



NBS Monthly Bulletin

JANUARY 2018

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ABBREVIATIONS

CPI EA ECB EC EMES EONIA ESA 2010 ESI EU EUR EUR EURIBOR EURIBOR EURIBOR EURIBOR GDP GNDI GDP GNDI GDP GNDI GNI HICP Ifo Institute IMF MFI MF SR MMF MTF NACE NARKS NBS NEER NFC NDISHE	Consumer Price Index euro area European Central Bank European Commission emerging market economies euro overnight index average European System of Accounts 2010 Economic Sentiment Indicator (European Commission) European Union euro euro interbank offered rate statistical office of the European Union foreign direct investment gross domestic product gross national disposable income gross national disposable income gross national income Harmonised Index of Consumer Prices Leibniz Institute for Economic Research at the University of Munich International Monetary Fund monetary financial institutions Ministry of Finance of the Slovak Republic money market fund NBS's Medium-Term Forecast (published on a quarterly basis) Statistical Classification of Economic Activities in the European Community (Rev. 2) National Association of Real Estate Offices of Slovakia Národná banka Slovenska nominal effective exchange rate non-financial corporation
	-
OECD p.a.	Organisation for Economic Co-operation and Development per annum
p.a. p.p. PMI	percentage point Purchasing Managers' Index
REER	real effective exchange rate
SASS	Slovenská asociácia správcovských spoločností – Slovak Association of Asset Management Companies
SME SO SR	small and medium-sized enterprise 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 VAT	US dollar value-added tax
ZEW	Das Zentrum für Europäische Wirtschaftsforschung – The Centre for European Economic
	Research

Symbols used in the tables

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



1 SUMMARY¹

The strength of sentiment in the euro area in recent months has been favourably reflected in hard indicators. Euro area industrial production increased significantly in November, with the growth driven mainly by Germany industry. The labour market situation is gradually improving and is having an increasingly greater impact on private consumption, as evidenced by retail sales. Leading indicators remained elevated in January, implying that economic activity will remain robust. This should support increasing foreign demand for Slovak goods and services.

In Slovakia, monthly indicators of economic activity continued to rise in November. Industrial production growth increased notably, thanks largely to the car industry's improving output. Nevertheless, the favourable developments in industrial production were still not fully reflected in overall sales and exports, both of which recorded the same growth rates as in the previous month. The upward trends are, however, expected to boost the growth of these indicators after a short lag. The labour market situation remains bright. Employment growth maintained its relatively high rate in November. Most new jobs are being added in the industry, services and trade sectors. Employers' expectations, as well as the number of job vacancies, suggest that employment will continue increasing in the period ahead. This outlook is further supported by the unemployment rate, which in December fell appreciably (to 7.1%).² Strong demand for labour is having a substantial downward impact on long-term unemployment. The labour market's continuing tightening is supporting wage growth, which in November rose to 4.9%. The highest wage growth was in the expanding sectors (industry and services).

The annual inflation rate for December was 2.0%, and for the year as a whole it stood at 1.4%. In December, food inflation was close to a five-year high and accounted for more than two-thirds of the headline rate. It is expected, however, that this supply-side shock will fade during the first half of the year and that upward pressure on the price level will come mainly from prices of energy and services.

- All month-on-month and quarter-on-quarter changes mentioned in the text have been seasonally adjusted using NBS internal models.
- 2 The unemployment rate based on the total number of job seekers, seasonally adjusted.

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2 The real economy

2.1 'HARD' INDICATORS OF ECONOMIC ACTIVITY

Monthly indicators of economic activity maintained their upward trend in November 2017, in three-month-on-three-month terms. While the growth rates of sales and exports moderated, industrial production growth accelerated, due mainly to the increase in manufacture of transport equipment.

November's industrial production growth rate of 3.8% was also supported by the manufacture of refined petroleum products. The rising trend in industry is expected to continue, as implied by business surveys conducted in late 2017 in which managers' expectations for production improved the most. After two quarters of moderate decline, industrial production is expected to have returned to positive growth in the fourth quarter of 2017.

As for overall sales, their three-month-on-threemonth growth rate stood at 2.0%. The sectoral breakdown of the growth was similar to that in industrial production. At the same time, how-

Chart 1 Sales, industrial production and

exports (three-month-on-three-month

percentage changes in the three-month

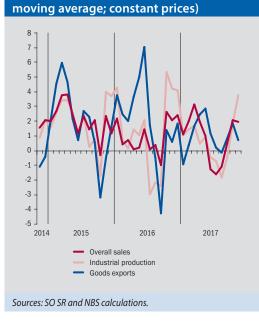
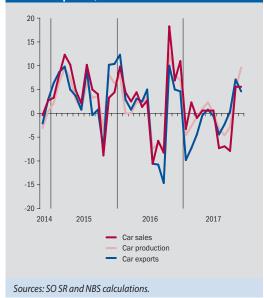


Chart 2 Automotive industry trends (three-month-on-three-month percentage changes in the three-month moving average; constant prices) ______



ever, growth in wholesale trade sales fell, mostly due to declines in November itself in sales of information technologies, fuels, and machinery.

Slovakia's exports increased in November by 0.7% on a three-month-on-three-month basis. Despite the relatively robust output in core sectors, October's growth rate was not surpassed.

2.2 'SOFT' LEADING INDICATORS

The European Commission's **Economic Sentiment Indicator** (ESI) for the euro area rose in December to its highest level for more than 17 years (116.0). Among euro area countries, the ESI for Germany recorded one of the highest increases (up to 116.0). In both cases, the ESI's increase was broad-based across all sectors. The composite Purchasing Managers' Index (**PMI**) for the euro area increased in January. The PMI for Germany fell marginally, but remained close to the sixand-a-half-year high recorded in the previous month. The **ZEW economic sentiment index** for Germany increased in January, and the current conditions index reflected burgeoning optimism.

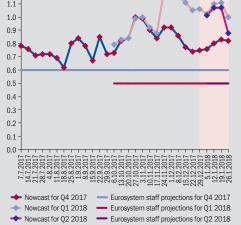
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The **Ifo Business Climate Index** for Germany increased in January, and while the sub-index for expectations was less favourable, the sub-index for current conditions reached an all-time high. Leading indicators, as well as short-term forecasts, suggest that economic growth in both Germany and the euro area as a whole will remain strong in early 2018.



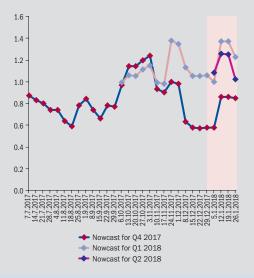


Sources: Now-Casting Economics Ltd and ECB (December 2017 Eurosystem staff macroeconomic projections for the euro area). Note: The highlighted area denotes developments since the previous Monthly Bulletin.



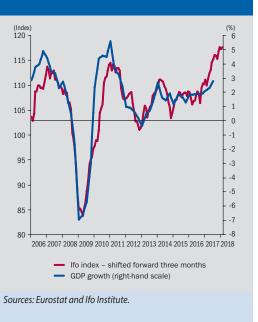
Sources: European Commission, Ifo Institute and ZEW Centre. Note: ESI (long-run average = 100); Ifo index (2005 = 100); ZEW (balance of responses).

Chart 4 GDP growth estimate for Germany in Q4 2017, Q1 2018 and Q2 2018 (quarter-on-quarter percentage changes)



Source: Now-Casting Economics Ltd. Note: The highlighted area denotes developments since the previous Monthly Bulletin.

Chart 6 Germany – Ifo index (2005 = 100) and annual GDP growth





3 The labour market

Employment growth across the reviewed sectors remained robust in November, standing at 2.8% year on year (down from 2.9% in the third guarter) and 0.1% in month-on-month terms. Taking into account that job growth is lower in the public sector (0.9% in the third quarter) than in the private sector, annual employment growth in the economy as a whole in the fourth guarter is expected to be around 2.2%. The main driver of November's job growth was industry, which saw increases in all branches apart from the energy and chemical industries. Services and trade also contributed positively, if somewhat more modestly (supported by most subsectors with the exception of certain market services in which job growth slowed: such as legal and accounting activities, administrative services, and architectural activities). The rising employment trend in the construction sector came to an end in November, but with confidence in the sector still elevated and construction production continuing to grow, it may reappear. Since confidence indicators have maintained the favourable levels observed at the end of 2017, job growth in ear-



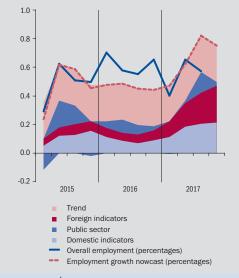
Chart 7 Employment – sectoral contributions

to three-month-on-three-month changes in

the three-month moving average

Sources: SO SR and NBS calculations based on monthly figures for employment in the reviewed sectors.

Chart 8 Indicator contributions to the nowcast for quarter-on-quarter employment growth (percentage points)



Sources: SO SR, ÚPSVR and NBS calculations. Note: The public sector comprising public administration, education and human health as defined in the sections O, P and Q of the NACE statistical classification of economic activities.

ly 2018 is expected to remain relatively strong. With the labour market becoming increasingly tighter, however, a rising number of employers are experiencing labour shortages.

The number of unemployed continued its downward trend in December, falling by 4,200, month on month, after seasonal adjustment. As a result, the adjusted unemployment rate based on the total number of job seekers fell to 7.1%. Part of that decrease was accounted for by job seekers being removed from the unemployment register for reasons other than finding work, but even after adjusting for this fact, December's fall in headcount unemployment was relatively large (almost 3,000 month on month). Unemployment is falling to below previous historical lows, a development aided by active labour-market policies (assistance to long-term unemployed and training for job seekers). The number of job vacancies remains very high, implying that employment growth could remain relatively strong.



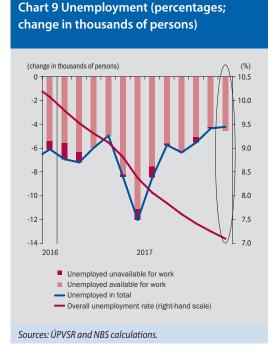
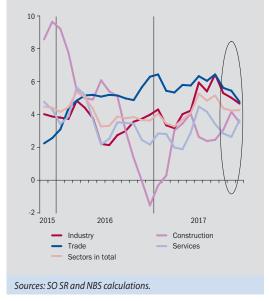
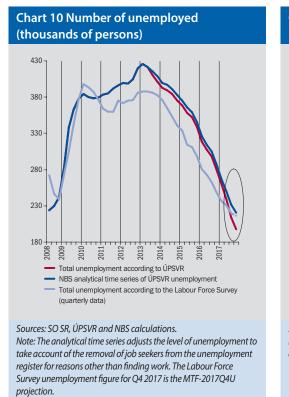
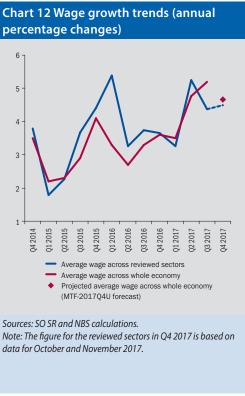


Chart 11 Wage growth by sector based on monthly figures (annual percentage changes in the three-month moving average)







Average annual wage growth in the reviewed sectors increased to 4.9% in November, from 4% in October (the average rate for the third quarter was 4.4%). The rebound in wage growth was driven by wages in core branches of industry (wages

in the sector as a whole increased by 5% year on year), and in the services sector, where the overall growth rate of 5.6% was largely accounted for by such subsectors as transportation, restaurants, and other market services (administrative,

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Chart 13 Factor model based wage determinants (annual percentage changes; percentage point contributions; deviations from long-run average)



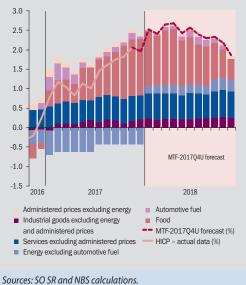
Notes: Long-run average annual wage growth is 4.3% (calculated since 2006). Wages and productivity are given in nominal terms. Further information about the methodology is provided in this Analytical Commentary. real-estate, consultancy, and recreation activities). Wage growth moderated in construction (to 2.4%) and trade (3.8%). In view of the latest monthly data and the relatively high irregular bonuses paid towards the end of 2016, annual wage growth is expected to fall in the fourth quarter in line with projections. It may, however, accelerate in the next period, given that wage determinants such as price developments, the pick-up in nominal productivity, and labour market tightening are quite clearly implying upward pressure on wage growth.

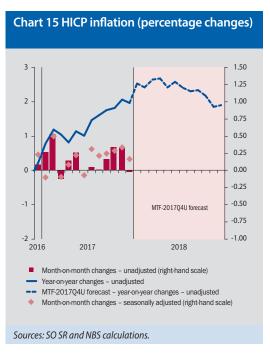


4 PRICES

The annual HICP inflation rate in Slovakia edged down to 2.0% in December (from 2.1% in November), in accordance with the projection. In month-on-month terms, the price level remained unchanged.

Chart 14 HICP inflation and its components (annual percentage changes; percentage point contributions)





The increase in food prices continued to be supported by the continuing upward trend in egg prices. Annual food inflation stood at 5.5% in December, close to a five-year high for a second successive month. With its impact on the head-line HICP inflation rate amounting to 1.44 per-

	Table 1 HICP components – comparison of projected and actual rates of change (percentages; percentage point contributions)											
				Non-energy industrial goods	Energy	Food	Services	ніср	Demand-pull inflation excluding fuel	Administered prices excluding energy		
	ges	A	December 2017 – MTF-2017Q4 forecast	0.7	-2.3	5.4	2.2	1.96	1.6	0.6		
Year-on-year changes	ar char	В	December 2017 – actual figure	0.8	-2.5	5.5	2.1	1.96	1.7	0.5		
	r-on-ye	B-A	December – actual figure minus forecast	0.1	-0.2	0.1	-0.1	0.0	0.0	-0.1		
	Үеаг	(B-A) * weight	Contribution to overall forecast error ¹⁾	0.04	-0.03	0.03	-0.04	0.01	0.01	-0.01		
	Sources: SO SR and NRS calculations											

Sources: SO SR and NBS calculations.

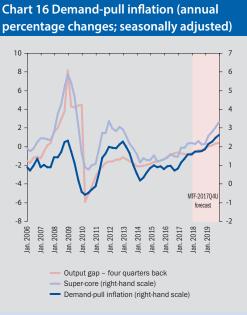
1) Projections taken from NBS's December 2017 Medium-Term Forecast (MTF-2017Q4).



centage points, the food component remained the principal contributor to inflation. Food inflation is expected to begin easing after the first four months of the year, owing to the fading of the impact of the supply-side shock and to projected developments in agricultural commodity prices in the European market.

Given the upward trend in global oil prices, the annual rate of increase in automotive fuel prices is expected to accelerate until around June/ July 2018. Demand-pull inflation has been in line with projections and is expected to accelerate moderately in the short term, reflecting the passthrough of increases in real disposable income and in import prices.

Annual services inflation was 2.1% in December and is expected to accelerate in January 2018, reflecting cost-push and demand-pull pressures generated by consumer demand developments. As a result, the average headline inflation rate in 2018 is expected to be slightly above 2%.



Sources: SO SR and NBS calculations.

Note: Demand-pull inflation comprises the following: industrial goods excluding energy and administered prices; and services excluding administered prices. The super-core index comprises sub-items in the HICP for which the output gap has predictive power with statistical significance.

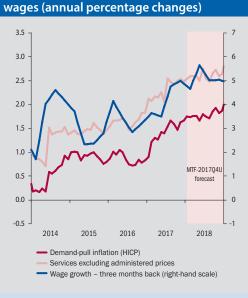


Chart 17 The HICP services component and

Sources: SO SR and NBS calculations.



Chart 18 The Brent crude oil price (EUR) and

automotive fuel prices in Slovakia (annual

Sources: SO SR and NBS calculations.



5 INDICATIVE IMPACT ON THE FORECAST

Nowcast movements and all the most recent monthly data have been incorporated into the update of NBS's December 2017 Medium-Term Forecast (MTF-2017Q4U).

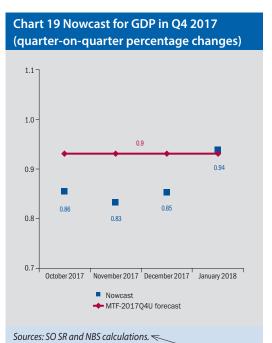


Chart 20 Nowcast for GDP in Q1 2018 (quarter-on-quarter percentage changes)

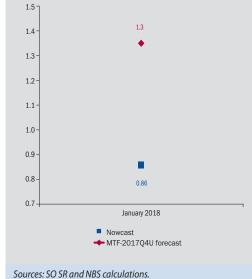
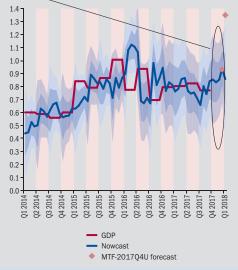


Chart 21 Nowcast for GDP (quarter-on-quarter percentage changes)³



Sources: SO SR and NBS calculations. Note: The GDP forecast for the first quarter of 2018 differs from the GDP nowcast by taking into account the expected increase in production capacities in the automotive industry, which constitutes a one-off factor in the economy. 3 The band around the point estimate denotes +/- 1 and 2 times the root mean square error. Nowcasts are calculated using OLS time series models based on selected sets of monthly indicators (for employment, a factor model is used). Nowcasts provide a current estimate of future developments using available monthly figures from the current quarter, their future values forecast with ARIMA models, and their lagged values. The individual model projections are independent of each other and therefore a forecasting error in a past quarter cannot affect current projections. Further details are available in the commentaries on the GDP nowcasts, private consumption nowcasts, export nowcasts and employment nowcasts.

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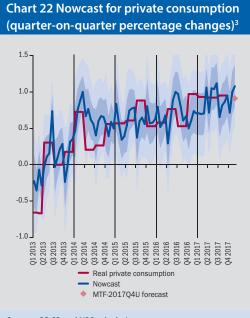
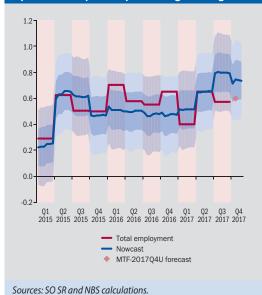
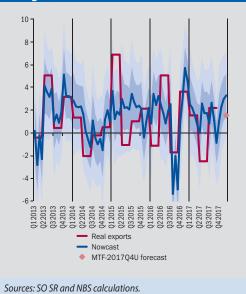


Chart 24 Nowcast for employment (quarter-on-quarter percentage changes)³



Sources: SO SR and NBS calculations.

Chart 23 Nowcast for goods and services exports (quarter-on-quarter percentage changes)³



sources. So Sh and NDS calculations.

OVERVIEW OF MAIN MACROECONOMIC INDICATORS FOR SLOVAKIA

Table 2 Selected economic and monetary indicators for Slovakia

(annual percentage changes, unless otherwise indicated)

	Gross do- mestic prod- uct	HICP	Industrial producer prices	Employ- ment ESA 2010	Unem- ployment rate (%)	Industrial produc- tion index	Total sales of sectors ¹⁾	Economic Sentiment Indicator (long-term average=100)	M3 (for analyti- cal use) ²⁾	Loans to private sector ³⁾	Loans to non-fi- nancial corpora- tions ³⁾	Loans to house- holds ³⁾	State budget balance (EUR mil.)	General govern- ment balance (% of GDP)	General govern- ment gross debt (% of GDP)	Current account (% of GDP)	Balance of trade (% of GDP)	USD/EUR exchange rate (average for the period)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2010	5.0	0.7	-2.7	-1.5	14.4	8.1	8.1	98.7	7.8	5.3	1.6	12.5	-4,436.1	-7.5	41.2	-4.7	-0.1	1.3257
2011	2.8	4.1	2.7	1.8	13.6	5.3	6.2	98.8	2.9	9.3	7.6	11.1	-3,275.7	-4.3	43.7	-5.0	-0.1	1.3920
2012	1.7	3.7	3.9	0.1	14.0	8.0	4.4	93.9	8.8	3.8	-2.3	10.3	-3,810.7	-4.3	52.2	0.9	3.4	1.2848
2013	1.5	1.5	-0.1	-0.8	14.2	3.8	1.9	90.2	6.4	6.4	1.7	10.3	-2,023.3	-2.7	54.7	1.9	3.9	1.3281
2014	2.8	-0.1	-3.5	1.4	13.2	3.6	2.6	100.4	2.5	7.7	1.9	13.2	-2,923.4	-2.7	53.5	1.1	3.6	1.3285
2015	3.9	-0.3	-4.2	2.0	11.5	7.3	7.3	99.7	11.5	10.7	7.3	13.1	-1,932.6	-2.7	52.3	-1.7	1.3	1.1095
2016	3.3	-0.5	-4.3	2.4	9.7	4.8	4.1	101.6	6.1	10.2	4.2	13.4	-980.3	-2.2	51.8	-1.5	2.0	1.1069
2017		1.4						103.5					-1,220.1					1.1297
2017 Q1	3.0	1.0	2.0	2.1	8.7	7.7	6.1	104.3	5.7	11.1	8.0	12.6	-	-0.8	53.5	0.2	2.3	1.0648
2017 Q2	3.7	1.0	1.9	2.1	8.1	1.8	3.2	101.7	5.9	12.6	10.5	13.3	-	-0.9	51.8	-1.7	2.0	1.1021
2017 Q3	3.4	1.6	1.6	2.3	8.0	3.3	4.7	104.6	6.4	11.2	9.8	12.0	-			-3.1	-0.7	1.1746
2017 Q4		2.0	1.2					103.4					-					1.1774
2017 Jan.	-	0.8	0.4	-	8.6	7.4	4.5	104.6	6.2	11.4	7.3	13.5	92.3	-	-	-	-	1.0614
2017 Feb.	-	1.2	2.6	-	8.4	2.6	5.4	106.6	6.6	11.9	9.4	13.5	-500.0	-	-	-	-	1.0643
2017 Mar.	-	1.0	3.0	-	8.0	12.9	8.3	101.6	5.7	12.0	8.5	13.8	70.7	-	-	-	-	1.0685
2017 Apr.	-	0.8	2.5	-	7.7	-3.0	4.1	101.6	6.1	12.3	9.6	13.6	-298.2	-	-	-	-	1.0723
2017 May	-	1.1	1.9	-	7.4	5.1	4.3	102.6	5.7	13.0	11.7	13.6	-256.4	-	-	-	-	1.1058
2017 June	-	1.0	1.4	-	6.9	3.3	1.2	100.8	5.9	12.6	10.5	13.3	72.6	-	-	-	-	1.1229
2017 July	-	1.5	0.6	-	6.7	9.2	6.9	102.1	5.6	11.9	9.6	13.3	53.2	-	-	-	-	1.1511
2017 Aug.	-	1.6	2.1	-	6.5	-0.4	3.9	104.0	6.7	12.1	10.4	13.3	-227.2	-	-	-	-	1.1807
2017 Sep.	-	1.8	2.1	-	6.4	2.3	3.4	107.7	6.4	12.0	10.3	13.0	-94.8	-	-	-	-	1.1915
2017 Oct.	-	1.8	2.0	-	6.1	5.4	3.1	106.3	6.8	11.3	8.3	13.1	336.2	-	-	-	-	1.1756
2017 Nov.	-	2.1	1.7	-	6.0	6.2	5.0	102.0	7.9	10.9	7.7	12.8	-229.7	-	-	-	-	1.1738
2017 Dec.	-	2.0	•	-	5.9	•	•	102.0	•	•	•	•	-238.7	-	-	-	-	1.1836

Sources: Statistical Office of the Slovak Republic, MF SR, the European Commission and NBS.

1) Constant prices (seasonally adjusted).

2) Currency in circulation in M3 refers to money held by the public (according to methodology in place prior to 2008).

3) Adjusted for sales and securitisation.

More detailed time series for selected macroeconomic indicators http://www.nbs.sk/_img/Documents/_MonthlyBulletin/2018/StatisticsMB0118.xls