1 GDP and its components (quarter-on-quarter percentage changes; percentage point contributions; constant prices)**



Sources: SO SR and NBS calculations.

**Chart 2 GDP and its components (annual percentage changes; percentage point contributions; constant prices; non-seasonally adjusted)**



Sources: SO SR and NBS calculations.

The quarter-on-quarter rate of economic growth slowed in the fourth quarter, to 0.8% (after seasonal adjustment). The country's economic output in that period was supported mostly by growth in fixed investment and consumption (in both private and public consumption). It was, at the same time, negatively affected by the higher than expected volume of imports and by the falling inventory levels. Both exports and imports of goods and services increased in the period under review, respectively, by 2.5% and 2.6% quarter on quarter. As a result, net exports remained

**Table 1 GDP by expenditure (percentage changes compared with the previous period; constant prices)**

	2017	2018				
	Year	Q1	Q2	Q3	Q4	Year
<b>Gross domestic product</b>	<b>3.2</b>	1.0	1.1	1.0	0.8	<b>4.1</b>
Final consumption of households and non-profit institutions serving households	<b>2.4</b>	0.8	0.5	0.9	0.8	<b>3.0</b>
Final consumption of general government	<b>1.7</b>	0.7	0.5	0.7	0.8	<b>1.9</b>
Gross fixed capital formation	<b>3.4</b>	6.6	4.6	-7.2	5.5	<b>6.8</b>
Exports of goods and services	<b>5.9</b>	-1.4	2.9	0.7	2.5	<b>4.8</b>
Imports of goods and services	<b>5.3</b>	1.1	1.9	1.9	2.6	<b>5.3</b>

Source: SO SR.

virtually unchanged at the end of the year. After declining in the previous quarter, investment increased by 5.5%. After a strong third quarter, private consumption growth slowed somewhat in the fourth quarter, to 0.8%.

The seasonal adjustment procedure affects not only the current figures, but also those for the previous quarters. In the case of a downward adjustment in the current growth rate, the rates for the previous quarters are also lowered, or, if the current quarter-on-quarter growth rate is adjusted upwards, the rates for the previous quarters are increased, too. This is why the quarter-on-quarter growth rate edged down from 1.1% to 1.0% in the third quarter, and from 1.2% to 1.1% in the second quarter.

On the production side, the slowdown in GDP growth was attributable to lower contributions from construction, private services, and from public administration. GDP growth was also supported on the production side by effective tax collection.

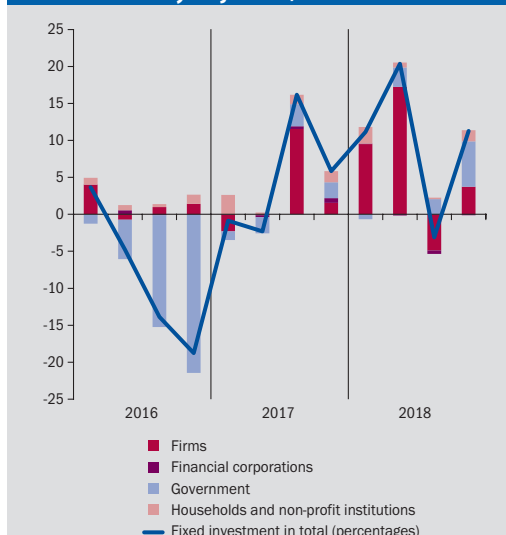
Overall investment rose again in the quarter under review, after falling in the previous quarter. The end of 2018 saw an upturn in investment activity in the general government sector in particular, supported by elevated absorption of EU funds.

**Chart 3 GDP – sectoral contributions to annual percentage changes (percentage point contributions; constant prices; non-seasonally adjusted)**



Sources: SO SR and NBS calculations.

**Chart 4 Investment – sectoral contributions to annual percentage changes (percentage point contributions; current prices; non-seasonally adjusted)**



Sources: SO SR and NBS calculations.

Renewed growth was also recorded in private investment, including investment in car manufacturing. As regards the structure of investment, the strongest growth took place in infrastructural investments, owing probably to an upturn in investment activity in the general government sector. Positive contributions also came from investment in residential buildings and in transport vehicles.

The annual rate of export growth continued to slow in the fourth quarter, to 4.7% (from 5.6% in the third quarter). This indicates that the gradual slowdown in foreign demand was already reflected in the level of exports of goods and services, too. Although the main driver of growth was still car production, the positive effect of the launch of new car models had started to fade. As regards the structure of car exports by destination, a slowdown was recorded in the growth rate of exports to countries outside the EU, while exports to euro area countries grew at an accelerating pace in the period under review. The growth rate of car exports was still at a historical high. This growth is concentrated on exports to Germany, which in the global value chain is the major destination country for Slovak exports. Other destination countries at the end of last year were the United Kingdom and the USA, owing probably to car importers stocking up ahead of the introduction of customs and non-tariff

trade barriers. Imports of goods and services, unlike exports, grew over the quarter under review at a pace accelerating to 7.8% at the end of year, from 5.4% at the end of the previous quarter.

This growth was connected in particular with investment growth and with consumption growth at the end of the year. As a result, net exports contributed negatively to annual GDP growth.

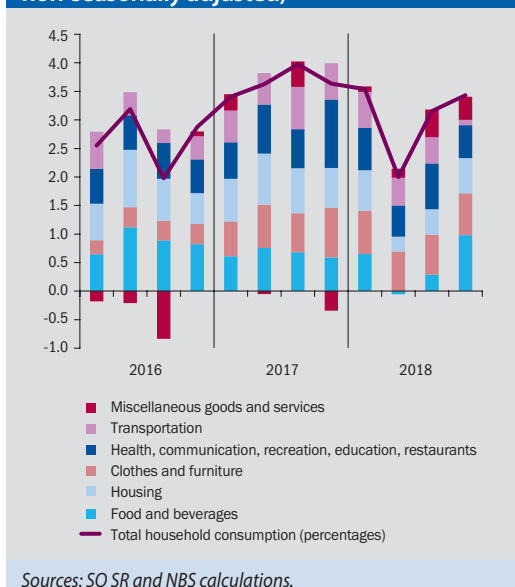
**Chart 5 Car exports by destination (annual percentage changes; percentage point contributions; current prices; 3-month moving average)**



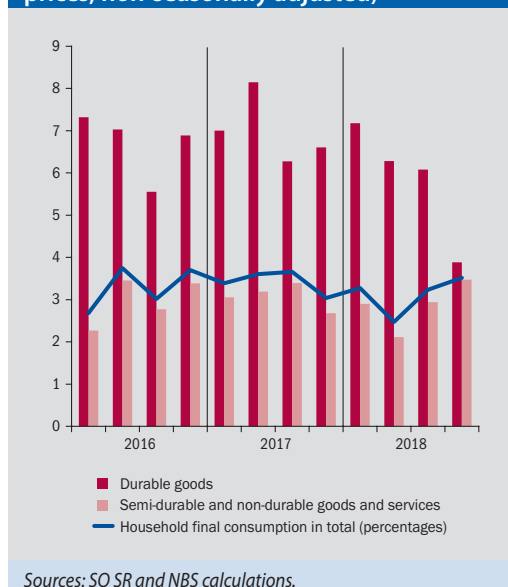
Household consumption growth accelerated slightly in the last quarter of 2018, to 3.4% year on year. The continuing positive trend in the labour market was reflected in households' disposable income growth, too. The behaviour of consumers was also influenced positively by a slowdown in inflation. In the period under review, households spent most of their disposable income on basic necessities (food and housing). Consumption growth was also supported by spending on recreation and culture, furniture, housing, and miscellaneous goods and services. The accelerating year-on-year growth was driven by dynamic growth in spending on non-durable and semi-durable goods.

Government consumption growth accelerated in the fourth quarter, to 3.8% year on year, from 1.6% in the third quarter. This acceleration was caused mainly by growth in intermediate consumption, probably stimulated by increased expenses incurred by self-governments in connection with the municipal elections.

**Chart 6 Private consumption – contributions to annual percentage changes (percentage point contributions; constant prices; non-seasonally adjusted)**



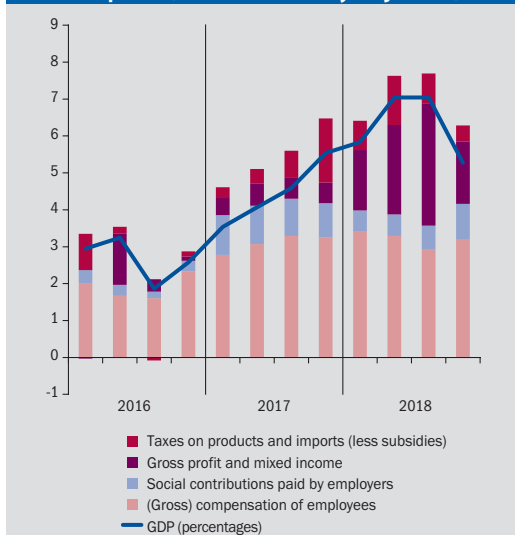
**Chart 7 Household final consumption broken down by durability of goods consumed (annual percentage changes; constant prices; non-seasonally adjusted)**







**Chart 8 GDP – contributions to annual percentage changes (percentage points; current prices; non-seasonally adjusted)**



Sources: SO SR and NBS calculations.

Looking at GDP at current prices as calculated using the income approach, it is evident that the slowdown in GDP growth in the fourth quarter was caused mainly by slower growth in entrepreneurial income (gross profits and mixed income) and, to a lesser extent, by slower rise in taxes on products and imports. Income from work remained strong and its contribution to annual GDP growth increased slightly; a similar trend was also recorded in social contributions paid by employers.

## 3 THE LABOUR MARKET

### 3.1 WAGES AND LABOUR PRODUCTIVITY

Annual average wage growth in Slovakia slowed in the final quarter of 2018, to 5.8% (from 6.1% in the previous quarter), as a result of slower wage growth in the private sector (slowed from 6.2% to 5.7%). Wage dynamics weakened mainly in manufacturing and services, while trade and construction recorded accelerated wage growth compared with the third quarter. In the public sector, the annual rate of overall wage growth reached 5.9%, compared with 5.8% in the previous quarter. Wage developments in this sector were marked by faster growth in basic wages in public administration and health care on the one hand, and by slower wage growth in education on the other. Real wages increased by 3.5% year on year, representing a modest acceleration compared with the previous quarter (3.3%), as a result of a fall in inflation. Average annual wage growth accelerated over the course of 2018, to 6.2% (from 4.6% at the end of 2017).

An important factor behind the slower wage growth in the economy as a whole was, in all probability, the lower level of basic wages, since

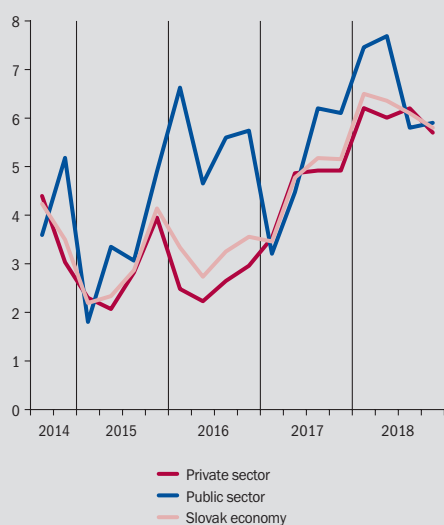
**Chart 10 Average wage components (annual percentage changes; percentage point contributions)**



Sources: SO SR and NBS calculations.

Note: The data for organisations with 20+ employees include organisations in the public and financial sectors, irrespective of the number of employees.

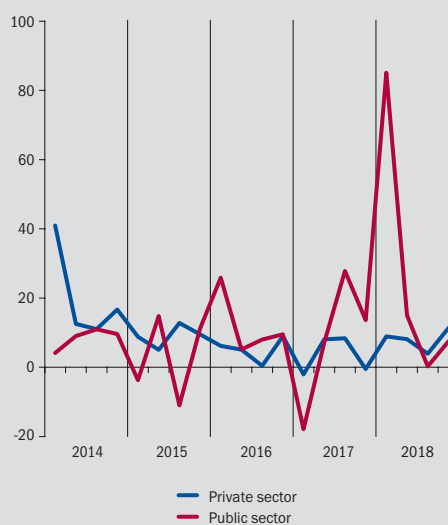
**Chart 9 Wage developments in the main sectors of the economy (annual percentage changes)**



Sources: SO SR and NBS calculations.

Note: The data for the public sector were calculated on the basis of developments in the categories O, P and Q of the NACE classification.

**Chart 11 Irregular bonuses paid in the Slovak economy (annual percentage changes)**



Sources: SO SR and NBS calculations.

**Table 2 Wages and labour productivity (annual percentage changes)**

	2017	2018				
	Year	Q1	Q2	Q3	Q4	Year
Average wage (headline)	<b>4.6</b>	6.5	6.4	6.1	5.8	<b>6.2</b>
Consumer price inflation	<b>1.3</b>	2.3	2.8	2.7	2.2	<b>2.5</b>
Average real wage (headline)	<b>3.3</b>	4.1	3.5	3.3	3.5	<b>3.6</b>
Average wage (ESA 2010)	<b>4.2</b>	6.2	6.2	5.5	4.9	<b>5.7</b>
Compensation per employee (ESA 2010)	<b>5.2</b>	5.4	5.6	5.3	5.5	<b>5.4</b>
Nominal labour productivity (ESA 2010)	<b>2.2</b>	3.5	4.8	5.0	3.5	<b>4.2</b>
Real labour productivity (ESA 2010)	<b>1.0</b>	1.4	2.3	2.7	1.8	<b>2.1</b>

Sources: SO SR and NBS calculations.

Note: Average wages (headline) are based on data from SO SR statistical reports. Average real wages were calculated on the basis of CPI inflation. Labour productivity (ESA 2010) was calculated as the ratio of nominal GDP to employment as defined in the ESA 2010 methodology.

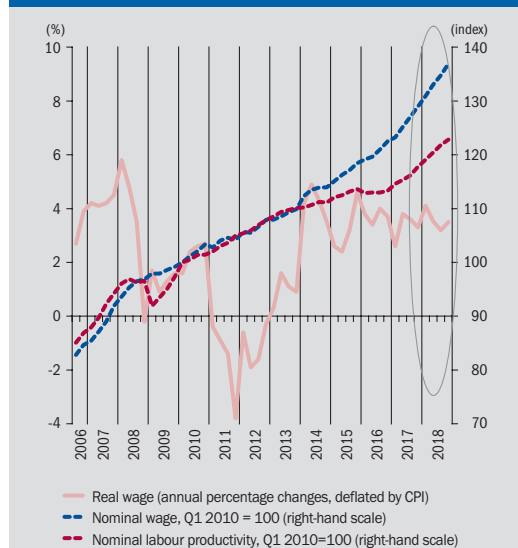
irregular bonus payments tended to strengthen the wage dynamics. Compared with the previous quarter, irregular bonus payments accelerated the rate of wage growth in both the private and public sectors.

Compensation per employee, i.e. gross wages and other employee-related expenses, increased during last quarter of 2018 by 5.5% year on year, representing a slight acceleration in comparison with the third quarter (5.3%). This was due

to faster growth in social contributions paid by employers, caused probably by the cancellation of a tax-deductible item from health insurance.

With the slowdown in economic growth, labour productivity growth moderated, too, by 1.5 percentage points quarter on quarter. Since labour productivity is reflected in the amount of funds available for the payment of wages and salaries, it may indicate that their growth rate will slow gradually in the period ahead.

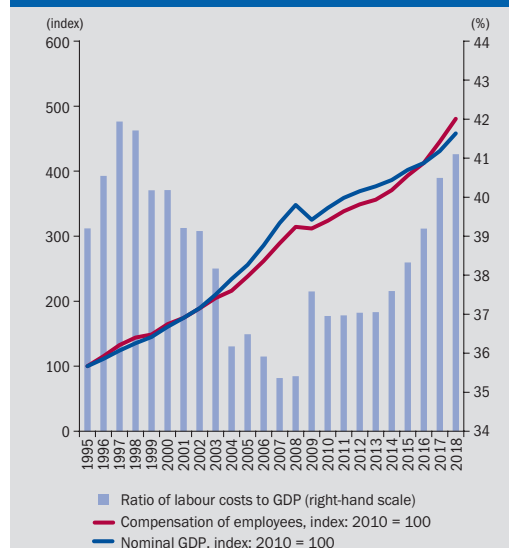
**Chart 12 Wages and labour productivity**



Sources: SO SR and NBS calculations.

Note: Wages are based on data from SO SR statistical reports. Nominal labour productivity was calculated from employment according to SO SR statistical reports. Base indices are based on seasonally adjusted data.

**Chart 13 Labour costs in the economy**



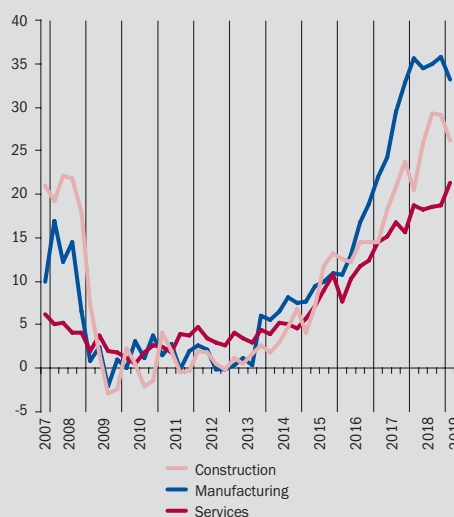
Sources: SO SR and NBS calculations.

### 3.2 EMPLOYMENT AND UNEMPLOYMENT

In seasonally adjusted terms, employment rose in the last quarter of 2018 by 0.4% quarter on quarter, representing a certain slowdown in comparison with the previous quarters. The annual rate of employment growth reached 1.7%, compared with 1.9% in the third quarter of the year. The slowdown took place in most segments of the private sector, while employment in construction grew relatively dynamically and that in the public sector remained virtually unchanged. Employment growth in manufacturing slowed down and, after more than three years, fell below 2%. Employment growth was also supported by the number of self-employed persons, which, after minor increases and decreases in the previous periods, increased by 1% year on year.

This trend in employment was probably a reflection of the persistent shortage of labour force and of the ongoing slowdown in economic growth associated with the weaker foreign demand. Employers were therefore careful in hiring new employees. This was also reflected in the lower number of job vacancies, which decreased by almost 4,000 compared with the previous period (according to labour office figures). At the same time, employers' expectations regarding the number of employees pointed to decreases in all sectors, except in construction.

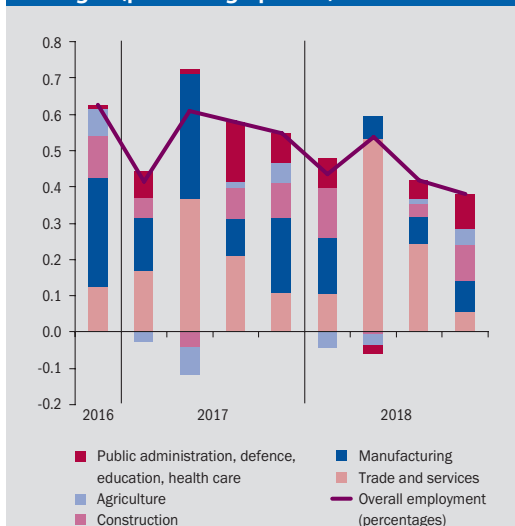
**Chart 15 Perceived labour shortages broken down by sector (percentage of respondents)**



Sources: EC and NBS calculations.  
Note: The data on construction for Q1 2019 are average figures for January and February 2019.

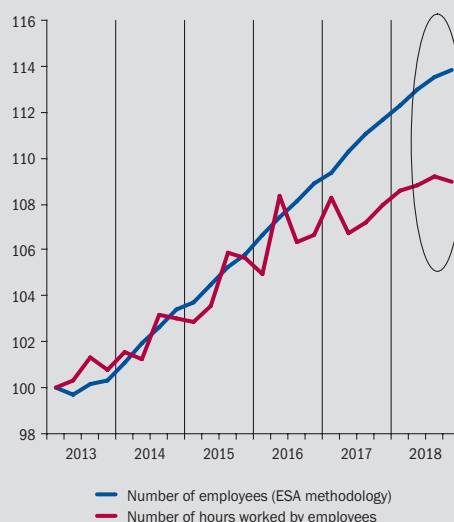
The gap between growth in the number of hours worked and employment growth continued to increase in the fourth quarter of 2018. All sectors contributed to this increase, owing probably to growth in the number of part-time employees, which caused a further decrease in the length of a working week.

**Chart 14 Employment – sectoral contributions to quarter-on-quarter percentage changes (percentage points)**



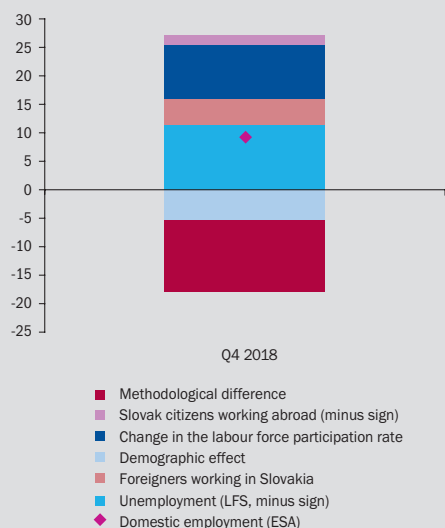
Source: SO SR.

**Chart 16 Employment growth and the number of hours worked (Q1 2013 = 100)**



Sources: SO SR and NBS calculations.

**Chart 17 Employment – contributions of principal labour market variables to quarter-on-quarter changes (thousands of persons)**



Sources: SO SR and NBS calculations.

Note: The 'foreigners working in Slovakia' time series has not been seasonally adjusted owing to its short history. The seasonality observed in this time series, however, appears to be insignificant. The 'methodological difference' item includes the effect of residual differences between the LFS and ESA methodologies.

According to the Labour Force Survey (LFS), the number of unemployed continued to decrease in the last quarter of 2018, by approximately 11,000 quarter on quarter. The unemployment rate dropped in that period by 0.4 percentage point, to 5.9%, representing a new historical low. As different methodologies were used, the more favourable trend in unemployment (according to the LFS methodology) did not correspond to the slowdown in employment growth (according to the ESA methodology) in the period under review. A characteristic phenomenon in the labour market was still the growing number of foreigners working in Slovakia, accompanied by the falling number of Slovak citizens working abroad.

Labour market developments were favourable in 2018. Employment grew during the year by 2.0% (47,700 persons), which was somewhat less than the figure for the previous year (2.2%). This, despite the modest slowdown, represented a rapid increase. This development was supported by an increase in the number of foreigners working in Slovakia (by almost 16,000 persons), accompanied by a decrease in the number of unemployed and a rise in the labour force participation rate.

## 4 PRICE DEVELOPMENTS

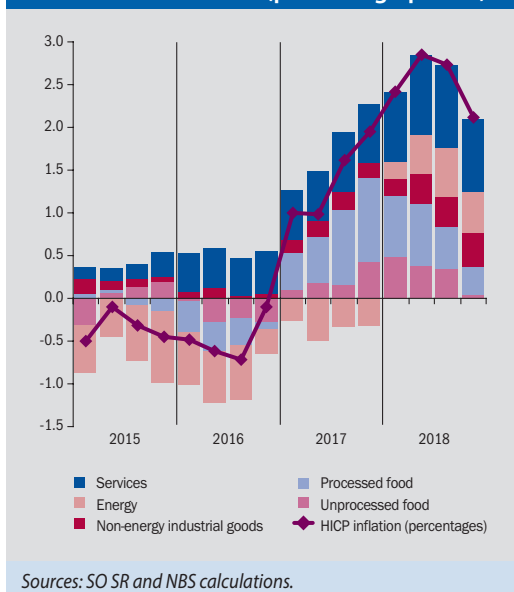
The fourth quarter of 2018 saw a further slowdown in inflation. The annual inflation rate slowed to 2.1% (from 2.7% in the third quarter) and the overall average inflation rate reached 2.5% in 2018. Price dynamics moderated at the end of 2018, mainly as a result of a slowdown in food price inflation.

The slowdown in the annual rate of increase in processed food prices reflected mainly the expected fading of the base effect of supply shocks from the previous year, as well as the marked fall

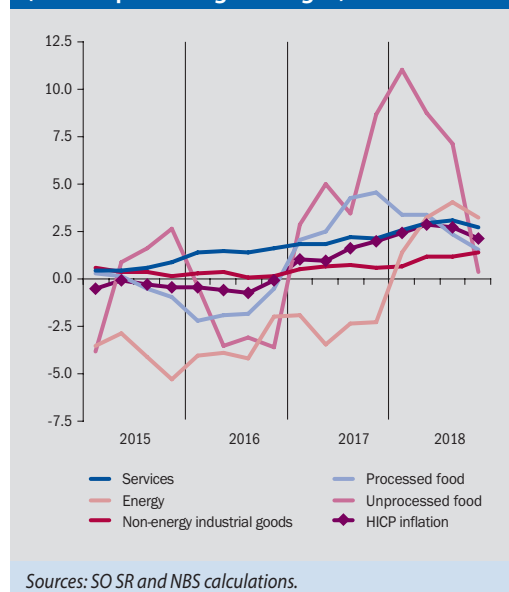
in fresh fruit prices recorded in October to December. Thus, food price developments were the most significant factor that contributed 0.4 percentage point to the slowdown in inflation compared with the third quarter of 2018.

The weaker consumer price dynamics were also influenced by energy and services prices. Energy prices were affected by a short-term decline in oil prices in the world market during November and December 2018. This led, without delay, to a sharp slowdown in the rate of increase in fuel

**Chart 18 Contributions of components to annual HICP inflation (percentage points)**



**Chart 19 Components of HICP inflation (annual percentage changes)**



**Table 3 Annual percentage changes in consumer price inflation by component**

	2017	2018				
	Year	Q1	Q2	Q3	Q4	Year
<b>HICP inflation</b>	1.4	2.4	2.9	2.7	2.1	2.5
Unprocessed food	5.0	11.0	8.8	7.1	0.4	6.8
Processed food	3.4	3.4	3.4	2.3	1.5	2.7
Non-energy industrial goods	0.6	0.7	1.2	1.2	1.4	1.1
Energy	-2.5	1.4	3.3	4.0	3.2	3.0
Services	2.0	2.6	2.9	3.1	2.7	2.8

Sources: SO SR and NBS calculations.



prices, which could not be offset even by the gas price increase in December 2018 (though prices changes are normally scheduled for January).

Prices for services were volatile throughout 2018, mainly as a result of changes in air transport prices. This factor also contributed to their slowdown at the end of the year. The rise in services prices was relatively small during the year, owing to demand and cost impulses from the labour market.

The only subaggregate that rose at a moderately accelerating pace was that of non-energy industrial goods. As for non-energy industrial goods prices, the annual rate of increase in prices for non-durable goods (electrical appliances and products for personal use, non-durable goods for households) accelerated in the period under review. The acceleration in industrial goods prices during 2018 reflected a relatively steep rise in import prices.