



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



REPORT ON THE SLOVAK ECONOMY

DECEMBER 2018

Published by:
© Národná banka Slovenska

Address:
Národná banka Slovenska
Imricha Karvaša 1, 813 25 Bratislava
Slovakia

Contact:
info@nbs.sk

<http://www.nbs.sk>

Discussed by the NBS Bank Board on 18 December 2018.

All rights reserved.
Reproduction for educational and non-commercial
purposes is permitted provided that the source is
acknowledged.

ISSN 1339-9594 (online)



CONTENTS

1	SUMMARY	5
2	GROSS DOMESTIC PRODUCT	6
3	THE LABOUR MARKET	11
3.1	Wages and labour productivity	11
3.2	Employment and unemployment	13
4	PRICE DEVELOPMENTS	15
LIST OF TABLES		
Table 1	GDP by expenditure	8
Table 2	Wages and labour productivity	12
Table 3	Annual percentage changes in consumer price inflation by component	15
LIST OF CHARTS		
Chart 1	GDP and its components	6
Chart 2	GDP and its components	6
Chart 3	Revised GDP and its components	6
Chart 4	Revised GDP and its components	7
Chart 5	GDP – sectoral contributions to annual percentage changes	7
Chart 6	Investment in manufacture of motor vehicles	8
Chart 7	Fixed investment – contributions of assets to quarter-on-quarter percentage changes	8
Chart 8	Household consumption – contributions to annual percentage changes	9
Chart 9	GDP – contributions to annual percentage changes	9
Chart 10	Exports of goods – contributions to annual percentage changes	9
Chart 11	Inventories – contributions to annual volume changes	10
Chart 12	Annual growth in inventories in Q3 2018 broken down by sector	10
Chart 13	Wage levels in the main sectors of the economy	11
Chart 14	Average wage components	11
Chart 15	Irregular bonuses paid in the Slovak economy	11
Chart 16	Average wage growth – contributions of wage components to average percentage changes	12
Chart 17	Wages and labour productivity	12
Chart 18	Labour costs in the economy	13
Chart 19	Employment – sectoral contributions to quarter-on-quarter percentage changes	13
Chart 20	Perceived labour shortages broken down by sector	13
Chart 21	Employment growth and the number of hours worked	14
Chart 22	Employment – contributions of principal labour market variables to quarter-on-quarter changes	14
Chart 23	Contributions of components to annual HICP inflation	15
Chart 24	Components of HICP inflation	15



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 accelerated in the third quarter of 2018 to 4.6%, year on year, from 4.5% in the previous quarter. The quarter-on-quarter rate of growth reached 1.1%. The main driver of growth was consumer demand.

Employment growth slowed in the third quarter, to 1.9% year on year (from 2.1% in the second quarter) and to 0.4% quarter on quarter (from 0.5% in the second quarter). Slower job growth was observed in most sectors, except in services. The average wage in the economy

increased, year on year, by 6.1% in the third quarter (compared with 6.4% in the second quarter). Smaller wage increases were recorded in the public sector and in education, while the private sector reported somewhat faster wage growth.

The annual HICP inflation rate slowed slightly in the quarter under review, to 2.7% (from 2.9% in the previous quarter), largely owing to a slowdown in the rates of increase in processed and unprocessed food prices.

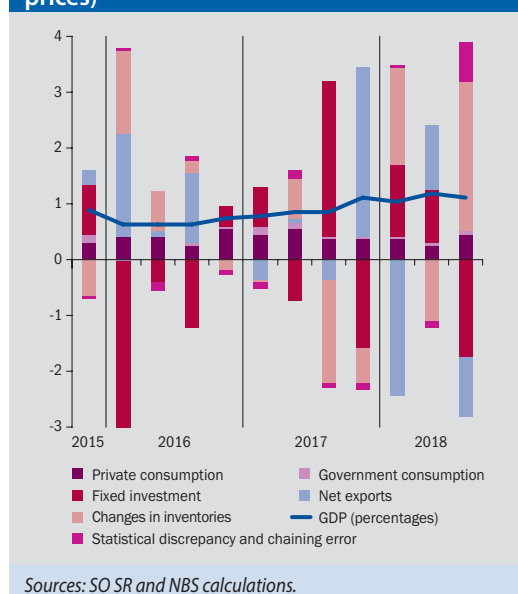


2 GROSS DOMESTIC PRODUCT

Slovakia's annual GDP growth accelerated from 4.5% in the second quarter of this year to 4.6% in the third quarter. This represented, in real terms,

the most rapid year-on-year growth since the end of 2015. In quarter-on-quarter terms, the economy expanded by 1.1% after seasonal adjustment. GDP at current prices increased, year on year, by 7.0% in the third quarter (after rising by 6.8% in the second quarter), which was its largest nominal increase since the third quarter of 2008.

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



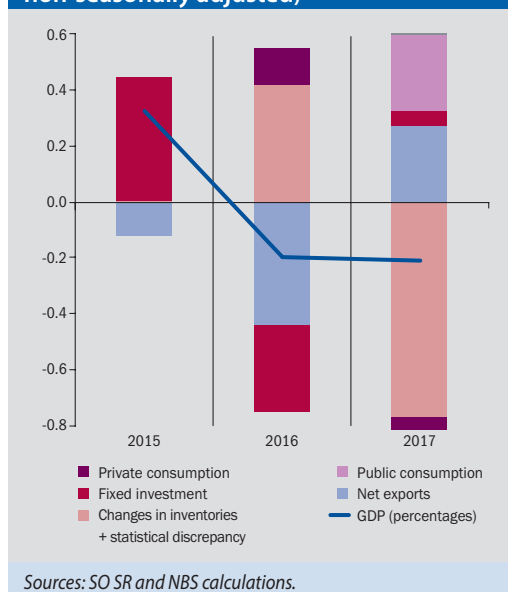
GDP data are systematically revised by the Statistical Office of the Slovak Republic (SO SR) on the basis of updated statistical data and data from administrative sources.

The annual GDP growth rate for 2015 has been revised upwards (from 3.9% to 4.2%), owing to an increase in fixed investment. The growth rate for 2016 has been moderated (from 3.3% to 3.1%), owing to a downward revision of goods exports. The rate for 2017 has also been reduced (from 3.4% to 3.2%). The contribution of public consumption and net exports of (almost exclusively) services has been increased, but not enough to offset the negative effects of changes in inventories and, in particular, of the elimination of the (positive) statistical discrepancy. The first two quarters of 2018 have also been revised: the volume of investment

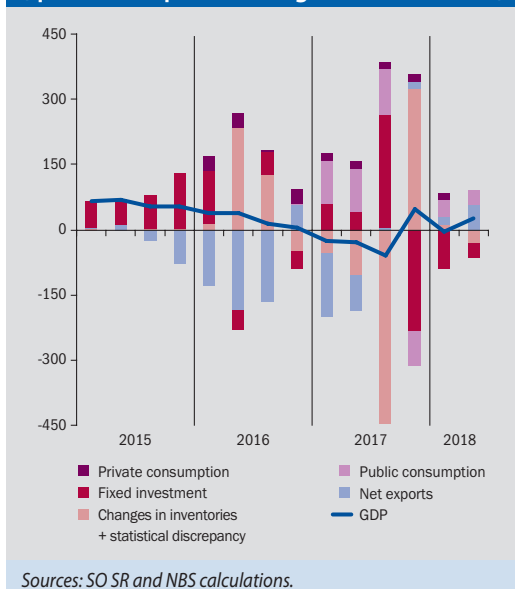
Chart 2 GDP and its components (annual percentage changes; percentage point contributions; constant prices; non-seasonally adjusted)



Chart 3 Revised GDP and its components (annual percentage changes, percentage point contributions; constant prices; non-seasonally adjusted)



**Chart 4 Revised GDP and its components
(quarter-on-quarter changes in EUR millions)**



has been reduced and the contribution of net exports, general government consumption and private consumption increased. The GDP data revised and published for the third quarter also necessitated upward revisions to the annual growth rates for the first three quarters of 2018, and of the expected annualised rate for 2018.

The Slovak economy is performing well, though its year-on-year growth during the quarter under review was driven mostly by changes in inventories. This growth, however, was also supported by other components (except investment), especially by private consumption. After a sharp rise in the previous quarter, investment suffered a decline. Fixed investment fell, year on year, by 5.7% at constant prices (after rising by 18.5% in the second quarter). Overall investment was affected by a fall in investment in car production, which recorded a steep increase in the previous quarter. Its year-on-year dynamics mirrored the base effect of the relatively large volume of investment in the same period a year earlier. These developments were also reflected in the structure of investment, because firms contributed significantly to the year-on-year decline in overall investment. On the other hand, government investment continued to grow on a year-on-year basis.

After being dampened in the second quarter by the impact of weaker household spending,

the annual rate of consumption growth accelerated again in the third quarter, to 3.1%. Amid strong consumer confidence, spending on durable goods continued to grow at a fast pace. The accelerating year-on-year growth was driven by dynamic growth in spending on non-durable and semi-durable goods. There were adequate resources on the labour market to cover the strong growth in private consumption.

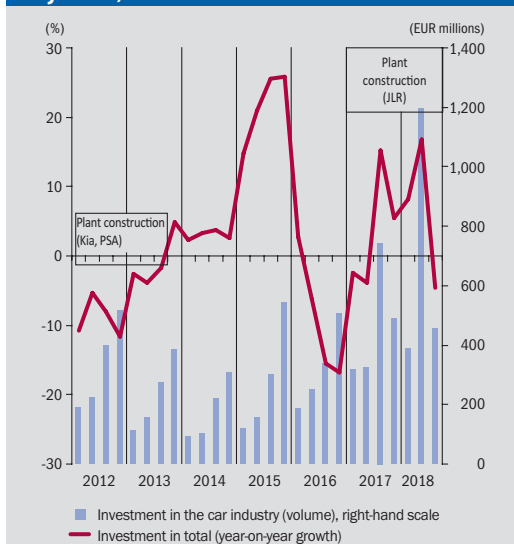
The rate of export growth decelerated in the third quarter to 5.6%, from 7.6% in the second quarter. Exports reflected the effect of investment in the production of new car models from the previous quarter. The export performance of car manufacturers remained strong, though their suppliers had an exceptionally weak quarter owing probably to declines in production in neighbouring countries. As regards the structure of exports by destination, a slowdown was recorded in exports to all the major recipient countries. The slowdown in total exports was caused largely by exports to non-euro area EU countries. Imports of goods and services increased by 5.4%, compared with 6.6% in the previous quarter. This increase made it possible for net exports to maintain their positive contribution to the annual rate of GDP growth.

On the production side, the most notable improvement was recorded in private services,

Chart 5 GDP – sectoral contributions to annual percentage changes (percentage points; constant prices; non-seasonally adjusted)



Chart 6 Investment in manufacture of motor vehicles (current prices; non-seasonally adjusted)



Sources: SO SR and NBS calculations.

owing to growth in private consumption and in value added in financial services. In construction, the contribution to GDP of value added growth continued to increase, probably as a result of infrastructural investments. Value added also increased over the first three quarters in manufacturing, mostly in the automotive industry. GDP growth was also supported on the production side by effective tax collection.

The seasonally adjusted quarter-on-quarter rate of economic growth reached 1.1% in the third quarter. This growth was driven mainly by private consumption, coupled with a positive change

in inventories, which more than offset the declines in investment and in net exports. Exports of goods and services increased by 0.6% quarter on quarter, while imports grew at a much faster pace (1.8%).

After rising in the second quarter by 4.3%, fixed investment declined in the third quarter by 7.4%, more than projected in the forecast (3.3%). This decline took place in all types of assets. A slightly positive contribution was made by investment in residential buildings.

Chart 7 Fixed investment – contributions of assets to quarter-on-quarter percentage changes (percentage points; constant prices; seasonally adjusted)



Sources: SO SR and NBS calculations.

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

	2017					2018		
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3
Gross domestic product	0.8	0.9	0.9	1.1	3.2	1.0	1.2	1.1
Final consumption of households and non-profit institutions serving households	0.8	1.1	0.7	0.7	3.5	0.7	0.5	0.9
Final consumption of general government	0.8	0.6	0.2	0.3	1.7	0.3	0.3	0.4
Gross fixed capital formation	3.3	-3.4	13.3	-6.8	3.4	6.0	4.3	-7.4
Exports of goods and services	3.2	-3.2	2.5	3.6	5.9	-1.5	2.8	0.6
Imports of goods and services	3.9	-3.5	3.1	0.6	5.3	0.9	1.8	1.8

Source: SO SR.

Chart 8 Household consumption – contributions to annual percentage changes (percentage points; constant prices; non-seasonally adjusted)

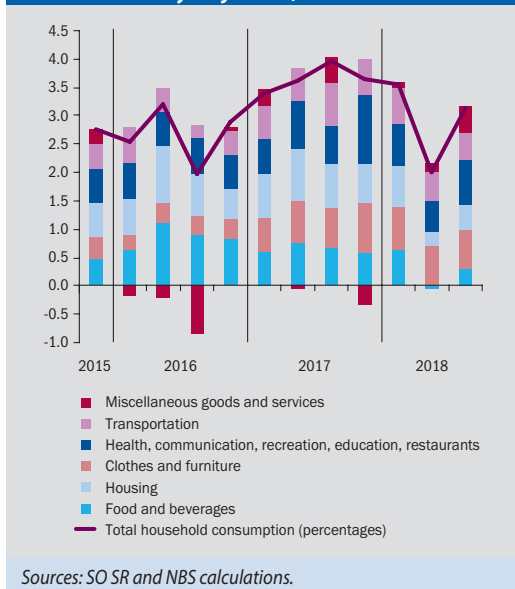
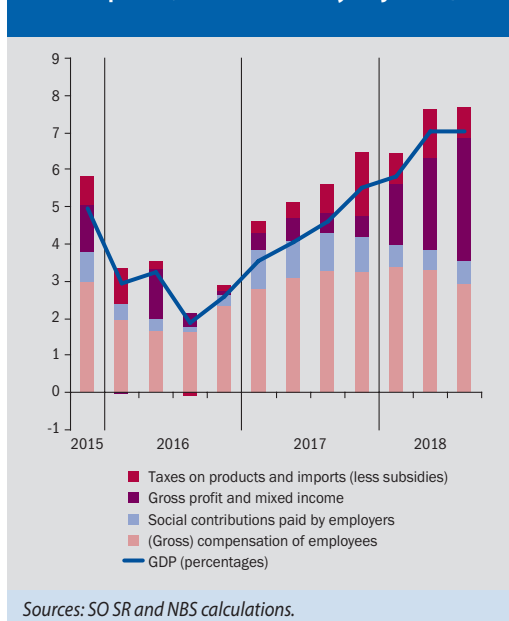


Chart 9 GDP – contributions to annual percentage changes (percentage points; current prices; non-seasonally adjusted)

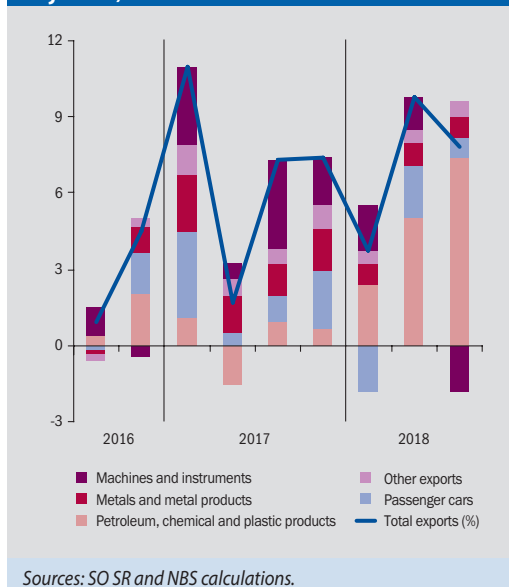


Private consumption was supported in the period under review by the ongoing growth in employment and wages. Except for autonomous expenditure on food and housing, household expenditure on luxury items and services (health, communication, recreation, education and restaurants) grew at a faster pace. After a weak second quarter (a rise of 0.5%), private consumption increased by 0.9% in the third quarter.

Looking at GDP at current prices as calculated using the income approach, the accelerating GDP growth in the third quarter was driven mainly by growth in entrepreneurial income (gross profits and mixed income). Income from work remained strong, but its contribution weakened somewhat, owing probably to the regular revision of data for the previous year, while data for this year were modified only slightly.

GDP growth in the third quarter was significantly influenced by changes in inventories. A closer look at the data indicates that the overall change in inventories was caused mostly by increases in the inventories of materials and products. Broken down by sector, almost 50% of the total increase in inventories was accounted for by wholesale trade, car production, retail trade, metal pro-

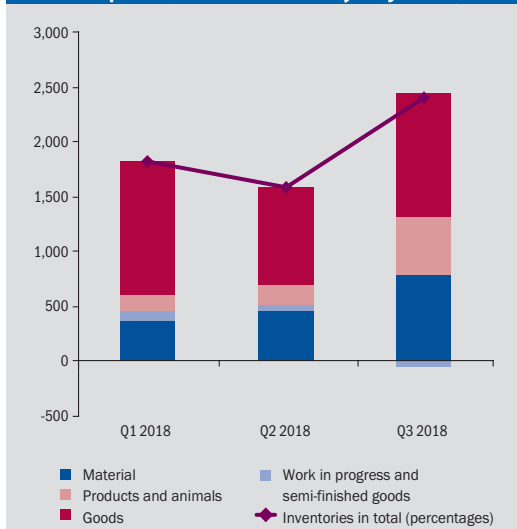
Chart 10 Exports of goods – contributions to annual percentage changes (percentage points; current prices; non-seasonally adjusted)



cessing, and the manufacture of machinery and equipment. This can, in large part, be explained by the weakening export performance of suppliers within the global value chains in the car industry.

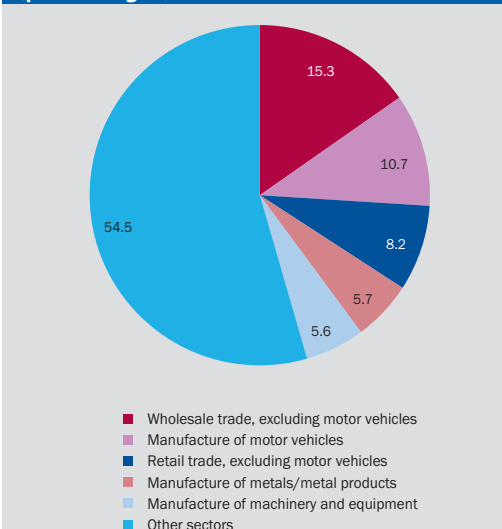


Chart 11 Inventories – contributions to annual volume changes (EUR millions; current prices; non-seasonally adjusted)



Sources: SO SR and NBS calculations.

Chart 12 Annual growth in inventories in Q3 2018 broken down by sector (percentages)



Sources: SO SR and NBS calculations.

3 THE LABOUR MARKET

3.1 WAGES AND LABOUR PRODUCTIVITY

Annual average wage growth in Slovakia slowed to 6.1% in the third quarter of 2018, from 6.4% in the previous quarter, as a result of weaker wage growth in the public sector and education. Despite faster wage growth in health services, wage growth in the public sector slowed from 7.7% to 5.8%. This was a consequence of a marked slowdown in the payment of irregular bonuses. On the other hand, wage growth in the private sector accelerated slightly (from 6% in the second quarter to 6.2% in the third quarter), mainly as a result of wage growth in industry, caused by a marked increase in irregular bonuses paid in the power industry. Accelerated wage growth was also recorded in transportation, accommodation and food services. Wage growth in the private sector was, however, hampered by a considerable slowdown in irregular bonus payments (except in the power industry). Despite this slowdown, the rates of wage growth recorded in the first three quarters of this year were higher than the average figure for the whole post-crisis period. Adjusted for inflation, real wages increased year on year by 3.3%. Wages levels rose most steeply in organisation with 20 or

Chart 14 Average wage components (annual percentage changes; percentage point contributions)

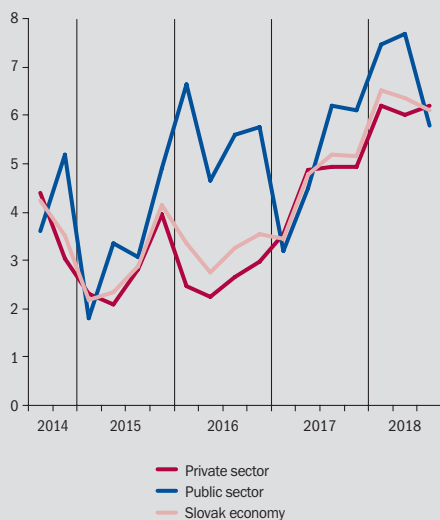


Sources: SO SR and NBS calculations.

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

more employees (by 7.6%), while those in smaller firms increased only moderately (by 3.8%).

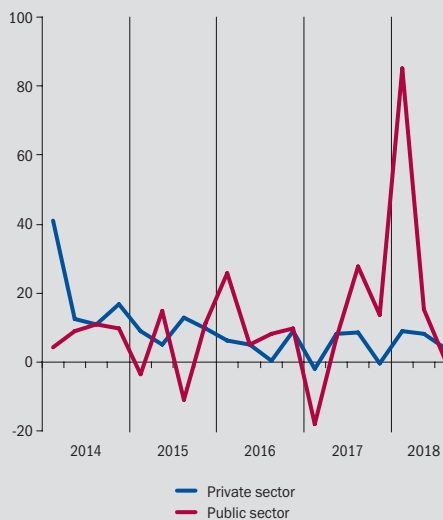
Chart 13 Wage levels in the main sectors of the economy (annual percentage changes)



Sources: SO SR and NBS calculations.

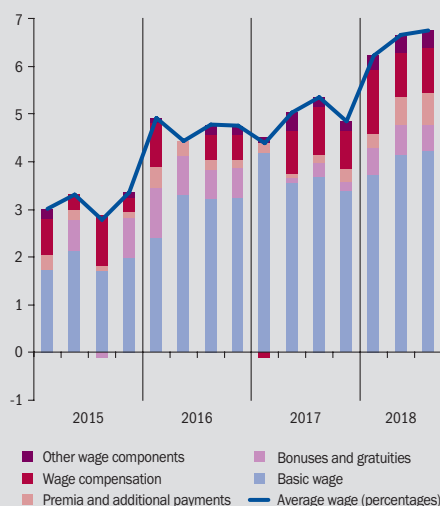
Note: The data for the public sector were calculated on the basis of developments in the categories O, P and Q of the NACE classification.

Chart 15 Irregular bonuses paid in the Slovak economy (annual percentage changes)



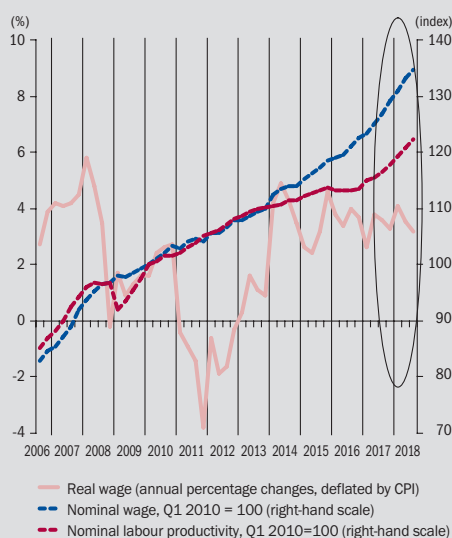
Sources: SO SR and NBS calculations.

Chart 16 Average wage growth – contributions of wage components to average percentage changes (percentage point contributions)



Sources: ISCP and Trexima.

Chart 17 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.

Compensation per employee continued growing in the quarter under review, at a pace of 5.3% year on year, representing a slowdown compared with the previous quarter. This growth was supported by higher payments classified as expenditure items (payments to persons working on the basis of a contract for work, members of boards of directors and supervisory boards) and by severance pays. On the other hand, compensation per employee growth was dampened by bonuses paid from profits.

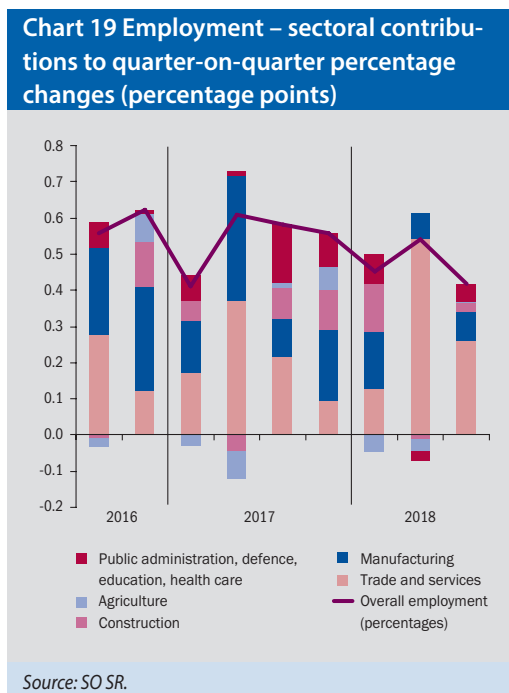
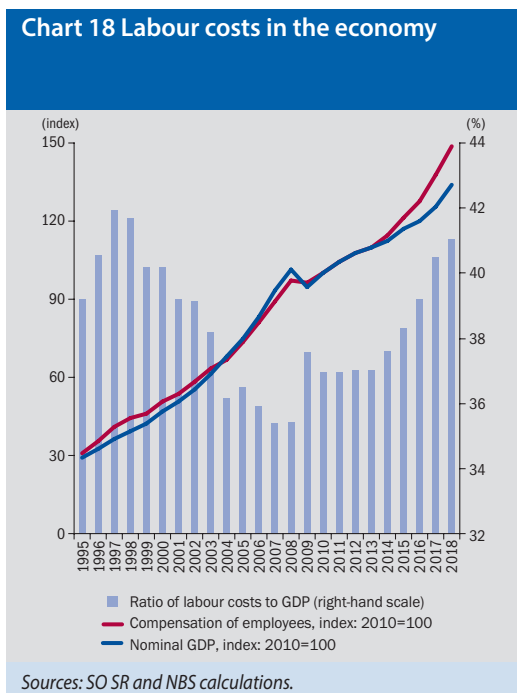
Nominal labour productivity, supported by the strong economic growth, continued to grow in the third quarter, at the fastest pace recorded in the past seven years. Despite its acceleration, nominal labour productivity growth still lagged behind wage growth. As a result of a slight slowdown in average wage growth, the excess of wage growth over labour productivity growth moderated in the quarter under review.

Table 2 Wages and labour productivity (annual percentage changes)

	2017					2018		
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3
Average wage (headline)	3.5	4.8	5.2	5.2	4.6	6.5	6.4	6.1
Consumer price inflation	0.9	1.0	1.5	1.8	1.3	2.3	2.8	2.7
Average real wage (headline)	2.6	3.8	3.6	3.3	3.3	4.1	3.5	3.3
Average wage (ESA 2010)	3.1	4.3	5.2	4.3	4.2	6.2	6.2	5.5
Compensation per employee (ESA 2010)	4.5	5.3	6.1	4.9	5.2	5.4	5.6	5.3
Nominal labour productivity (ESA 2010)	1.4	1.9	2.2	3.2	2.2	3.5	4.8	5.0
Real labour productivity (ESA 2010)	0.5	1.2	0.7	1.4	1.0	1.4	2.3	2.7

Sources: SO SR and NBS calculations.

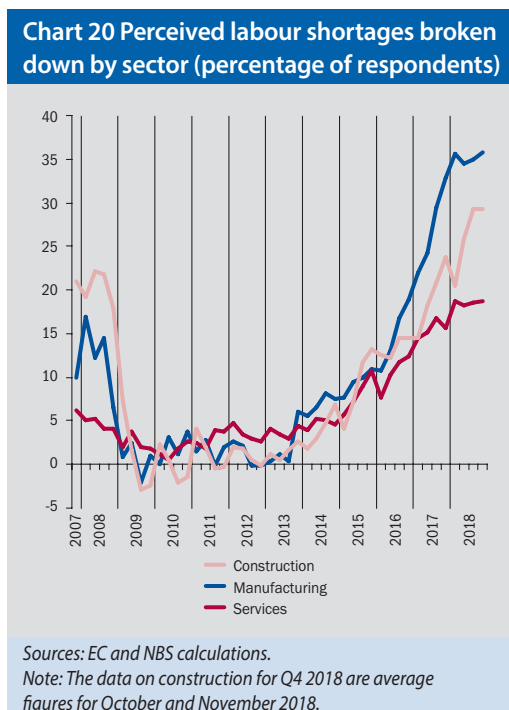
Note: Average wages (headline) are based on data from SO SR statistical reports. Average real wages were calculated on the basis of CPI inflation. Labour productivity (ESA 2010) was calculated as the ratio of nominal GDP to employment as defined in the ESA 2010 methodology.



3.2 EMPLOYMENT AND UNEMPLOYMENT

The annual rate of employment growth slowed during the third quarter of 2018, to 1.9% (from 2.1% in the previous quarter). In seasonally adjusted terms, the quarter-on-quarter rate of employment growth moderated to 0.4%, from 0.5% in the second quarter. Employment growth decelerated in most sectors, except in the services sector, comprising professional, scientific and technical activities, where employment rose by 2.5% quarter on quarter. After falling quarter on quarter in the previous quarter, employment in construction, public administration and defence increased again. The number of self-employed persons also increased slightly.

This trend in employment reflected the actual situation in the labour market. The number of job vacancies continued to grow in the period under review, but the persisting shortage of skilled labour caused a gradual slowdown in employment growth. At the same time, employers' expectations regarding the further trend in employment were less optimistic, owing probably to the heightened uncertainty surrounding the global economic outlook.

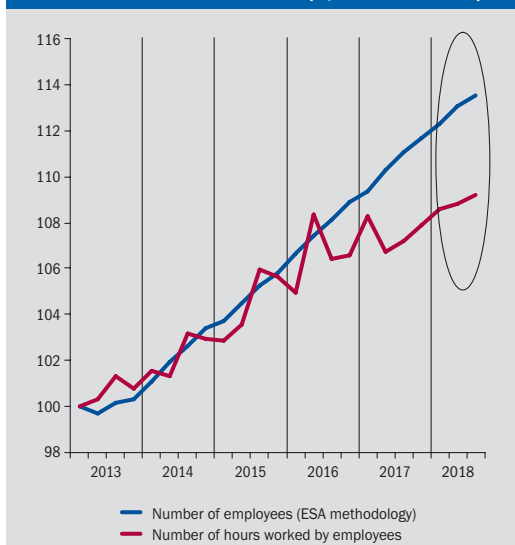


The number of hours worked has long been growing at a far slower pace than the number of employees. In the quarter under review, the number of hours worked increased by 0.3%

quarter on quarter, while that of employees rose by 0.5%. The difference was caused mainly by a quarter-on-quarter drop in the number of hours worked in manufacturing. Since there is a chronic shortage of skilled labour in this sector, employers are forced to hire workers for part-time employment, too, even for shorter working hours. The increase in the number of part-time employees explains why the length of a working week decreased in the third quarter, to a greater extent than in the previous quarters.

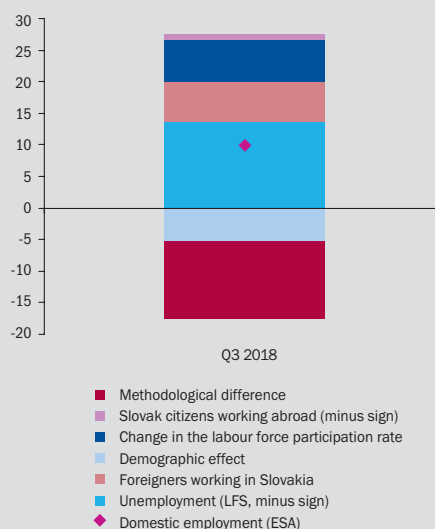
According to the Labour Force Survey (LFS), the number of unemployed decreased in the third quarter of 2018, at a faster pace than in the previous quarters. The seasonally adjusted num-

Chart 21 Employment growth and the number of hours worked (Q1 2013 = 100)



Sources: SO SR and NBS calculations.

Chart 22 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.

ber of unemployed dropped by 13,600 persons quarter on quarter. The unemployment rate fell by 0.5 percentage point, to 6.3%, representing a new historical low. The labour market situation was still influenced by the growing number of foreigners working in Slovakia, the falling number of Slovak citizens working abroad, and the rising labour participation rate. These developments were strongly supported by the favourable trend in wages, too.

4 PRICE DEVELOPMENTS

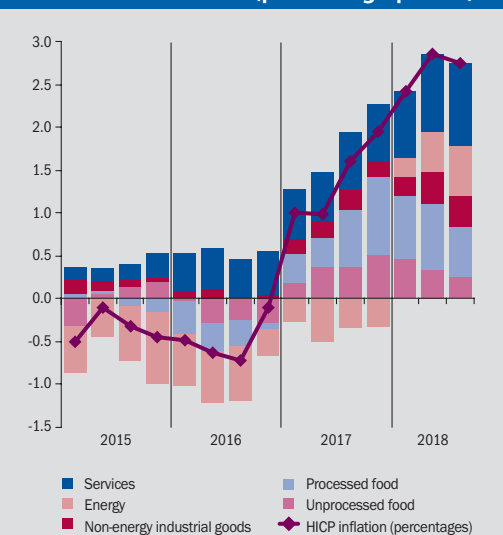
Annual HICP inflation slowed slightly during the third quarter of 2018, to 2.7% (from 2.9% in the previous quarter), owing mainly to a slowdown in the rate of increase in processed and unprocessed food prices.

The slower year-on-year rise in processed food prices was due to the fading of the base effect of a steep increase in food prices from the second half of 2017. This effect is expected to culminate

in the last quarter of 2018 and thereby cause a further slowdown in inflation.

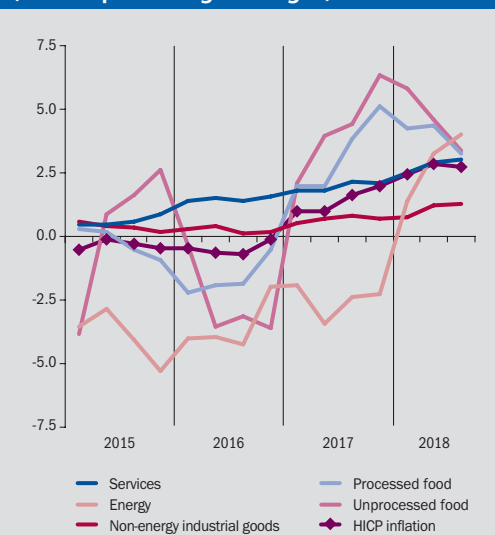
On the other hand, the annual rate of increase in energy prices accelerated in the period under review. Demand-pull inflation also accelerated slightly. Energy prices were influenced by a steep rise in oil prices, which subsequently generated a rapid increase in petrol/diesel prices. Thus, energy prices were the key factor constraining the

Chart 23 Contributions of components to annual HICP inflation (percentage points)



Sources: SO SR and NBS calculations.

Chart 24 Components of HICP inflation (annual percentage changes)



Sources: SO SR and NBS calculations.

Table 3 Annual percentage changes in consumer price inflation by component

	2017					2018		
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3
HICP inflation	1.0	1.0	1.6	2.0	1.4	2.4	2.9	2.7
Unprocessed food	2.1	4.0	4.4	6.3	4.2	5.8	4.6	3.4
Processed food	2.0	2.0	3.8	5.1	3.2	4.2	4.4	3.2
Non-energy industrial goods	0.5	0.7	0.8	0.7	0.7	0.8	1.2	1.3
Energy	-1.9	-3.4	-2.4	-2.2	-2.5	1.4	3.3	4.0
Services	1.8	1.8	2.1	2.1	2.0	2.5	2.9	3.0

Sources: SO SR and NBS calculations.



slowdown in inflation in the third quarter. The prices of other energy commodities increased, too. This, however, is unlikely to cause a steeper rise in regulated energy prices before the beginning of 2019.

The slight acceleration of demand-pull inflation was caused by increases in non-energy industrial goods prices and in services prices.

As for non-energy industrial goods, the annual rate of increase in prices of durable goods (furniture and household appliances) accelerated in the period under review. Services prices continued to rise as a result of demand-pull and cost-push pressures from the labour market. Labour market pressures are expected to push up prices for services in the medium term, too.