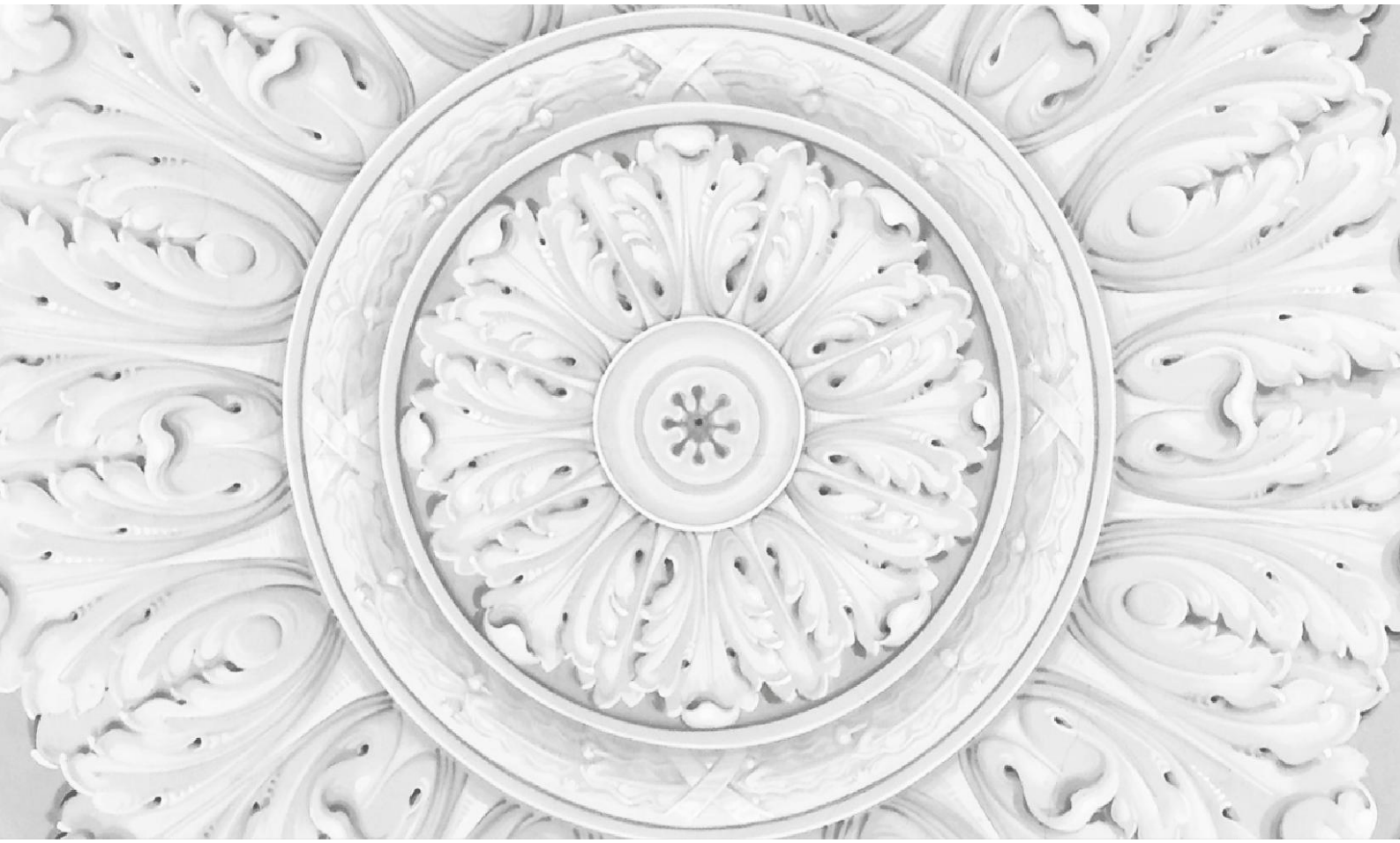
Bank of Russia
Central Bank of the Russian Federation



Talking Trends

Macroeconomics and Markets

February 2016

Research and Forecasting Department Bulletin

No 4 / February 2016

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Executive summary

1. Monthly summary

- **February 2016** saw slower price growth amid elevated inflation risks, while the economy stays in recession.

    - **Inflationary pressures** have eased over the last month**,** but **inflation risks** remained high.
    - In early 2016, **Russian economy** witnessed output contraction (primarily in construction and services sectors) amid slowing contraction rates. As before, structural factors are a major contribution to the negative growth dynamics.
    - **Financial stability risks** in Russia decreased because oil prices stopped their slump in February. However, the range of oil price fluctuations still remains high.

2. Outlook

- Leading business indicators suggest risks incurred for ongoing economic growth in the advanced economies and persistently high risks of a further slowdown in economic growth in emerging markets, causing a new wave of turbulence in global financial markets.
- Oil price and ruble exchange rate stabilisation have not yet improved leading business indicators in Russia. Economic growth is still expected to resume not earlier than the second half of 2016.

3. In focus: Seasonal adjustment of Russian CPI

- The results of Research and Forecasting Department's approach towards seasonal adjustment of Russian consumer inflation, which accounts for intra-year seasonality shifts in particular CPI components, yields less volatile dynamics of seasonally adjusted inflation as compared to a more conventional seasonal adjustment approach.
- Our methodology for seasonal adjustment of Russian CPI shows that consumer prices in seasonally adjusted terms have grown by 0.7% and 0.6% in January 2016 and February 2016 respectively. These figures are apparently higher than the results for seasonal adjustment of Russian CPI on the aggregate level. Tracking down such differences in results plays a crucial role in the process of identifying inflationary pressures in the economy on the basis of short-term monthly data.

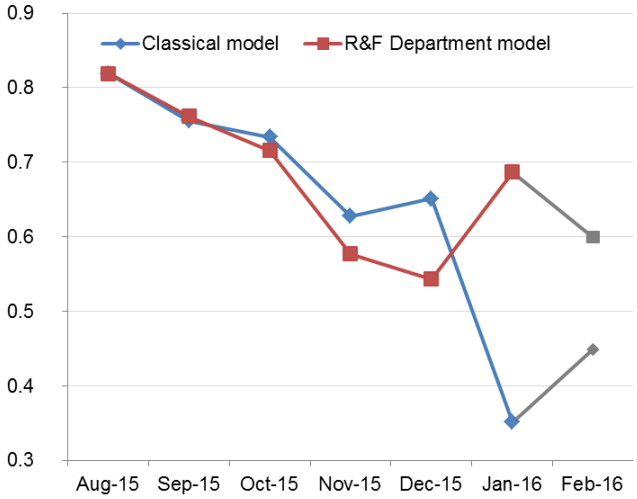
1. Monthly summary

1.1. Inflation remains high, with a high risk of failure to meet inflation targets

1.1.1. Seasonally adjusted monthly inflation stabilised and remains within the 0.6%-0.7% range

Compared to January, February saw a slower price growth from 1.0% to 0.7%[1]. These readings however cannot be compared directly as long as they disregard the various seasonality impacts for the two months. A straightforward TRAMO/SEATS-based CPI adjustment points to a certain acceleration in February against January: from 0.35% to 0.45%.

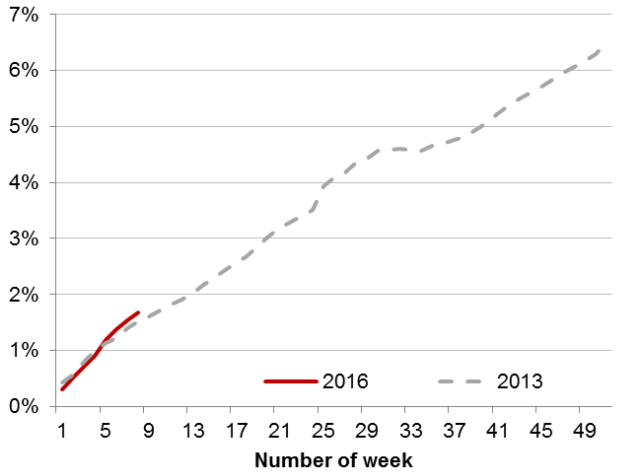
Figure 1. Seasonally adjusted inflation performance, % MoM



Grey is used for preliminary data for February

Sources: Rosstat, R&F calculations

Figure 2. Inflation accumulated since the start of the year in 2013 and 2016 (weekly data)



Source: Rosstat

We believe however that this simplified seasonality adjustment treatment of the CPI range in this case does not fit the Russian reality, for a number of objective reasons, the key one being a changed seasonality in revision of regulated prices and tariffs. Up to 2012 inclusive, tariffs and regulated prices would be revised upwards in January; yet starting from 2013, this revision has been taking place in July. The direct impact of tariff rises on the overall price index is small enough. This rise tends to trigger a growth in prices on other products, especially those with cost price largely dependent on changed tariffs. The ensuing tariff indexation to other months is very impactful on the seasonality of price growth.

The other reasons include the so-called 'moving' seasonality of some product categories. Prices for fruit and vegetables, for instance, could begin declining in either July or August,

[1] Preliminary estimate based on weakly data.

subject to the weather and the yield. The classical seasonality adjustment model on the overall CPI level fails to take into account these changes.

R&F team-developed seasonality adjustment model (for details, see Section 3. In focus: The seasonal adjustment in consumer inflation problem) enables to take into account the irregular nature of seasonality. According to our calculations, seasonality effect-free price growth totalled 0.7% in January and 0.6% in February, substantially higher than the classical seasonal adjustment-based estimates (Figure 1).

Our CPI seasonality adjustment model shows therefore that price pressure between January and February remained high despite the emerging signs, in late February, of a starting downward movement in this pressure. Our estimates suggest that should the monthly CPI performance hold throughout 2016, annual inflation is set to total 8.0%-8.5%. Comparison of accumulated inflation since the start of the year in 2013 and 2016 is an indirect evidence to the elevated inflation background (Figure 2).[2] The growth accumulated for the first two months of 2016 is higher than that for 2013, with this gap on the rise, suggesting there is the risk that the year would end with a relatively high inflation indicator.

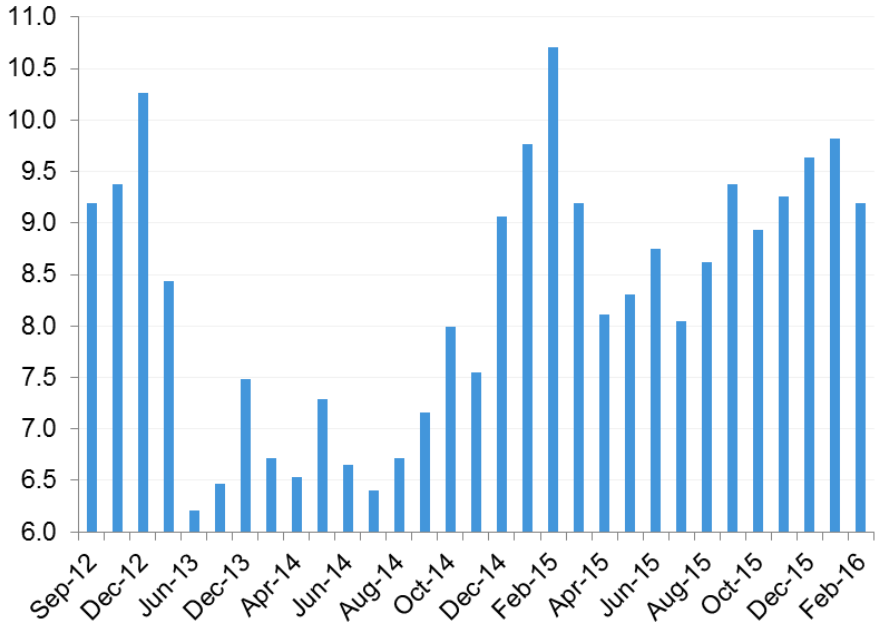
1.1.2. Despite some drop in February, inflation expectations remain high

As seen from the February survey by inFOM, R&F-adjusted for systematic overstatement, inflation expectations in February were down from 9.8% to 9.2% (Figure 3)[3].

However, inflation expectations are still high.

[2] With no vivid price shocks occurring in 2013, annual inflation totalled 6.5%, which is why the year could be considered as a model year based on forecast price performance in 2016.
[3] For the calculation methodology please refer to the previous Bulletin issue (see Bulletin 'Talking Trends' No 3. January 2016. Section 1.3.2 Inflation expectations continue growing in January).

Figure 3. Direct inflation expectation estimates by inFOM adjusted for their regular overrating, % YoY over a calendar year



Sources: Rosstat, inFOM, R&F calculations

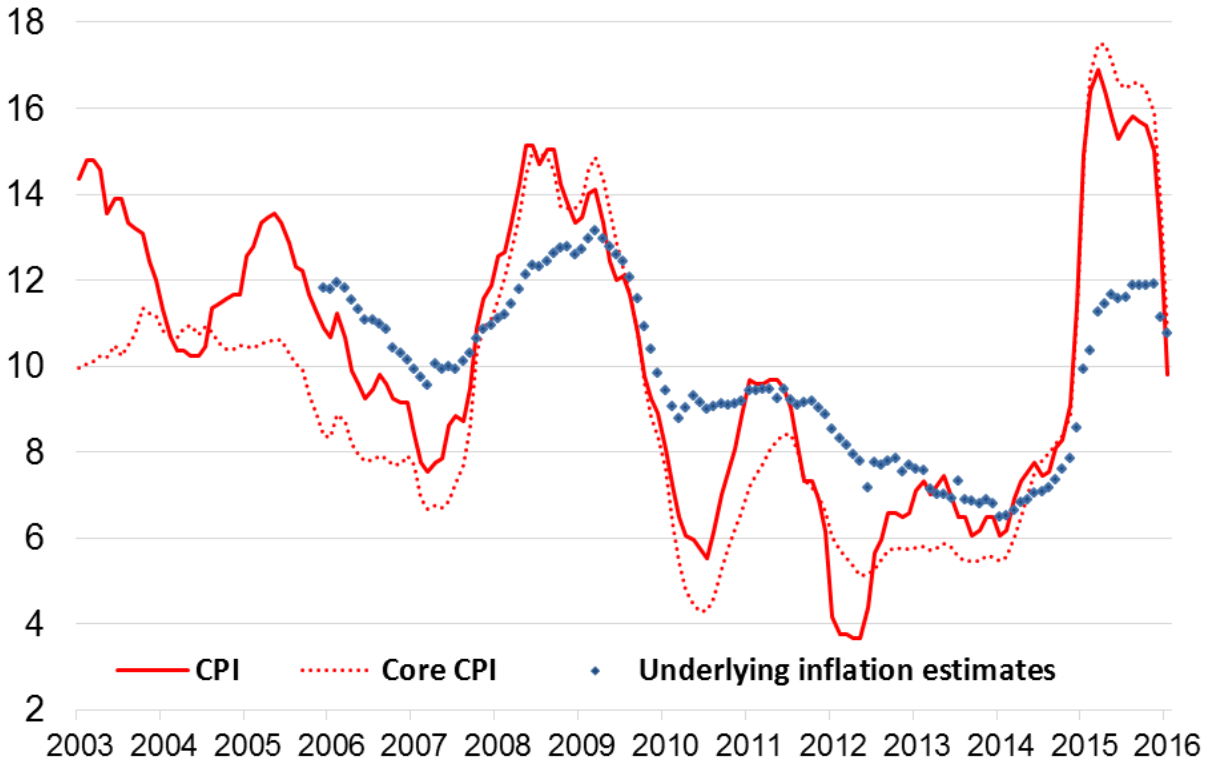
1.1.3. Underlying inflation remains high

Annual underlying inflation estimate in January was down to 10.7%, which was higher than the actual inflation for the first time in two years, and remains high (Figure 4).

On condition that the current price performance remains in place, a gradual reduction in underlying inflation is expected to be seen. However, should escalated inflation risks materialise, underlying inflation is set to decrease at a slower rate.

In calculating the underlying inflation indicator, short-term price fluctuations are excluded. This is why underlying inflation was not responsive to, inter alia, short-term acceleration of inflation caused by the price shock in early 2015. As this price shock-caused fallout exhausted themselves, the actual inflation was gradually moving closer to underlying inflation, and for January it even turned out lower. The long-term inflation component, which underlying inflation captures, is indicative of a slower consumer price growth, albeit at a slower pace than the pace of actual inflation slowdown. This sees the current inflation expectations remaining to be high, rendering a shaky nature to the ongoing decline in the actual inflation.

Figure 4. CPI, core CPI and historical estimates of underlying inflation, % YoY



Sources: Rosstat, R&F calculations

1.1.4. PMI price indexes: cost-push inflation accelerated, with high rates of ex-factory price growth spurred by poor demand

- As the January and February PMI surveys suggest, devaluation and price expectations did not grow against the backdrop of a weaker ruble. Fundamentally, this is a sign of a better situation in early 2016 than early 2015.
- In manufacturing, with its fairly stable demand, ex-factory prices tend to rise quicker than those in the service sector where demand constrains pressure on ex-factory prices coming from the cost side.

The PMI for ex-factory prices in manufacturing was somewhat bigger for February, following its January's drop, while the service sector in January[4] was seeing some slowdown in price growth. The ex-factory price PMI for the service sector was an all-time low since the start of the recession in Russia. The ex-factory price PMI in the manufacturing sector is higher than that in services, and higher than its mid-2015 reading, suggesting the presence therein of an elevated price background.

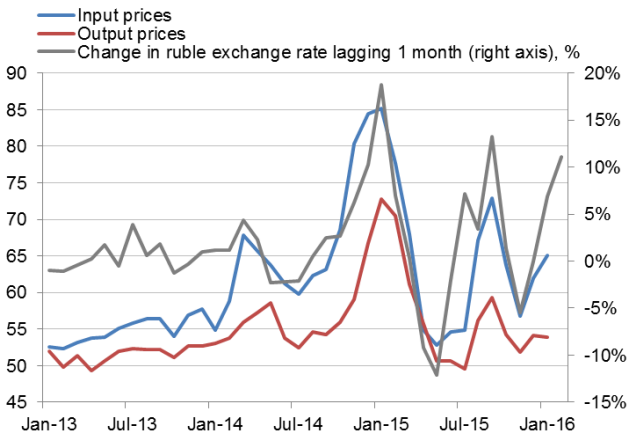
The weak demand acts as a price constraint. This driver is especially vivid in the service sector, wherein business activity has been in decline for a fourth month in a row. In

[4] As of writing, February PMI data for the service sector were unavailable.

January, the business activity component in the service sector reached its all-time low since March 2015.

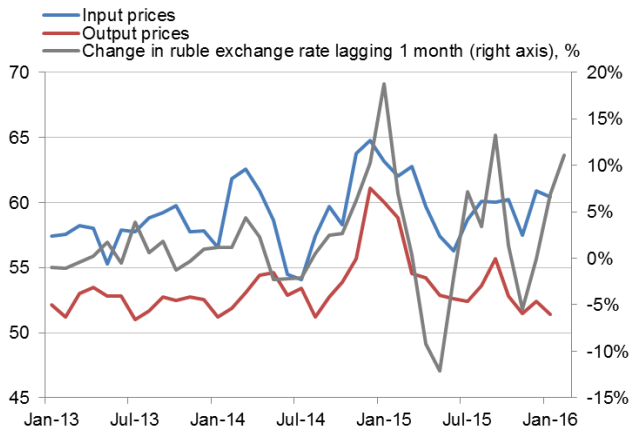
The price pressure from the cost side remains high in manufacturing, reflecting, most probably, a sharply weaker ruble as seen between December and January. Although the PMI procurement price index was substantially lower in February, it remains in the increased range. The simple correlation analysis shows that procurement prices are responsive to movements in the nominal effective exchange rate of the ruble (both up and down) with one month's lag: the pair correlation for the period since early 2013 is 0.7. Price pressure on procurement prices remained strong in February as a result of the weaker ruble. At the same time, the level of cost-push inflation is meaningfully lower than that seen in early 2015 - the period of the same quicker ruble depreciation. This is an indirect sign of a reduced pass-through effect of the rubble weakening on prices (or a sign of its more extended nature against last year).

Figure 5. Price components of industrial PMI and RUB/USD exchange rate movements



Sources: Markit PMI, R&F calculations

Figure 6. Price components of services PMI RUB/USD exchange rate movements



Sources: Markit PMI, R&F calculations

In the service sector cost-push inflation, although remaining high, did not accelerate. Procurement price index in services PMI was somewhat down. It is to be noted that in the service sector the dependence of procurement prices on ruble exchange rate performance is not overly strong (Figure 6).

Demand constraints could continue to be putting a checking impact on the expansion of retail prices; however, the possible procurement price acceleration is a risk factor, especially in case the ruble resumes its weakening.

1.2. The Russian economy: no immediate recovery is yet in store

1.2.1. Industrial production in January: growth unstable

- According to Rosstat, expansion in manufacturing output is recorded for a second month in a row. Yet this growth is shaky and mainly explained by substantial month indicator fluctuations against the backdrop of persisting uncertainty in the economy, as well as seasonal and weather factors.
- Any signs that manufacturing is on the way to a stable growth path have yet to emerge, and it may well remain in stagnation in the current year.

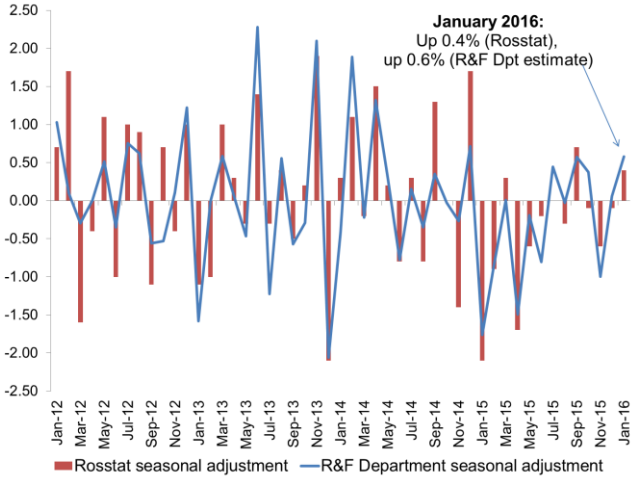
Industrial output for January 2016 rose 0.4% MoM, according to Rosstat's seasonal adjustment (with R&F seasonal adjustment suggesting a 0.6% MoM growth). A slight manufacturing output growth, seasonally adjusted, was observed for a second month in a row (Figure 7). Having said this, manufacturing performance in individual activities is mixed.

Manufacturing in January 2016 recorded a minor drop (0.4%, according to R&F seasonal adjustment), while in December 2015 manufacturing was the key contributor to the growth of aggregate industrial production index (Figure 8). Volatility in the output across individual manufacturing sectors was growing stronger: for the last few months, a stable growth or decline is hardly seen in an industry. Seasonally adjusted R&F estimates show that relatively strong positions are only held by the wood processing industry, wherein the expansion must have been due to the depreciation of the ruble. At the same time, the new weakening surge of this winter is still of little help to export-oriented sectors. Please see the next Bulletin section for more details of the manufacturing sector's performance in January.

The key industrial output growth driver was electricity, gas and water supply (where growth was, according to R&F, 4.5% MoM, seasonally adjusted). Of all activities, the absolute contribution of this component to the overall industrial output index was the most significant for a second month in a row. This is chiefly attributed to the weather factor (the relatively warm December and the cold January), which is difficult to take into account as seasonal adjustments are being made.

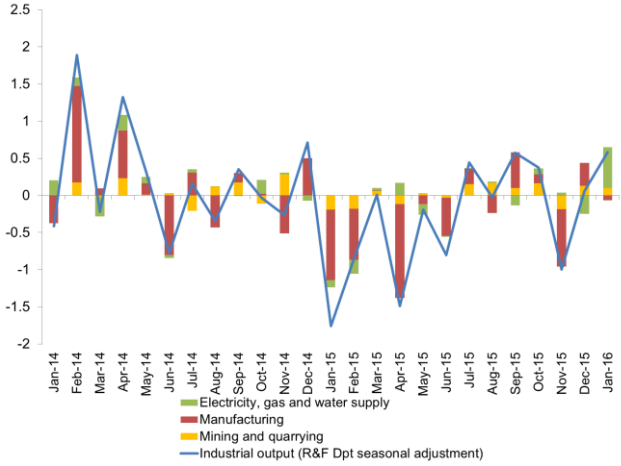
The positive impact from the weather factor in January excluding, it is to be recognised that industrial production has a long way to go to reach a growth path. Yet, no deterioration in the situation is observed. The onset of stable positive expansion rates in the production sector tends to rely on external conditions and take time needed for the current structural change in the economy to complete.

Figure 7. Industrial production, % MoM (seasonality adjusted)



Sources: Rosstat, R&F calculations

Figure 8. Contribution of individual components to industrial output index, % MoM (seasonally adjusted)



Sources: Rosstat, R&F calculations

1.2.2. Non-tradables sector developments in January: is the improvement temporary?

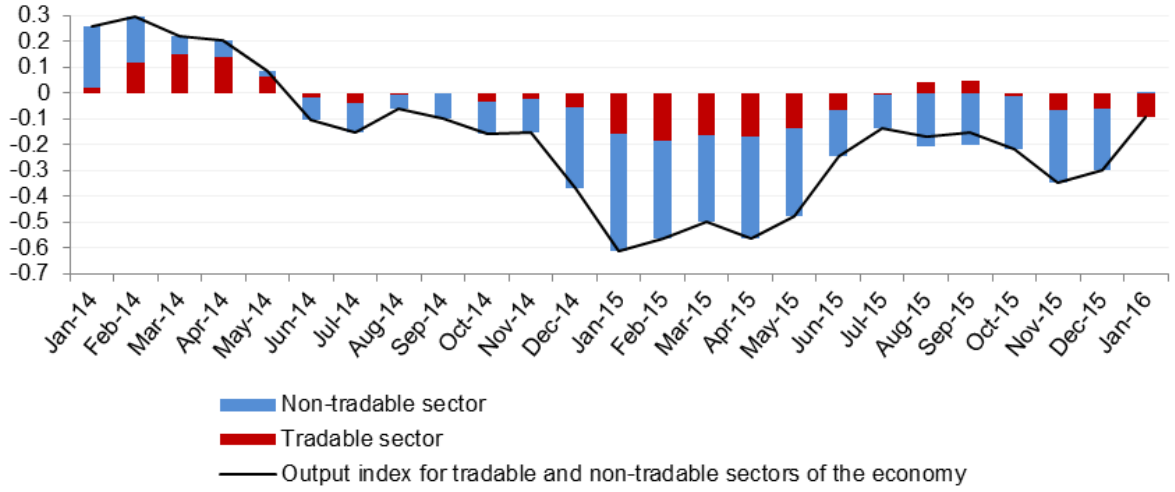
- For the first time since the middle of 2014, the output of products and services in the non-tradables sector in January was showing a positive, albeit close to zero, reading - caused by the unexpected improvement in retail volumes.
- In the tradables sector, January's developments remained negative, which saw output contraction across all groups of manufacturing industries: investment, consumer and intermediate demand.

In January 2016, the downward trend in the outputs of tradables and non-tradables sectors remained; yet, on the back of some positive dynamics the rates of decline in the latter of the two dropped. The ongoing decline in the tradables sector against December last year is explained by the negative performance of manufacturing and agricultural outputs (Figure 9). Having said this, the expansion in mining and quarrying (mainly fossil fuels) in January staved off a deeper decline in the tradables sector.

The non-tradable sector's contribution to the index performance was positive for the first time over a large period of time, albeit indiscernible. This contribution was determined by the unexpected improvement in retail volumes, seasonally adjusted (0.4% MoM), as well as the expansion in electricity, gas and water supply of 4.5% MoM, seasonally adjusted, which was caused by the temperature factor referred to in the preceding section. The other non-tradables industries (transport and construction) saw a contracted month-on-month output. As before, we expect the relatively weak dynamics in these sectors'

outputs to hold in the months ahead, considering the ongoing structural shifts in the economy, from non-tradables to tradables sector.

Figure 9. Output index for tradable and non-tradable sectors of the economy, % MoM (trend component growth rate)



** January readings on non-tradables sector and output index contain no data on the volumes of paid services to the households for the lack of such statistics for the report date.*

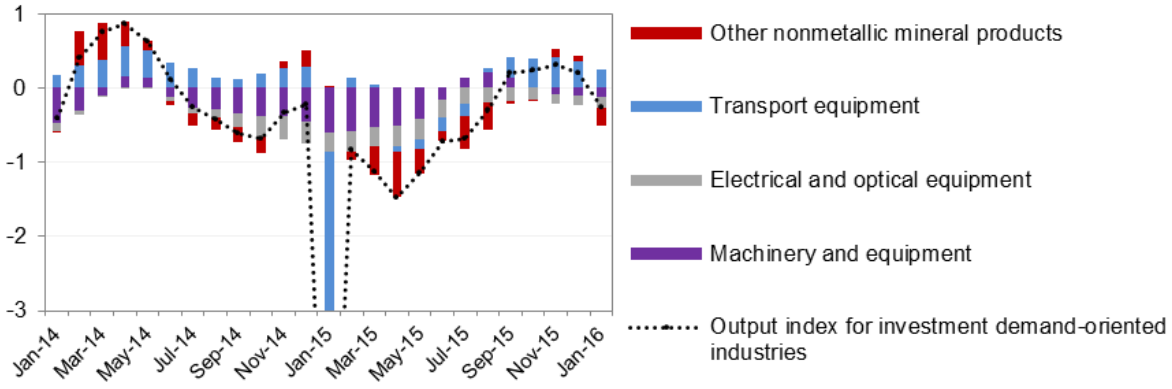
Sources: Rosstat, R&F calculations

For manufacturing, month-on-month output decline, based on the emerging trend, was in January typical of all industry groups: investment, intermediate and consumer demand (Figures 10-13). Production index movements in investment demand-oriented industries are determined by the still low investment activity in the economy, checked by the lack of sufficient demand and the uncertain economic situation. The January index performance was worsened by all industries incorporated into the index.

The output of consumer-oriented industries saw a further decline in January. The trend component in this industry group was mainly impacted by the shrinking production of durable goods. The positive production growth was seen only in the production of food products (dairy and meat products, vegetable oil and animal fat).

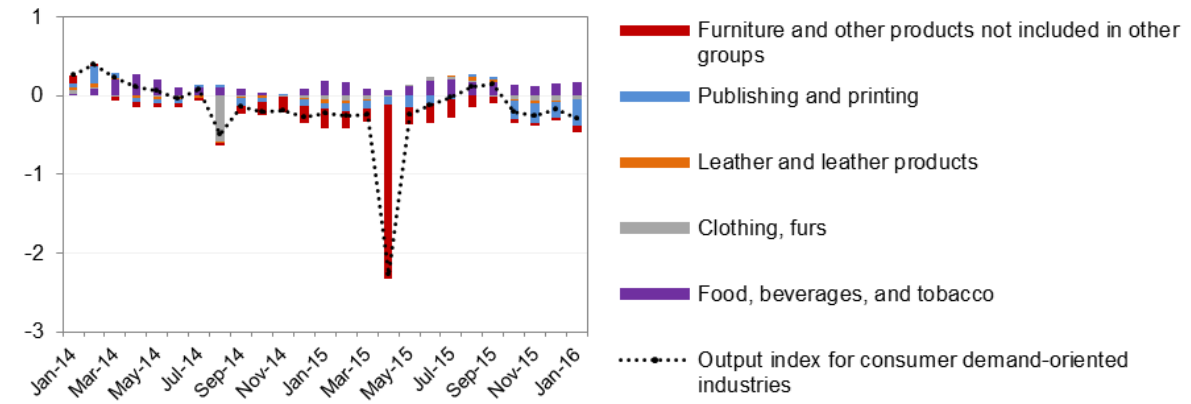
The indicator of intermediate demand-oriented industries improved in January against December but remained negative. This improvement occurred on the back of contracted negative impact from the metallurgical industry, against the backdrop of better export positions of metallurgical companies as the ruble exchange rate tumbled last winter.

Figure 10. Output index for investment demand-oriented manufacturing industries, % MoM (by the trend component of production)



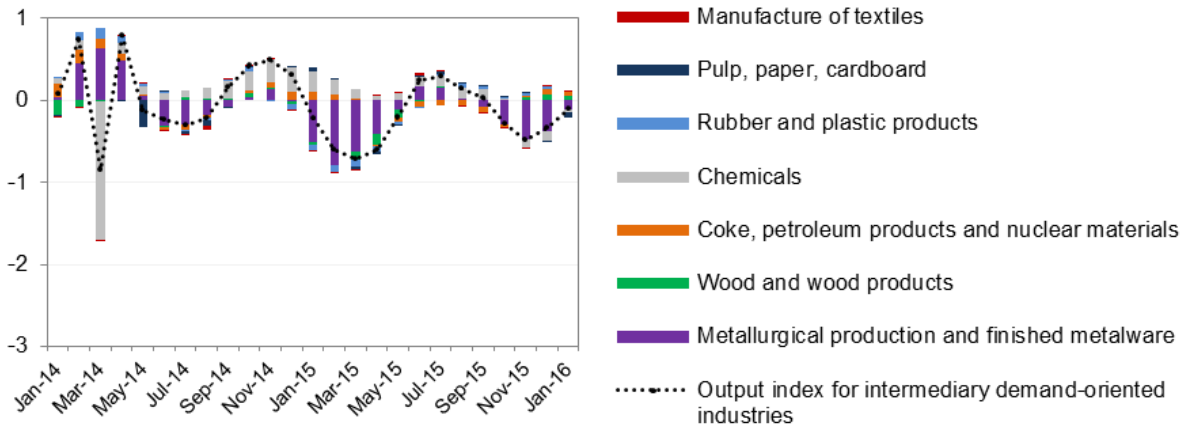
Sources: Rosstat, R&F calculations

Figure 11. Output index for consumer demand-oriented manufacturing industries, % MoM (by the trend component of production)



Sources: Rosstat, R&F calculations

Figure 12. Intermediate demand-focused industrial index, %, month-on-month (by the trend component of production)



Sources: Rosstat, R&F calculations

1.2.3. PMI surveys provide evidence to a continued overall economic slump, while manufacturing industries are showing some stabilisation

Based on PMI survey data[5], the following conclusions are offered.

First, manufacturing industries, as a typical representative of a tradables sector, are still feeling better than the service sector (which is mainly a non-tradables sector). Hence, the expected structural shifts towards the tradables sector are underway in the economy.

Second, the services output for January 2016 saw a 'second wave' of contraction, which began in October 2015, the rates of output decline accelerating, while the manufacturing sector saw a stabilisation. Business expectations in the service sector in January deteriorated sharply, with a pessimistic market sentiment dominating, which was very uncommon before.

Third, the decline in export orders is ongoing despite contracted forex costs of Russian exporters. This decline is express enough and enduring.

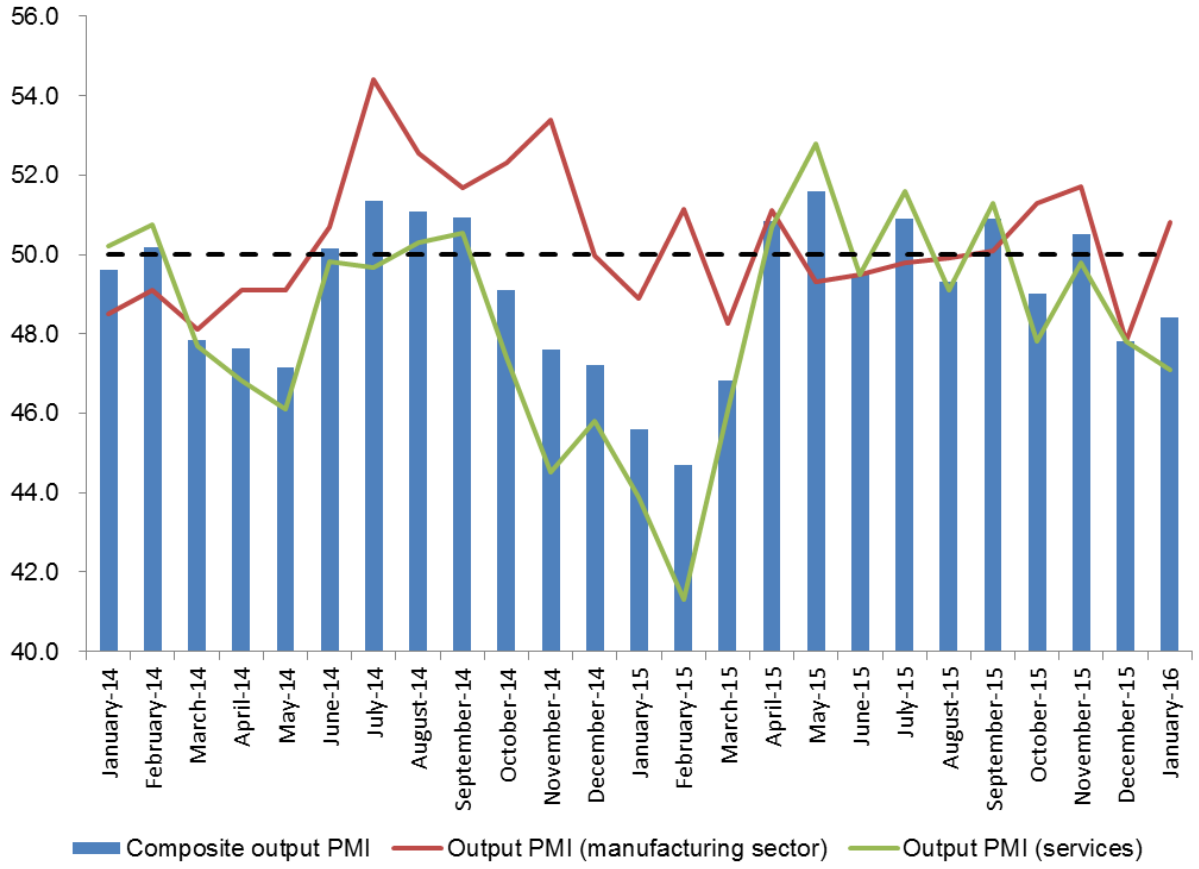
The latest available PMI statistics overall point to the high dangers of a continued economic downturn we spoke of before. Following its dip in late 2014 – early 2015, the composite PMI for production stabilised by the middle of last year at around 50 points of the gap between growth and recession, signalling the emergence of prerequisites for a gradual output growth recovery by the end of the year.

The last few months' statistics however suggest that the above trend could fall prey to the oil price slump as the composite PMI for production dropped substantially in December 2015 and January 2016 (Figure 13). The negative performance of the index is largely down to a declining service sector. The overall negative background in the non-tradables sector persisting, the service sector is likely to gain some support from its relatively stable

[5] January services PMI and the composite PMI and February manufacturing PMI.

subsectors (chiefly, tourism and hotel industry). The latter, as we believe, could to a large extent check the downturn in the non-tradables sector from a further deepening.

Figure 13. Production and business activity PMI: composite index for manufacturing and services (points)

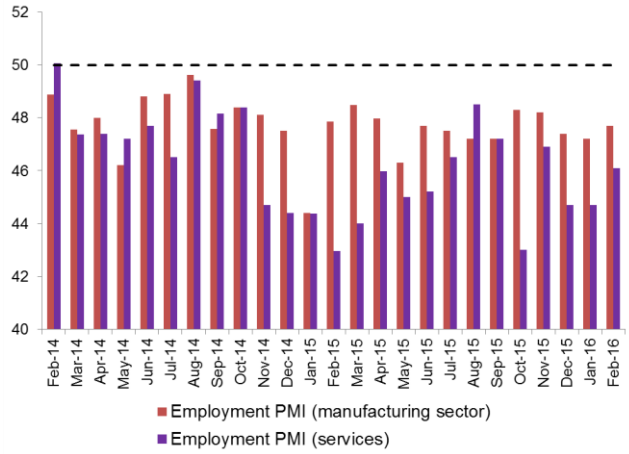


Sources: Markit, Bloomberg

Still, the dynamics in the manufacturing sector were much more optimistic over the past few months: the second half of the last year only once saw the output index decline well above 50 points, in December, following the declining oil prices. In this year, we believe that a weak exchange rate would continue to provide objective support to business activity in the tradables sectors. Having said this, there are a number of structural reasons which are set to render the potential support of a weaker ruble, yet more and more limited.

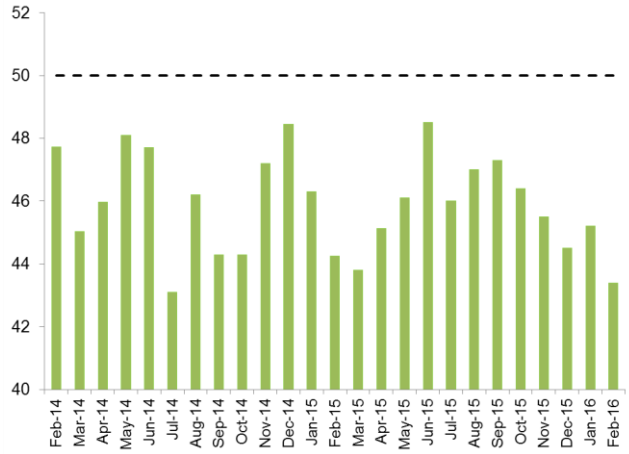
PMI job indicators are continuing to signal negative dynamics (Figure 14). The relatively stable, for a crisis period, unemployment data are to a great extent attributed to structural factors; most probably however it fails to show the full picture of negative developments in the labour market. The other extra factors, including part-time employment, incomplete working week, fewer work shifts, are probably not reflected appropriately in the relevant survey indicators. We therefore cannot offer any optimistic immediate outlook for the labour market.

Figure 14. PMI in employment: manufacturing sector and services, points



Sources: Markit, Bloomberg

Figure 15. PMI in manufacturing sector: new export orders, points



Sources: Markit, Bloomberg

Also importantly, 2015 saw the onset and persistence, throughout the larger part of the year, of a meaningful gap between the survey data for employment in the manufacturing sector, on the one hand, and the service sector, on the other. The less negative PMI performance in the manufacturing sector suggests the ongoing labour resource crossflow from the non-tradables to the tradables sector, which is driven by a worsened external economic climate.

And, finally, of relevance are the continued negative and deteriorating dynamics in the survey data on export orders (Figure 15). The number of new export orders fell in February to an all-time low since July 2014. Although some largest Russian exporters may not be included into the PMI survey selection, the vivid negative trend in export orders suggests that Russian non-oil and gas exports have no growth potential in the near future. Hence, the contraction of forex costs of Russian exporters, thanks to a weaker ruble, has so far failed to boost exports. The rise in exports in some product categories remains immaterial to impact on the overall export volumes.

1.2.4. Unemployment rate: structural factors-induced downward movement

- The unemployment rate (seasonally adjusted) was down from 5.7% in December to 5.4% in January, which corresponds to full employment.
- A low mobility of labour in Russia currently stands in the way of efficient labour distribution across sectors and regions; it may well act as a strong constraint on economic growth.
- As the Russian labour market mobility is low, lower real wages and rising companies' debt to employees sustain a moderate unemployment rate.

According to Rosstat, unemployment rate (including the Crimea Federal District) in January 2016 was different than between November and December 2015 at 5.8%. The total number of unemployed, seasonally unadjusted, has held in the past three month, with its fluctuations being immaterial, close to 4.43 million.

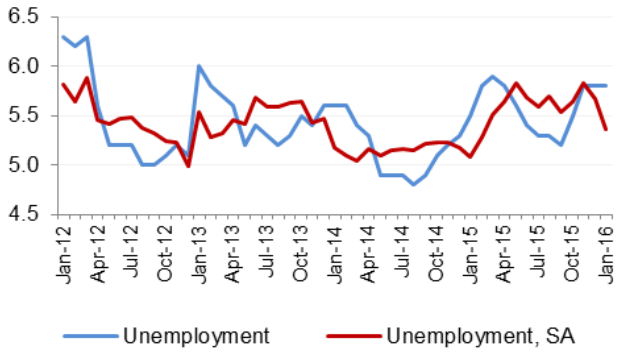
The seasonally adjusted unemployment rate for the month was substantially down from 5.7% seen in December to 5.4% in January (Figure 16). This rate corresponds to the state of full employment based on R&F model calculations unless, certainly, a new demography-driven downturn occurs in the next few months. The seasonally adjusted number of unemployed has been dropping since December, with the rate of decline accelerating (Figure 17).

Unemployment rise was checked by an improvement in the production sector with its January output expansion in individual economic activities.

In the current crisis, a moderate unemployment growth, with the lack of spare labour generation, is accompanied with a stronger fall in real wages than seen in the past crises. According to Rosstat, in 2015, real wages lost 9.5% against 2014, while this number for 2009 against 2008 was 3.5%. At the same time, the overdue payments of wages have been rising since 2015, when they mainly came about. As of 1 February 2016, the amount of wages in arrears rose 73% YoY to total □4.3 billion.

These are all signs that the Russian labour market is not sensitive enough to the ongoing structural economic changes. The low mobility of labour currently stands in the way of efficient labour distribution across sectors and regions; it may well act as a strong constraint on economic growth.

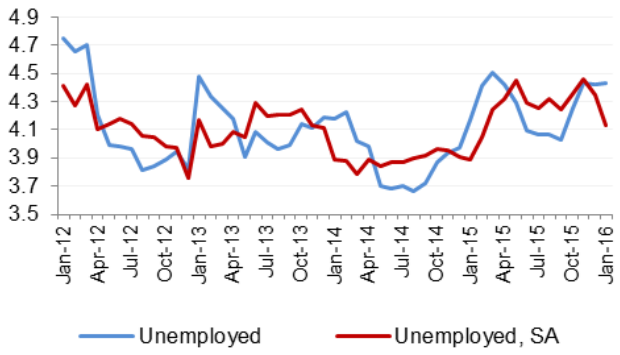
Figure 16. Unemployment rate*, %



** 2016 data is tentative.*

Sources: Rosstat, R&F seasonal adjustment

Figure 17. Number of unemployed*, mln



** Starting from January 2015, the diagram data incorporate the Crimea Federal District.*
Sources: Rosstat, R&F seasonal adjustment

1.2.5. Forced cuts in budget spending and their changed seasonality are set to negatively affect Q1 2016 GDP

- The expenditures of the federal and general government budget are forcefully declining in real terms because of the structural drop in the oil and gas revenue and the insufficient monetary means of the sovereign funds to fully neutralise the

oil slump effect on the budget in the medium term. We estimate that such contraction in budget spending is set to reduce aggregate demand in the economy by 0.3-0.7 pp of GDP in 2016.

- It is essential that spending be aligned to budget capacity so that long-term budget stability is ensured to improve market participant confidence in the state policy and to bring down economic uncertainty. Meanwhile, the continued uncertainty around the federal budget for 2016 and onwards leads to a worsened calendar budget execution compared to 2015, which is set to impact on negatively economic growth rates in Q1 2016.

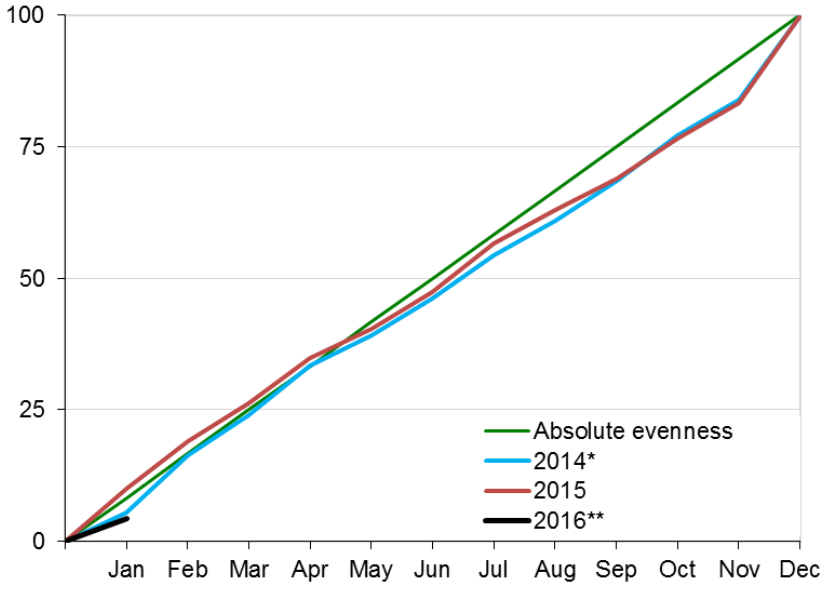
The federal and general government budget spending are expected to decline in real terms in 2016 while budget deficits are set to rise. These cutbacks, forced and structural in nature, are caused by the persistent drop in hydrocarbon prices, which leads to substantial loss of oil and gas revenue even as the forex rate is floating. The monetary means available from the sovereign funds (the Reserve Fund and the National Wealth Fund) are insufficient to keep mid-term budget spending unchanged in real terms. Having said these, the sovereign funds could be drawn on to mitigate the stroke to the budget as induced by dropping revenue –so that the time is bought to make well-informed cutback decisions and take action to improve spending efficiency. Furthermore, costs need to be cut back to improve economic agents' and financial markets' confidence in the state policy as well as to ensure a stable mid-term growth.

Our estimates suggest that, subject to the extent of budget spending correction, the negative impact on 2016 GDP from the budget spending side is set to total between 0.3-0.7 pp.

Additionally, it is possible that the seasonality shift in budget spending in 2016 (and the ensuing support of aggregate demand from the budget side) from the beginning to the end of the year. The uncertainty related to the budget for 2016 and onwards is behind a worsening in its calendar execution as compared to 2015. In particular, the amount of standard advance payment, according to the Ministry of Finance's proposal, is to be cut back from 80% to 20%[6]. This will make budget execution different from 2015, when advance payments out of the federal budget were actively being made early in the year.

[6] According to the Vedomosti business daily, the standard amount of advance payment in 2015 was increased from 30% to 80%, as a counter-crisis action. The Russian Ministry of Finance however proposes that in 2016 it be cut back from 80% to 20%, a move opposed by the Ministry of Economic Development.

Figure 18. Evenness in federal budget spending, % (accrued within the year)



**Excluding the funds for capitalisation support to the Deposit Insurance Agency for December 2014.*
***The annual amount is in line with the 2016 budget law. Sources: The Russian Federal Treasury, the federal budget 2016 law and R&F calculations*

The less active budget spending amid uncertainty early this year is likely to result in the bulk of the negative impact on GDP, as a result of curtailed spending, to fall on the first quarter. In January 2016, the execution of non-interest federal budget spending proved all-time low since 2007, standing at 4.3% against 10.0% for January 2015 (Figure 18)[7]. Public procurement accounted for 80% of contraction. Reduction of spending may be partially related to the constraints in activation of planned expenditure as key budget lines are being reviewed, which is why more uniformity in budget spending is expected in the months to come.

Importantly, advance payments in budget spending impact on the actual output of products and services indirectly, that is, through a better or worse financial position of companies operating as government contractors.

[7] The annual value of non-interest costs is calculated in line with the current budget amount and excludes expected sequestering and extra accommodative measures.

1.3. Global economy, financial and commodity markets

1.3.1. Declining financial markets trigger a slower growth in advanced economies

- Declining financial markets can have a negative impact on the economic dynamics of advanced economies in the recent months. Accelerated inflation in the US and deflation risks in the eurozone drive a further divergence in the monetary policy stance of the Fed and the ECB.

The United States

The labour market environment has stabilised. Wage and inflation growth tend to accelerate. The Fed is likely to act more aggressively than the market expects, especially if the risks of economic activity slowdown abate as the climate in financial markets stabilises.

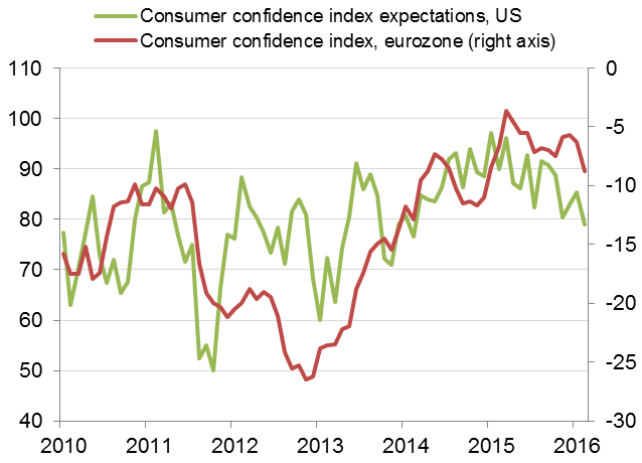
The labour market showed mixed statistics in January. The number of newly created jobs (except for the agriculture) stood at 151 thousand (as against the expected 190 thousand). The December data were also revised downwards from 292 thousand to 262 thousand. However, the unemployment rate fell unexpectedly from 5.0% to 4.9% (according to Bloomberg, market expectations stood at 5.0%) to hit an eight-year low. In spite of the decrease in the number of newly created jobs, the hourly wage rate showed an accelerated growth, which stood at 2.5% in the annual terms. A steady wage growth may signal that the growing employment rate will finally put an upward pressure on wages.

In her Congressional testimony Janet Yellen, the Chairwoman of the Federal Reserve System, did not rule out gradual rise of the Fed's rate though on the whole staying prudent in her statement. A fall in the financial markets, especially a prolonged one, was recognised as a risk to the US economic growth. Market participants have long reviewed their expectations regarding the pace and scale of the Fed's rate rise, and Janet Yellen's statement only backed them up. The Fed's meeting in March is likely to result in a downward revision of the federal funds rate dynamics forecast.

Inflation indicators sent an important signal to the Fed. The annual growth of the core personal consumer expenditure (PCE) deflator, the regulator's key measure of inflation, accelerated from 1.4% to 1.7%. The general CPI growth also accelerated to 1.4% due to the last-year low base effect. The core inflation dynamics look more informative, it grew to 2.2% to reach its maximum from mid-2012. The accelerated price growth in the run-up to the Fed's meeting in March may result in a tougher regulator's stance as compared to the one prevailing in the recent weeks against the backdrop of falling financial markets. There is a risk that market expectations with regard to the Fed's steps turn out a lot softer than reality. Higher inflation and accelerated wage growth may push the Fed to continue raising the rate faster than the market expects. It should be noted though that the rise will

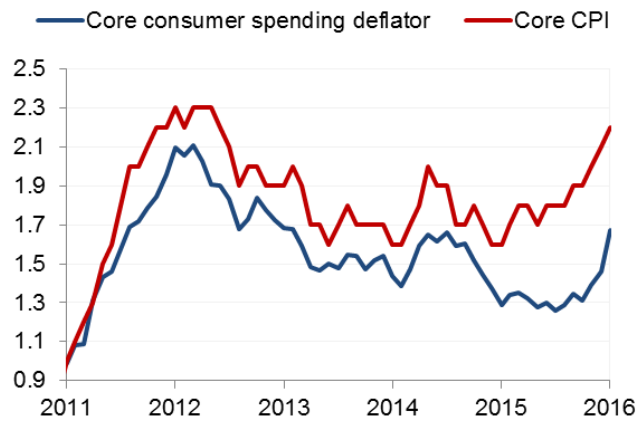
be less aggressive than expected in late 2015 amid the increased risks of the economic slowdown.

Figure 19. Consumer confidence indices on the US and the eurozone



Source: Bloomberg

Figure 20. US price dynamics, %, YoY



Source: Bloomberg

The fall in the consumer confidence index to an eight-month low was an unpleasant signal (Figure 19). A drop was registered in both the estimates of the current situation and the expectations. Apparently, the fall in financial markets in January-February starts to adversely affect consumer sentiment that is likely to reduce their activity in the months to come.

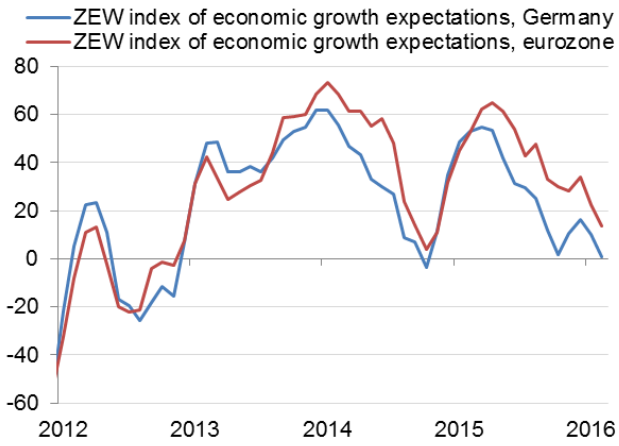
Eurozone

In December, industrial production in Germany dropped unexpectedly by 1.2% (against the expected growth of 0.5%). Data on industrial production in France, Spain and Italy also fell below expectations. Decreased energy generation because of the abnormally warm weather had a considerable negative contribution to the production dynamics. Nevertheless, manufacturing industries also registered a fall, sending an alarming signal and pointing to a slowdown in the global economy. The preliminary estimates of the industrial and service PMIs signalled a further decline in the economic activity in February.

ZEW Indicator of Economic Sentiment for Germany and the eurozone fell to its lowest level since October 2014. The unfavourable external climate manifesting itself in volatility in financial markets and overall slowdown in the global economy pushed the expectations downwards (

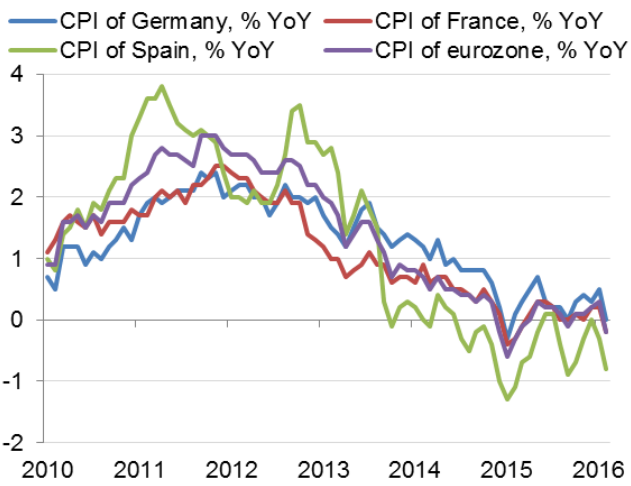
Figure 21). A slowdown in the growth engine of the European economy gives the ECB another reason for monetary policy easing to be resolved at its March meeting.

Figure 21. ZEW Indicator of Economic Sentiment



Source: Bloomberg

Figure 22. Inflation in the eurozone



After a brief recovery, inflation is likely to return to negative territory in March. According to preliminary estimates, the eurozone price index failed to grow year-on-year and the risks of resumed deflation are very high (

Figure 22). Negative price growth is fraught with a decline in inflation expectations, which may to result in persistently long-lasting deflation. At the moment, it is a key risk for the ECB; therefore at its March meeting it is likely to pass softer decisions than currently expected.

China. Pressure on the national currency remains strong, the government steps up economic stimulus.

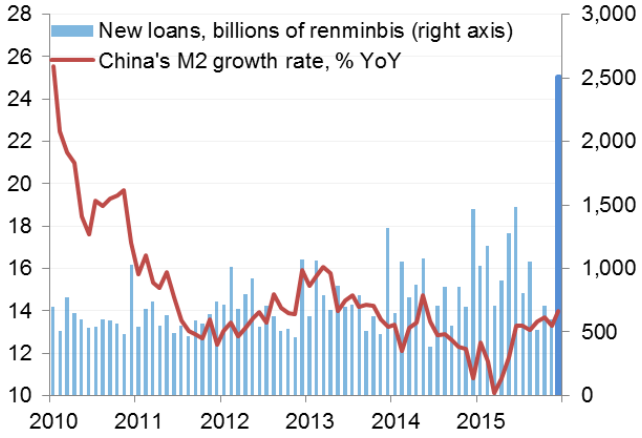
In January, the Institute of International Finance (IIF) estimated capital outflow from China. According to preliminary estimates, it stood at $113 billion as against $637 billion in 2015. The renminbi remains under pressure following the 22-month long increasing capital outflow.

In January, the People's Bank of China spent another $90 billion[8] on foreign exchange interventions to prevent sharp renminbi depreciation. The international reserves shrank to $3.23 trillion - the lowest level since 2012 - and the rates of reserve depletion went up. The Chinese authorities are slow in presenting their exchange rate strategy, which increases uncertainty and boosts capital outflow. Such a situation is fraught with persistently increasing pressure on renminbi, which is likely to step up as the gold and currency reserves continue to shrink.

In January, China registered a record high monthly growth in bank and other lending (bonds, off-balance sheet transactions, etc.) which is in conflict with previous trends of slower lending growth in the economy.

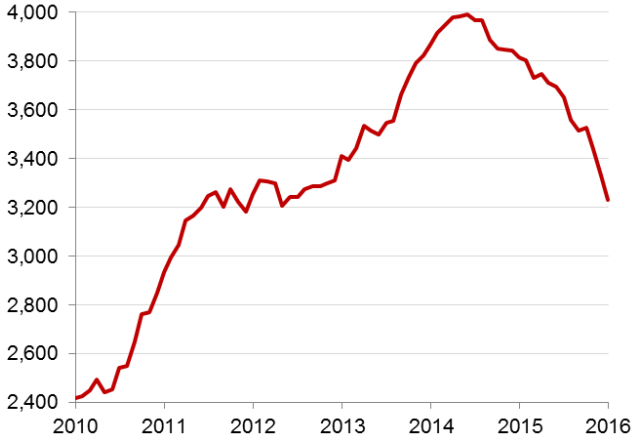
[8] IIF estimate.

Figure 23. Loans and money supply in China



Source: Bloomberg

Figure 24. Chinese international reserves, bln USD



Source: Bloomberg

Banks traditionally increase lending at the beginning of the year after the limit zeroing. Another seasonal factor - the upcoming lunar new year - is also likely to have had its effect. Banks are likely to have sought to close as many deals as possible in January as in 2016 the lunar new year fell on early February (8 February), while in 2015 it was the second half of the month (19 February).

However, we believe these seasonal effects to be unlikely to fully explain the increase in lending. It is probable that many companies try to substitute US dollar loans with renminbi loans, expecting the national currency to depreciate. This also increases the volume of issued loans. Provided that the trend for the accelerated lending growth persists, it may back up the Chinese economic growth in the short term. However, in the long run the risks of excessive lending will enhance.

Mexico. Emergency rate rise and budget expenditure cut.

On 17 February, the Bank of Mexico raised the target rate by 50 bp from 3.25% to 3.75% and amended the rules of foreign exchange interventions, while the government announced it would cut its budget expenditures and expenses of the state-owned oil company Pemex by 0.7% of GDP. These measures were taken in response to the considerable depreciation of the Mexican peso, which started in mid-2014 and has accelerated significantly earlier this year.

The situation resembles that in Russia in late 2014. Sharp peso depreciation poses a threat of accelerated inflation and higher inflation expectations. The rate hike is designed to mitigate the risks of price growth.

An important step has been made with regard to the exchange rate policy. The Bank of Mexico has abandoned strict intervention volumes and rules and currently can conduct interventions at its discretion at any time and in any volume. The pressure on reserves

was high: from mid-April 2015 till early February, they shrank by $20.5 billion (10.5%), which was a reason for policy review.

We expect it to enable a more efficient volatility management in the FX market as compared to the previous rules, which have presumably proved inefficient. Given the favourable reaction of financial markets to the authorities' steps, the unpredictability of foreign exchange interventions, combined with the target rate hike, may ease pressure on the peso and the Bank of Mexico reserves. Judging by the current reserve volume, the central bank did not resort to interventions after having amended the policy. According to the official data, the reserves did not fall after the revision of the intervention regime, while the peso appreciated against the US dollar by 5%.

The announced cuts in the budget expenditures and expenses of the state-owned company Pemex is an example of the adjustment of the budget system to the external shock from the oil price drop. However, it should be noted that the government has no alternatives to budget expenditure cuts for the lack of accumulated reserves which would be capable of smoothing the consumption dynamics of the public sector.

Agustin Carstens, the Governor of the Bank of Mexico, said that the rate hike did not spell the beginning of monetary policy tightening. The steps taken by the Mexican authorities serve as example of a coordinated response to increased external shocks for the economy. Along with direct impact on inflation, such steps may help raise confidence to the pursued economic policy, bring down capital outflow, lower volatility in the FX market and contain possible growth of inflation expectations.

Global investors have started to see Mexico as a top pick in its league, which means more favourable lending terms and a lower risk premium as compared with other emerging markets with similar credit ratings.

Oil exporting countries. Mass S&P rating downgrade of oil exporting countries other than Russia and Qatar.

S&P has been massively downgrading the ratings of oil exporting countries. Countries downgraded by 2 notches were[9] Saudi Arabia (from A+ to A-) and Bahrain (from BBB- to BB). Ratings of Brazil, Oman and Kazakhstan were revised downwards to BB, BBB- and BBB- respectively. The Russian Federation preserved the rating BB+, negative outlook.

The main reason behind the downward revision was deterioration in the agency's expectations of oil price dynamics. The fall in oil prices reduces budget revenues of the exporting countries, leads to budget deficit growth and budget expenditure cuts.

Russia's rating has been confirmed at the previous notch because S&P estimates that the oil price drop does not result in a radical deterioration in the economic dynamics and fiscal performance of the Russian Federation. The floating ruble exchange rates allows to partially offset the oil price fall, and, as a result, its impact on the budget revenues is less

[9] Hereinafter, long-term FX ratings are indicated.

considerable than in case of a fixed exchange rate regime followed by many other oil exporting countries.

The agency stipulates a possible downward revision of Russia's rating in case the public debt grows to 3% of GDP or debt repayments exceed 5% of budget revenues. We estimate fiscal performance to be in line with S&P limits; however, it is impossible to increase budget expenditures.

1.3.2. Financial markets: volatility remains high

- A slump in the first half of February following the concerns over the eurozone banking system was surmounted by the end of the month.

Global markets

In February, the yields of sovereign bonds of advanced economies hit the lowest level following the growing demand for protective assets and the revision of expectations towards policy easing by the central banks of developed countries. The only move untypical for the risk flight period was a considerable, though short-lasting, depreciation of the US dollar. Inflation acceleration and the renewed expectations of a more aggressive rate rise by the US Fed allowed the US dollar to regain its positions. The pound depreciation related to Brexit risks also contributed to the strengthening of the US dollar.

The principal risk in February 2016 was the growing concerns over the condition of the banking sector, connected with contingent convertible bonds (CoCo bonds) of European banks. The first affected was Deutsche Bank: its statements raised concerns over the bank's capital adequacy and capability to make coupon payments for this type of bonds[10].

Panic in this market was provoked by the fact that in the short history of this instrument no bank has ever missed coupon payments or converted bonds into shares. Poor banks' statements made the bond holders revise the risks of unfavourable scenarios materialising. Expectations of central banks' moves added up to the negative trend with many participants believing that they would continue rate cuts in the negative zone. Such behaviour is favourable for monetary authorities as, other things being equal, it stimulates the bank to look for more earning and risky assets, which should ultimately have a positive effect on economic activity. However, the concerns exist that these measures may fail to bring about the intended result, affecting banks' profitability and thereby restricting their capabilities to increase lending.

We believe that concerns over the capability of certain banks to meet their obligations are exaggerated given a large number of policy support instruments of central banks. The growing concerns over the consequences of further rate cuts for the banking sector look

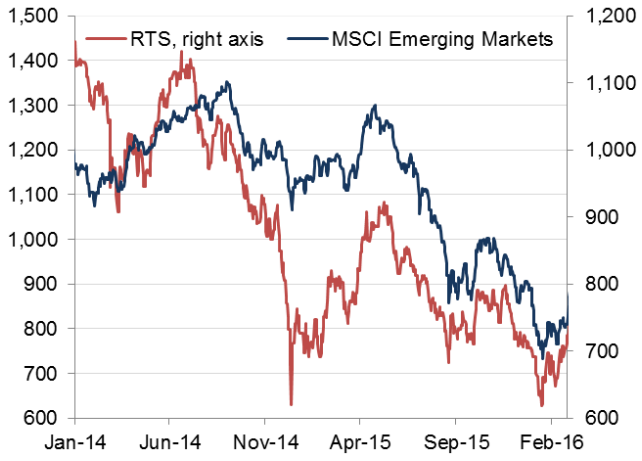
[10] This is a new instrument introduced to share bank bailout costs between investors and taxpayers in unfavourable conditions. Bonds can be converted into shares if the capital adequacy falls and shall be recorded in capital as tier 1 additional capital.

more alarming. The situation could be improved if central banks provide information with a clear explanation of prerequisites and transmission mechanisms they rely on when making decisions on pushing the rates deeper to the negative zone.

Paul Samuelson once made a joke that 'the stock market has forecast nine of the last five recessions'. Nevertheless, one should not underestimate the risks brought by long-lasting declines in the equity markets for economic growth, especially in advanced economies. One of the main channels of influence is the welfare effect. Shares make up the largest share in financial assets of households. Their decline results in a decrease in the general amount of assets and may have a negative effect on consumer confidence, which may lead to a drop in demand from their part. Until recently, consumer confidence in advanced economies was close to its maximum, which backed up the aggregate demand and relatively high GDP growth rates. However, it decreased considerably in February. Slower consumer demand growth may result in the overall economic slowdown and lower inflationary pressure.

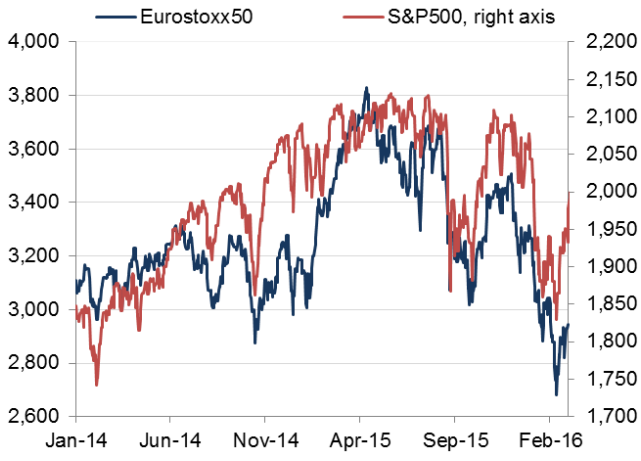
Lower availability of credit may become another channel of negative influence of the financial market climate. Junk bond yield has already exceeded 10%[11], which amid zero rates of central banks and low inflation almost closes access to funding for companies with low credit rating.

Figure 25. RTS and MSCI EM



Source: Bloomberg

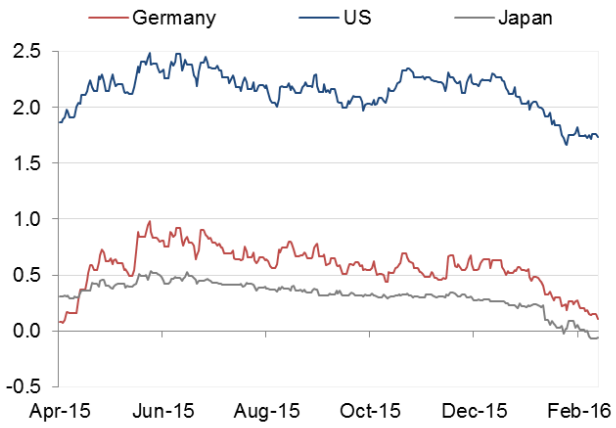
Figure 26. S&P500 and Eurosotxx50



Source: Bloomberg

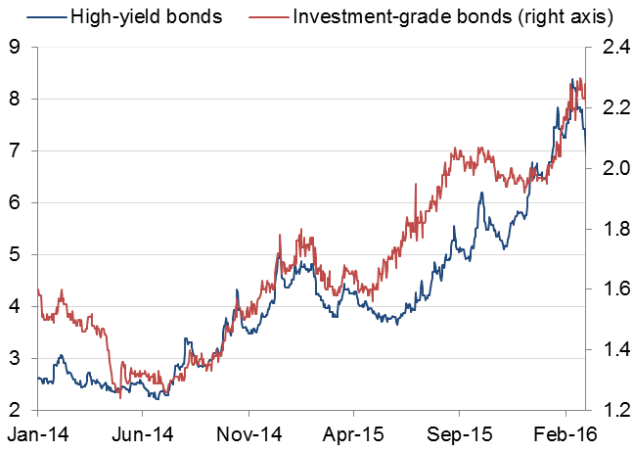
[11] High-yield bonds. Bloomberg USD High Yield performance.

Figure 27. Yields on 10-year bonds of developed countries, %



Source: Bloomberg

Figure 28. Credit spread of corporate bonds of developed countries, %



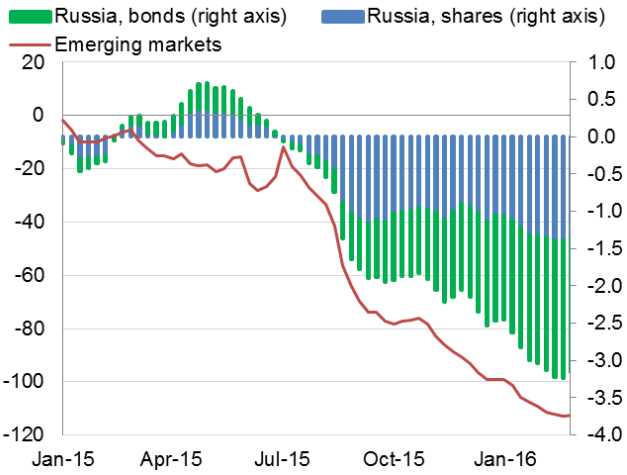
Source: Bloomberg

Cash outflow from Russian funds persists in line with the general trend in the emerging markets. Portfolio flows generally reflect the common capital flow dynamics and the negative sentiment of market participants with regard to emerging market prospects (Figure 30).

Figure 29. CDS spreads of European financial companies, bp

Source: Bloomberg

Figure 30. Cash flows into Russian and EM funds (accrued, '+' - inflow) bln USD



Sources: EPFR Global, Bloomberg

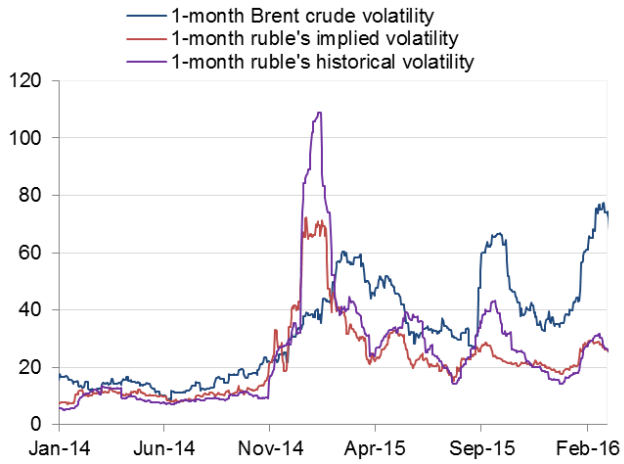
Russian markets

February stabilisation in the oil market and consequently in the Russian FX market resulted in higher demand for Russian assets. The Ministry of Finance has managed to place the OFZ as claimed. The demand for long 15-year securities stood at □65.3 billion

while the volume of placement was □20 billion. OFZ yield curve declined by 25-35 bp last week at the long end and increased slightly at the short end (Figure 32).

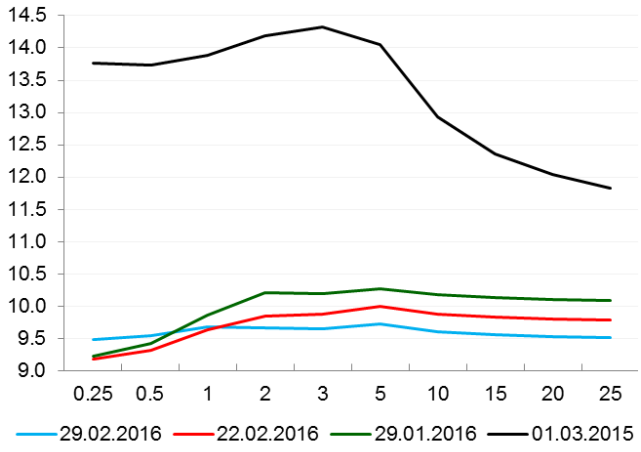
A decline in the long-term bond yield amid higher yield of short-term bonds points to a growing expectations of sustainable inflation deceleration in the medium term as a result of implementation of a more prudent monetary policy by the Bank of Russia. OFZ dynamics may also signal a rather high market segmentation. The expected inflation deceleration boost foreign investors' demand for OFZ, in such cases they choose to purchase long-term securities which results in inversion of the yield curve. At the same time, risks of higher volatility increase as in case of unfavourable developments these positions can be closed rather quickly.

Figure 31. Imputed and historical volatility of the ruble and oil prices



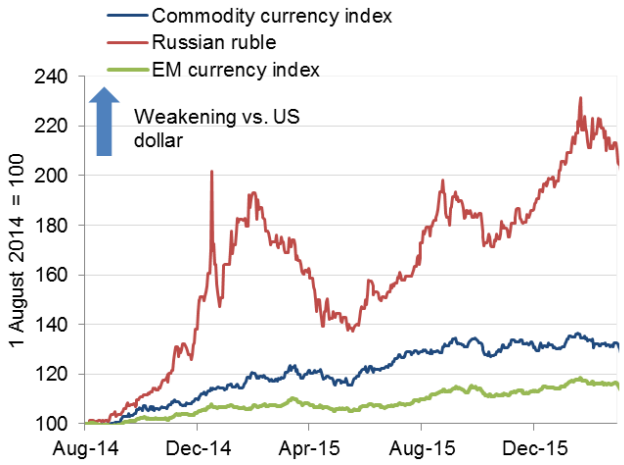
Source: Bloomberg

Figure 32. GKO-OFZ yield curve, %



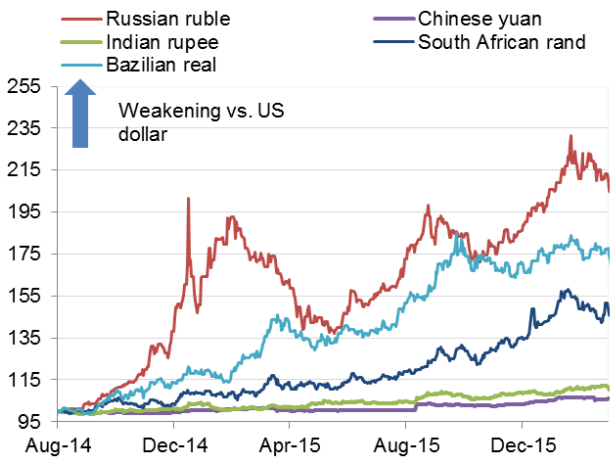
Source: Moscow Exchange

Figure 33. Exchange rates of emerging economies, commodity currencies (1 August 2014 = 100)



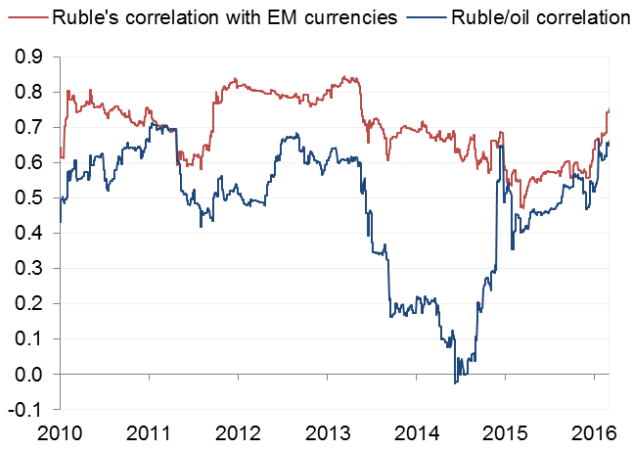
Commodity currencies: New Zealand dollar, Norwegian krone, Australian dollar. Source: Bloomberg

Figure 34. BRICS exchange rates (1 August 2014 = 100)



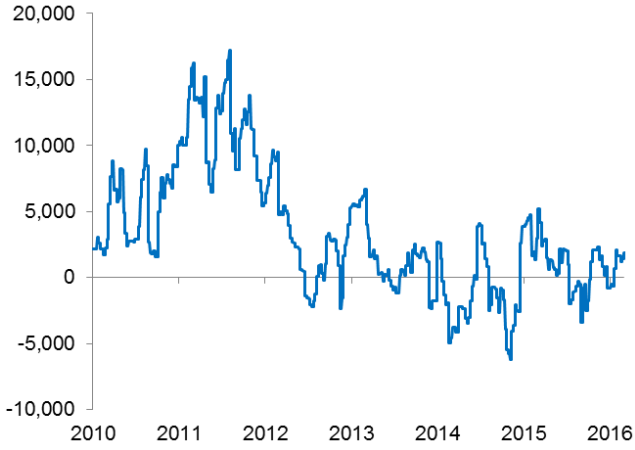
Source: Bloomberg

Figure 35. The ruble's 12-month correlation with emerging economies' currencies and oil



Source: Bloomberg

Figure 36. Net short position for ruble futures



Sources: Bloomberg, Bank of Russia calculations.

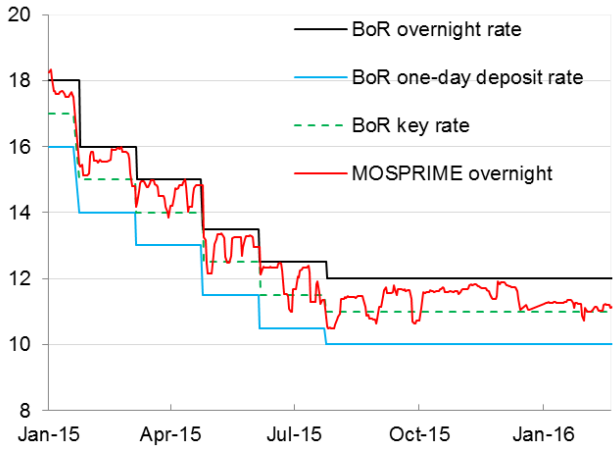
Short-term rates in the interbank lending market remain in the middle of the interest rate corridor (Figure 38). The beginning of the tax payment period has not yet resulted in a rate rise. This may point to the sufficient level of liquidity in the banking system following the effective transition from the structural liquidity deficit to the structural liquidity surplus and may cause the rates to shift to the lower bound of the interest rate corridor after the tax period.

If it happens, it may signal monetary easing in the economy irrespective of the movements of the Bank of Russia key rate.

Figure 37. FRA3X6 and 3M Mosprime spread, % p.a.

Sources: Bank of Russia, Bloomberg, R&F calculations

Figure 38. BoR interest rate corridor and short-term interbank lending rate



Sources: Bank of Russia, Bloomberg

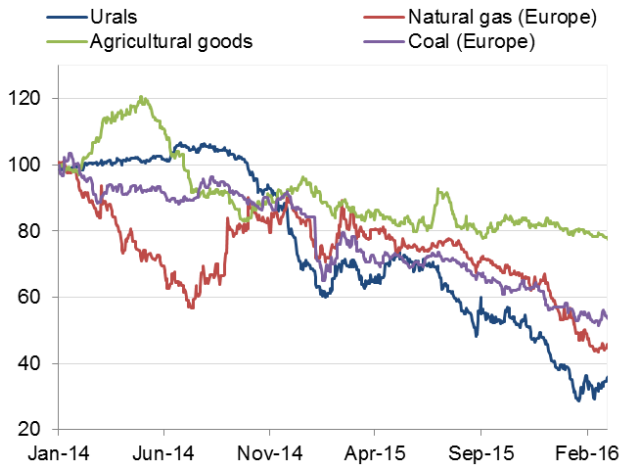
1.3.3. Commodity markets: declining prices against the backdrop of growing volatility

- In February, prices for key commodities and metals mostly went down, while at the same time volatility grew.
- The regulation of petrol prices in China limits the opportunities for growth in demand that has been showing a weakening in the recent months.
- In January, the global production of oil and liquid fuel grew by another 0.4% mostly thanks to OPEC countries.
- Oil extraction in Russia continued positive dynamics at the beginning of the year as we expect this trend to persist for most of the year.
- In the US, oil production accelerated its decline, but the stock continues to grow and the risks of overloading Cushing storages are increasing.
- Oil and gas majors are cutting capital costs, but this will have no effect on the production volume till 2017.
- The relevant international organisations have revised downwards their forecast for the oil market and price recovery prospects.

In February, given the excessive supply, prices for key commodities and metals mostly declined and the depreciation of the US dollar prevented their more considerable adjustment. The price of gold as a protective asset continued to grow. The Bloomberg Commodity Index fell 1.5%; the Baltic Dry Index, which shows the demand for large-tonnage bulk shipping, reached the bottom on 10 February and rebounded to have grown by 2.5% in February.

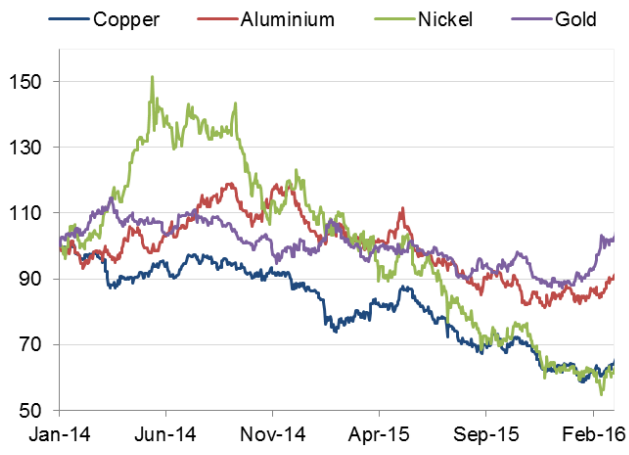
The positive price dynamics were accompanied by their increased volatility. In particular, the volatility of 30-day WTI crude price exceeded 85%, in the past ten years only the period between late 2008 and early 2009 saw higher volatility. The latter is explained by the reaction of market participants to the information on possible coordinated actions of exporters to limit oil supply in the market. We believe that the current agreement to freeze production at January levels will have a limited impact on oil supply in the market because the production is currently at its highest; Iran, having the key potential for production growth, does not intend to join the agreement, while the OPEC practice suggests that agreements are often violated, and many countries and companies are not in the best conditions and are utterly interested in violating the limits.

Figure 39. Commodity prices (January 2014 = 100)



Source: Bloomberg

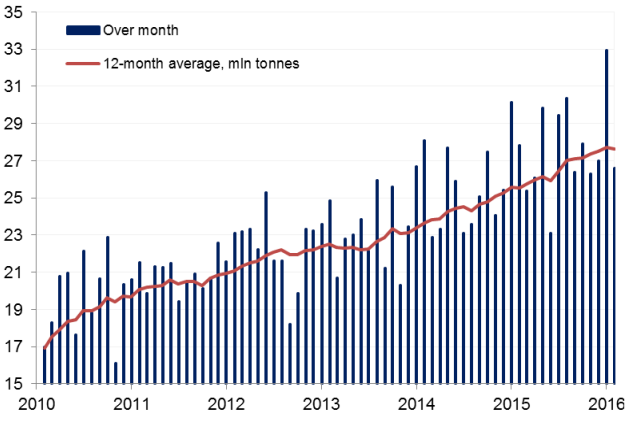
Figure 40. Metal prices (January 2014 = 100)



Source: Bloomberg

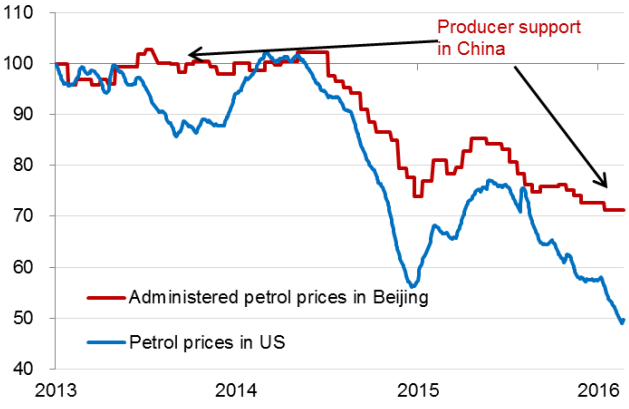
January data on China's net oil imports are rather weak, in particular, the 12-month average value of the indicator declined, though in line with the seasonal dynamics (Figure 41). At the same time, regulation of petrol prices in China with the lower price level is linked to the oil price of $40 a barrel, constrains the additional demand arising from oil price fall (Figure 42).

Figure 41. Chinese net oil imports



Sources: Customs General Administration, Bloomberg

Figure 42. Petrol prices in China and the US, renminbi (January 2013 = 100)

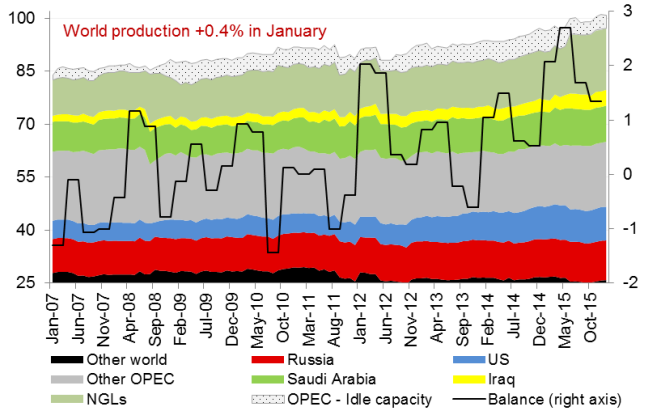


Source: Bloomberg

According to Energy Intelligence Group, the global production of oil and liquid fuel grew by another 0.4% in January (Figure 43). The growth was almost entirely generated by OPEC countries. Production in other countries grew insignificantly, mainly in Americas (other than the US). In February, production inside OPEC returned to the December 2015 level, which can be explained by the technical factors in Iraq and Nigeria. Iran increased its production 7.1% between January and February.

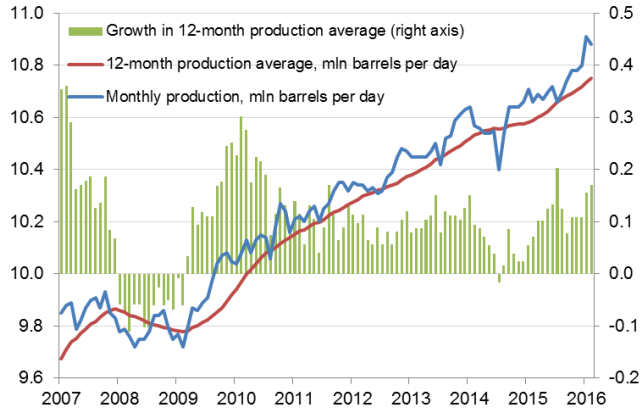
Oil production in Russia continues to grow: in January-February, CDU TEK registered growth of about 2.0% YoY. Comparative figures also show positive dynamics (Figure 44). Proceeding from the adjustments for systemic underestimation of oil production we made to the official forecast by the Ministry of Energy, we expect the positive dynamics to hold most of the year and the annual oil production to grow.

Figure 43. World oil production and market balance (mln barrels per day)



Sources: Bloomberg, Energy Intelligence Group, OPEC.

Figure 44. Oil production in Russia



Source: Central Dispatching Department of Fuel Energy Complex.

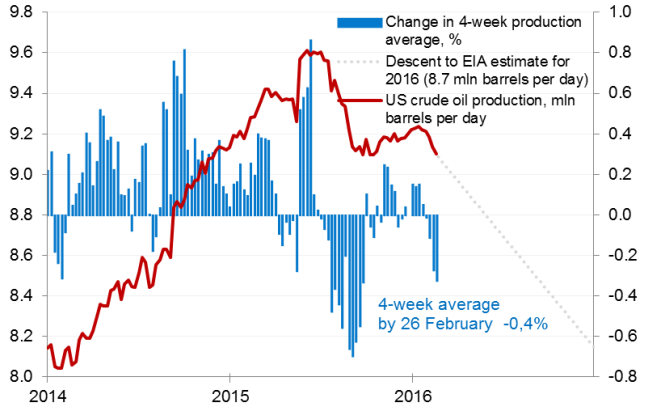
In February, the shrinkage of the number of operating drilling rigs accelerated in the US (-20% in 4 weeks), while production cuts are only slightly behind the record figured of the beginning of the last year. The US also has started cutting its production, and in the past four weeks the decline has been exceeding the estimated pace of reduction, which should result in the EIA 2016 forecast of 8.7 million barrels per day materialising (Figure 45). This results from the depletion of brown fields against the backdrop of slow deployment of new ones following, among other things, the companies' intentional delays in deployment of new wells as they anticipate the price growth to resume[12]. In addition, it is likely that the completion of the first stage of hedging is beginning to manifest itself: according to Morgan Stanley, American companies hedged actively in May-June and September-October 2015 for an average term of nine months.

Amid relatively high refining capacity utilisation commercial oil stocks continue to grow actively, which is likely to continue until the end of April due to the seasonal factors. There are enhancing risks of overloading Cushing storages, the main transfer point for WTI crude (Figure 46)[13].

[12] Rosneft estimates that the deployment of drilled but not hydrofractured wells will increase production by 0.5 million barrels per day.

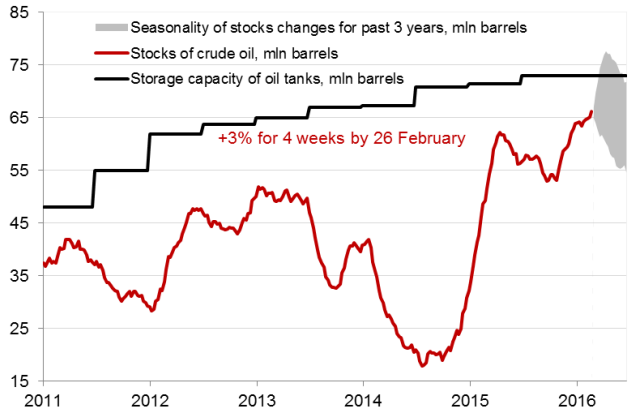
[13] The storage capacity utilisation in reality exceeds estimations due to blending restrictions for oil with different specifications.

Figure 45. Oil production in the US, mln barrels per day



Source: US Energy Information Administration

Figure 46. Oil stocks in Cushing (USA)



Source: US Energy Information Administration

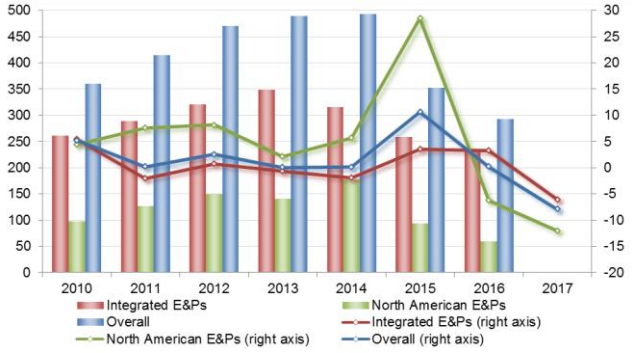
In 2015, profits of major oil and gas companies [14] declined considerably, Statoil and BP [15]registered losses. Their profit structure shifted towards downstream. Most companies preserve the announced volume of dividends despite the decline in profits and cash flow, which is offset by deposit cuts. In 2015, oil and gas majors other than Shell were increasing production. In line with Bloomberg consensus forecast for oil and gas majors, after a minor growth in capital expenditures (CAPEX) in 2014, the figure fell by 28% in 2015 and is expected to decline further, by 17% in 2016. However, the real effect on production will be less pronounced and lagged as it is accompanied with expense optimisation and stronger cost efficiency.

At the same time, companies often continue to operate unprofitable oilfields in order to avoid disclosing production cuts in their statements as it is negatively perceived by investors. Bloomberg consensus forecast for these companies reveals expectations of insignificant production growth in 2016 followed by a pronounced 8% cut in 2017. The forecasts assume greater resistance to the negative trends in the oil markets of major companies following, among other things, better diversification of operations and access to loan capital (Figure 47).

The EIA and OPEC revised downwards the oil market prospects in their February reports. The EIA estimates that lower demand and higher supply will preserve the considerable oil glut in the market until mid-2017 (Figure 48). The IEA indicates in its report that high stocks will impede rapid price recovery. BP notes in its long-term forecast that the energy market outlook will be determined by the Asian economies, mainly the Chinese economic climate, while OECD countries will hardly increase their consumption.

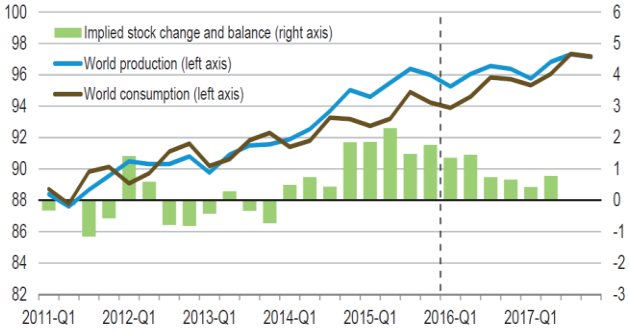
[14] Petro China, Exxon, BP, Shell, Chevron, Statoil.
[15] BP suffered losses due to the provisions for penalties for the Gulf of Mexico oil spill. Net of this provision, the company's profit almost halved.

Figure 47. CAPEX (columns, billion US dollars) and production growth against the previous year (lines, %) of vertically integrates and and North American oil and gas companies



Source: Bloomberg

Figure 48. World liquid fuels production and consumption balance



Source: US Energy Information Administration

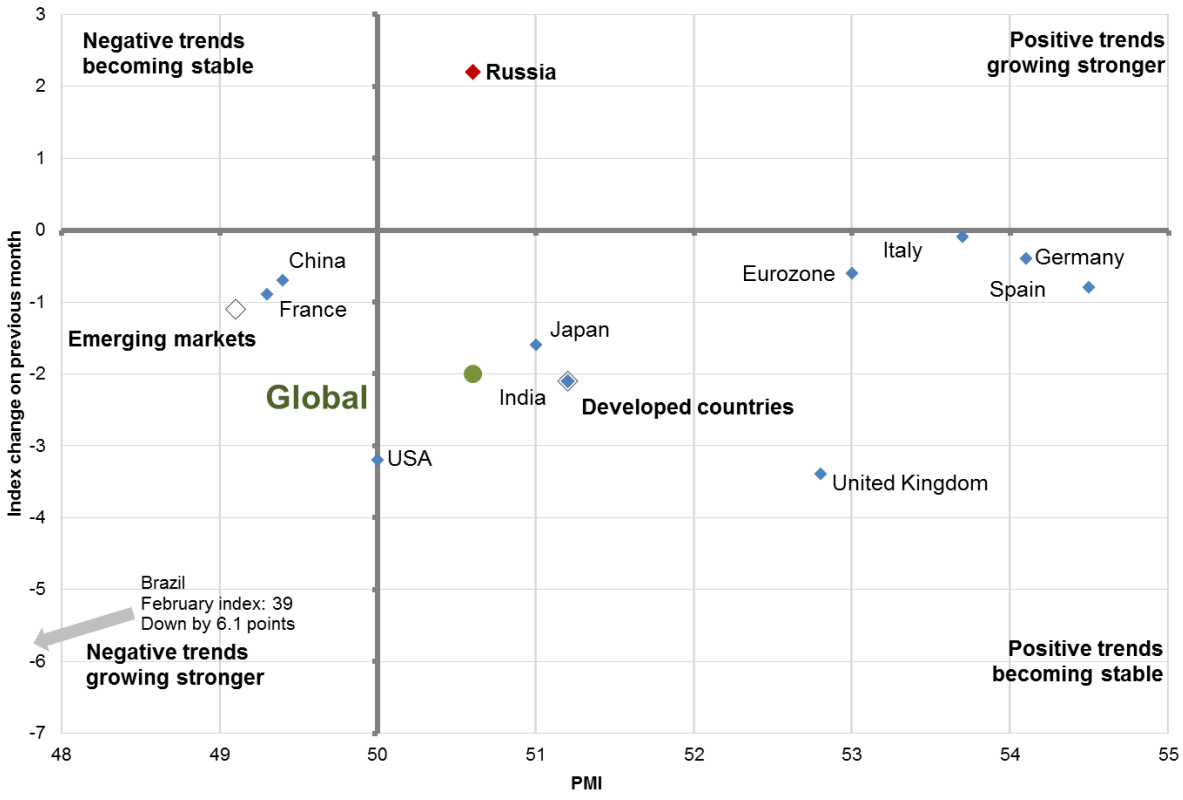
2. Outlook: leading indicators

2.1. Global leading indicators

2.1.1. Leading indicator data: consumer confidence stumbled

The financial market crash of early 2016 is starting to influence consumer sentiment in advanced economies. Consumption growth was the main GDP driver in the US and the eurozone in 2015. Deterioration in consumer sentiment may result in slower growth of consumer demand in the months to come. The situation in the industry also looks complicating, especially in the eurozone. The economic downturn in Germany and other European countries points to a slack external demand triggered mainly by a slowdown in emerging markets.

Figure 49. Composite PMI in January 2016 and increment on December 2015, points



Highlighted in blue are preliminary February estimates and increment on January. Sources: Markit Economics, Bloomberg.

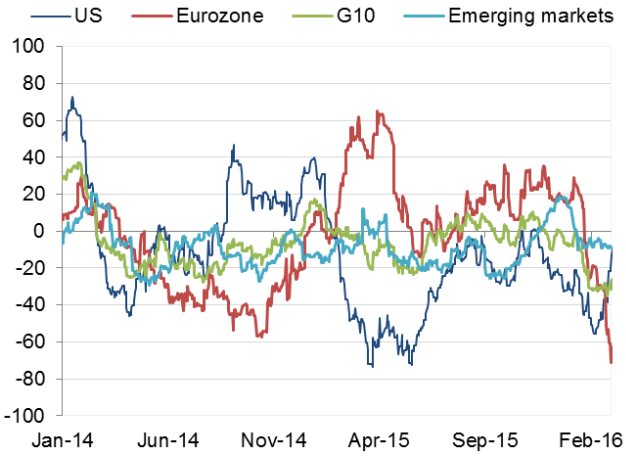
Copper prices, as a global industrial bellwether, rebounded to the late January level after a slump provoked by the general financial market downturn (Figure 50). The copper price remains low, reflecting a general negative market sentiment with regard to growth prospects in the emerging markets by China.

Summary surprise indicators of macro data, according to Citi, declined in the eurozone and went up in the US (Figure 51). The eurozone index reached the lowest levels since late 2014, confirming the probability of a large-scale expansion in the asset purchase programme and rate cuts by the ECB.

Figure 50. Copper price, $/tonne

Sources: Bloomberg

Figure 51. Surprise indices in macro data releases for the US, the eurozone and advanced and emerging economies



Sources: Citi, Bloomberg

2.2. What do Russian leading indicators suggest?

2.2.1. Short-term index GDP assessment: the odds are still slim for recovery to resume in the near future against the backdrop of weak survey data

- The overall January statistics on the key short-term economic and financial indicators enabled us to slightly improve our estimates for 2016 H1 GDP performance. Nevertheless, R&F model estimates continue to indicate that stagnation is likely to persist through the middle of the year. The weak dynamics of individual leading indicators suggest that a full-pledged economic recovery may take long to come about given the current structural changes.

The GDP index estimate[16] for 2016 Q1 was revised upwards to -0.3% QoQ in February against -0.7% QoQ in January (seasonally adjusted). However, our model estimate

[16] GDP index estimate is based on Rosstat's data on social and economic situation in Russia in the corresponding month and other statistical, leading and financial data as of the calculation date, and results from simulation of a dynamic factor model. These Research and Forecasting Department forecasts are based on model calculations, and their results do not represent the official Bank of Russia's forecast. The data set used for GDP index estimate include 110 different time series divided into three groups: 1) survey data, 2) hard data, 3) external and financial data. The detailed methodology for the GDP index estimate is described in the Bank of Russia's Working Paper Series: A. Porshakov, E. Deryugina, A. Ponomarenko, A. Sinyakov. Nowcasting and Short-term Forecasting of Russian GDP with a Dynamic Factor Model (Working Paper Series. March 2015. No 2).

shows that the recession is still very likely to continue at the beginning of the year (Figure 52).

The survey data for January, including primarily, Russian PMI statistics, provide a more pessimistic estimate of GDP growth in this quarter compared with real economy data and financial and external data. Service PMI survey data are those mainly responsible for the negative effect on the index estimate (Figure 53). These results confirm the assumption we made in the previous issue about the persisting downturn in non-tradable sectors following structural changes in the economy (for details see Talking Trends No 3, January 2016, Section 1.2.2. Downward output trend in the tradable and non-tradable sectors of the economy persists).

Electricity, gas and water supply makes the largest positive contribution to the index estimate with regard to real economy indicators. As we have mentioned earlier, the positive performance of this component was more pronounced in January as compared to other components. It resulted from, inter alia, the favourable impact of the weather factor, which is hard to consider in generating seasonally adjusted data. The further model extension with other real sector data impaired the quarterly GDP growth forecast by 0.1-0.2 pp (Figure 53).

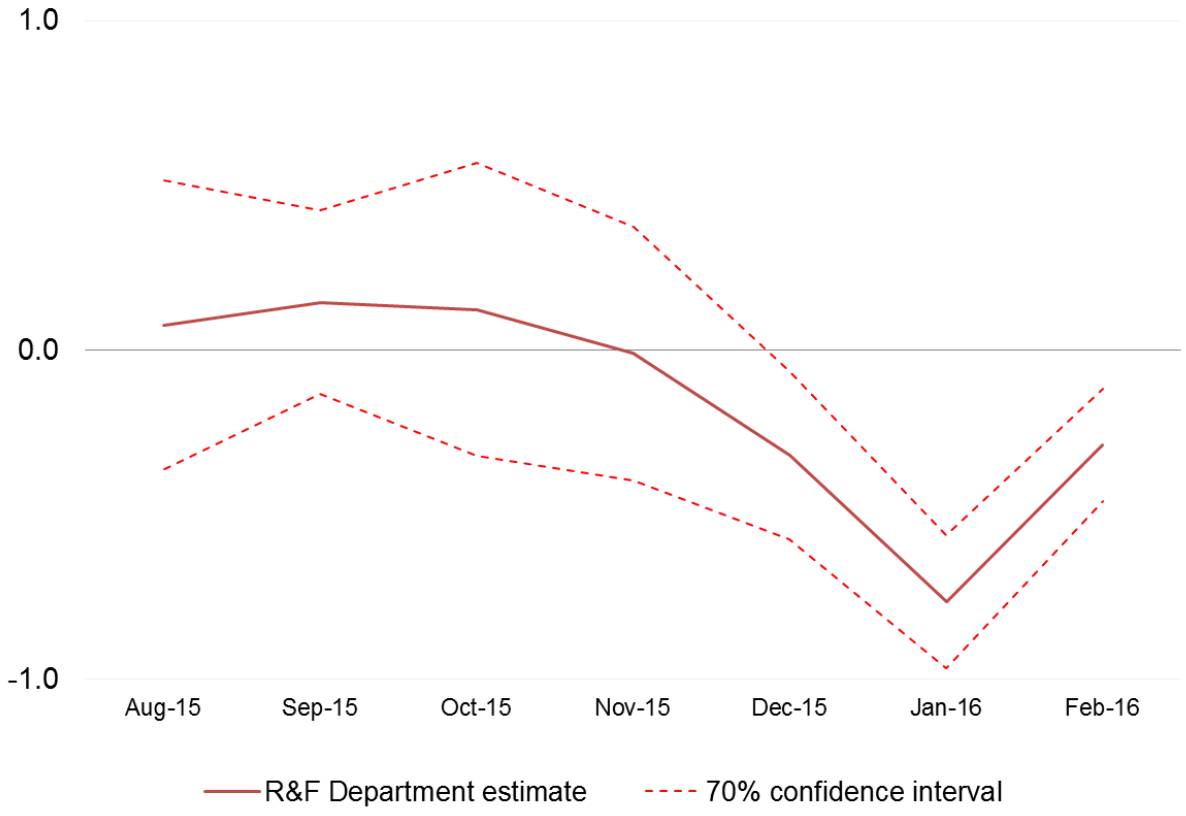
Financial and external data made an insignificant contribution to the changes in the quarterly GDP estimate, supplementing the survey data and real sector data. Given the stabilisation of the external climate in the past month, oil prices are unlikely to have played such a significant role in the current iteration of the GDP nowcast as it did one month before.

Another constraint for the GDP growth in Q1, which is not considered directly in out short-term GDP index estimate, is budget spending and, in particular, a worsened calendar budget execution in 2016 against the previous year (see Section 1.2.5 'Forced cuts in budget spending and their changed seasonality are set to negatively affect Q1 2016 GDP)'.

We have slightly improved our GDP estimate for 2016 Q2 against January estimates, so it currently assumes near-zero dynamics. Given the currently available statistics, the first estimation of 2016 Q3 points to recovery in a weak quarterly growth of 0.2-0.3%. If this positive dynamics continues until the end of the year, the GDP fall in 2016 is likely to be slightly above 1.0%. However, the weak January data on the leading indicators call for a restrained treatment of these results. Our model estimates may change considerably as new short-term statistics become available.

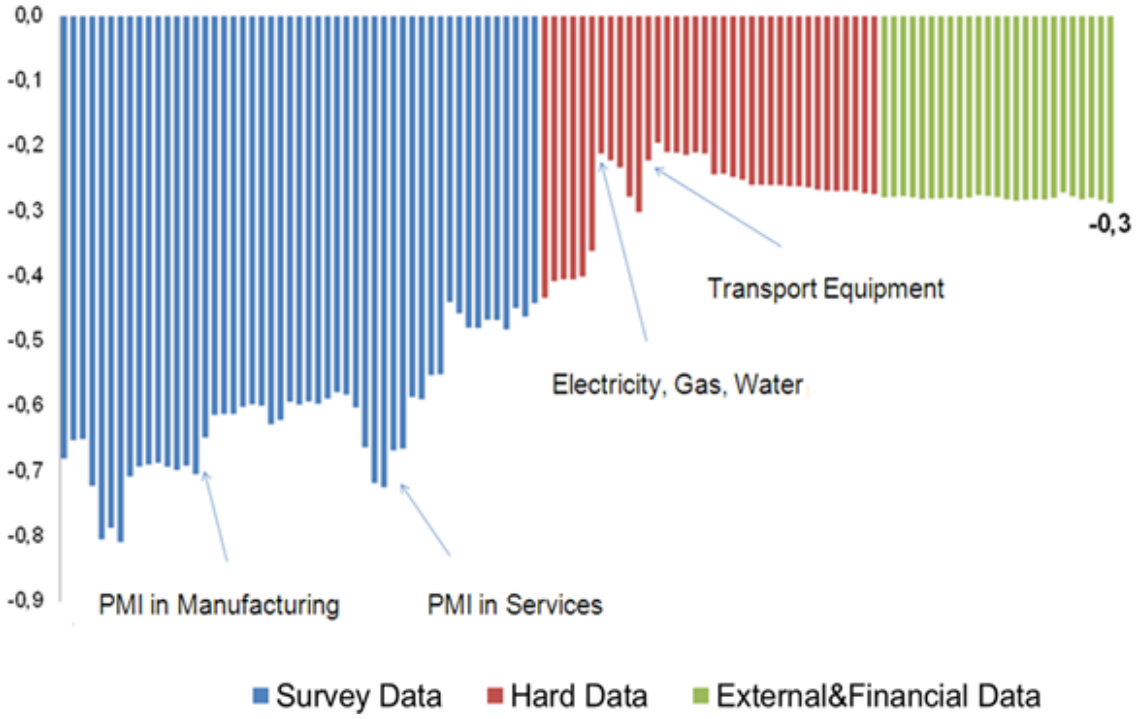
	February 2016	January 2016
	% QoQ	% QoQ
2016 Q1	**-0.3**	-0.7
2016 Q2	**0.0**	-0.3
2016 Q3	**0.2-0.3**	-

Figure 52. Estimate of GDP growth in 2016 Q1, % QoQ



Sources: Rosstat, R&F calculations

Figure 53. Evolution of DFM-based GDP nowcast for 2016 Q1 as the model included new indicators, pp



Source: R&F calculations

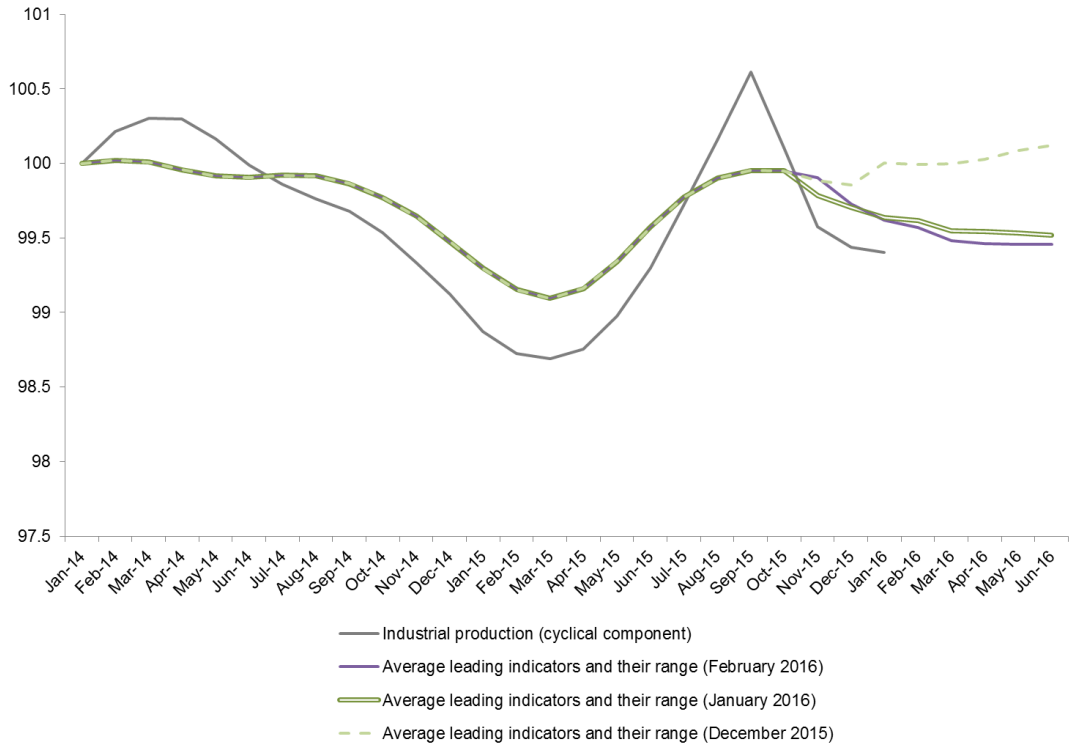
2.2.2. Composite leading business indicator: stabilisation in anticipation of new indicator survey data

The composite leading business indicator[17] has not changed considerably as compared to the previous estimate a month ago (Figure 54). This results from the fact that, in accordance with the turning point method we use to identify the best predictors of the cyclical component of industrial production, 70% of dynamics of the indicator is determined by the Russian PMI.

Hence, the published January macro statistics turned out to be more favourable compared to survey indicators. However, it failed to considerably improve the estimates of the cyclical component of industrial production for the next two quarters. Given the decline in manufacturing PMI in February, which our calculations have yet to consider, we assume that the composite leading indicator is unlikely to improve in March.

[17] Calculated by the Research and Forecasting Department on the basis of HSBC methodology for a wide range of short-term economic indicators (over 100 variables) through the turning point method. For details see *Fenn D., Nerbrand F., Kasem S., Selvakumar Y. 2015. "HSBC Leading Indicators." HSBC Global Research*.

Figure 54. The cyclical component of industrial production (January 2014 = 100, seasonally adjusted) and leading business index: turning point method



Sources: Rosstat, HSBC, Russian Economic Barometer, R&F calculations

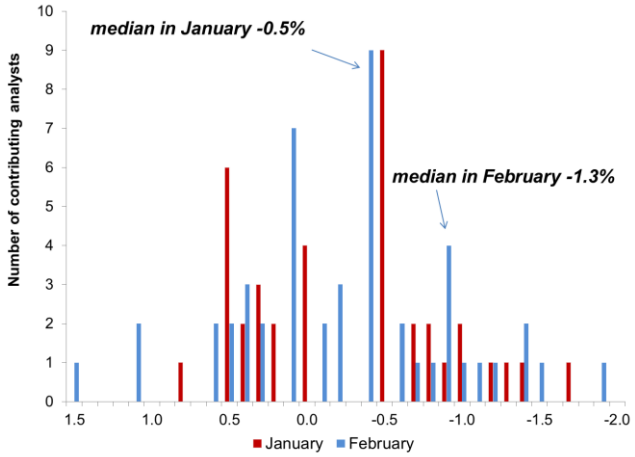
2.2.3. Financial analysts' forecasts: worsened expectations for GDP and inflation

1) GDP

Bloomberg consensus forecast as of 26 February 2016 shows that financial analysts' median estimate of the GDP growth in 2016 deteriorated significantly to -1.3% against -0.5% in late January (Figure 55). We believe that there are several reasons behind this negative revision of estimates. *First*, although oil prices ceased to fall in February, they have stabilised at low levels. The winter oil price fall is thereby prolonged in nature, ruling out any considerable adjustive growth in the immediate future as many experts may have previously predicted. *Second*, the negative revision of the median estimate may have resulted from the estimate of the GDP growth estimate in 2015 (-3.7%) which exceeded market expectations. As a result, the GDP growth estimate for 2016 may be revised downwards on the back of the high base effect.

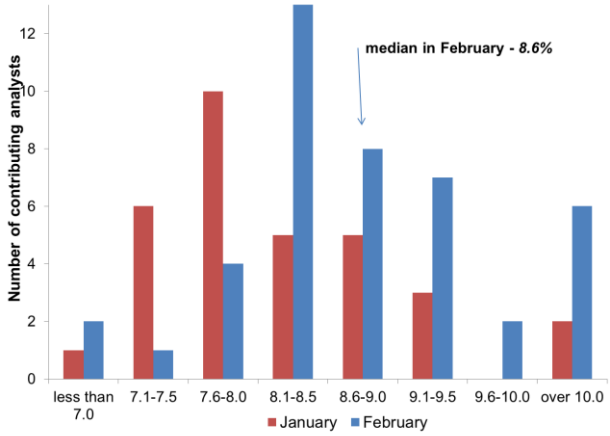
R&F estimates show that if the Russian economy reaches positive quarterly growth in Q3, the GDP fall in 2016 will by slightly above 1%, which is generally in line with financial analysts' expectations revised downwards (see Section 2.2.1 'Short-term index GDP assessment: the odds are still slim for recovery to resume in the nearest future amid weak survey data).

Figure 55. GDP growth forecasts by external analysts



Sources: Bloomberg, R&F calculations

Figure 56. Consumer inflation forecasts by external analysts



Sources: Bloomberg, R&F calculations

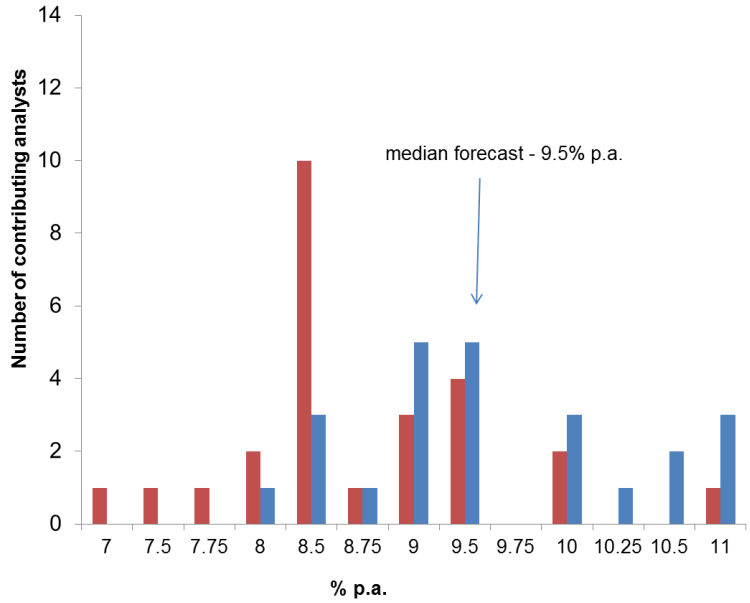
2) Inflation

The actual median consumer inflation forecast for 2016 has reached the level of 8.6% in February, 500 bp higher against the corresponding January forecast (Figure 56). According to R&F estimates, the said median forecast provides for annual inflation of about 8.0% as of the end of 2016, which is in line with R&F estimates based on extrapolation of the current dynamics of weekly and average daily inflation from the beginning of the year. Nevertheless, a considerable upward revision of inflation forecast looks unexpected given the stabilisation of weekly inflation in February and limited time and force of the exchange rate pass-through effect on consumer prices. In our opinion, it may result from downgraded expectations for oil price levels and their dynamics this year, as well as the highly turbulent exchange rate, which keep general uncertainty at high levels.

3) Bank of Russia monetary policy

Expectation of Bloomberg analysts with regard to the Bank of Russia key rate as of the end of 2016 have remained unchanged since late January, standing at 9.5% (Figure 57). However, a more detailed analysis of the respondents' forecasts shows that the balance of estimates of the Bank of Russia key rate has been revised in the previous month towards tighter monetary conditions. The latter can be explained by the unexpected 'hawkish' notes in the press release published in followup of the January policy meeting of the Bank of Russia Board of Directors. At the same time we assume that the upward revision of the key rate forecast for the end of 2016 by some analysts is not so pronounced and sustainable to enable a firm conclusion on the impact of the Bank of Russia's rhetoric on analysts' expectations.

Figure 57. Bank of Russia key rate forecasts by external analysts as of end 2016



Sources: Bloomberg, R&F calculations

3. In focus

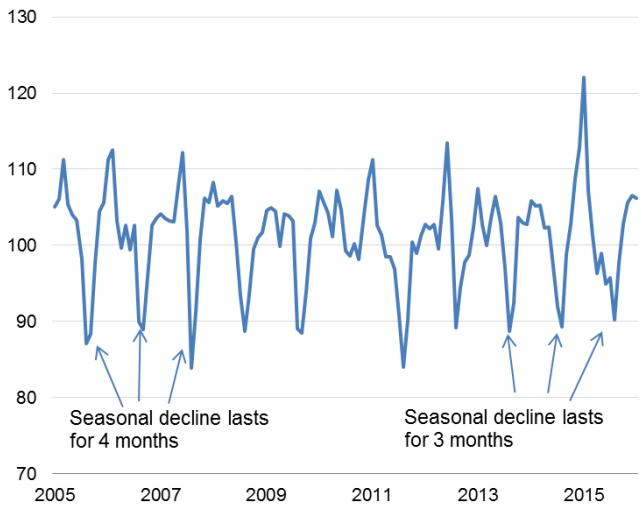
The seasonal adjustment in consumer inflation problem

The seasonal adjustment of the consumer price index gains in accuracy if the seasonal component is assigned in separate categories of goods and services included in its calculation. This is thanks to the fact that the seasonality of certain CPI components changes over time. We have revealed and differentiated two general cases of change in seasonality:

- The amplitude and duration of seasonal variations differ across periods.
- Seasonal variations 'shift' to other periods within a year.

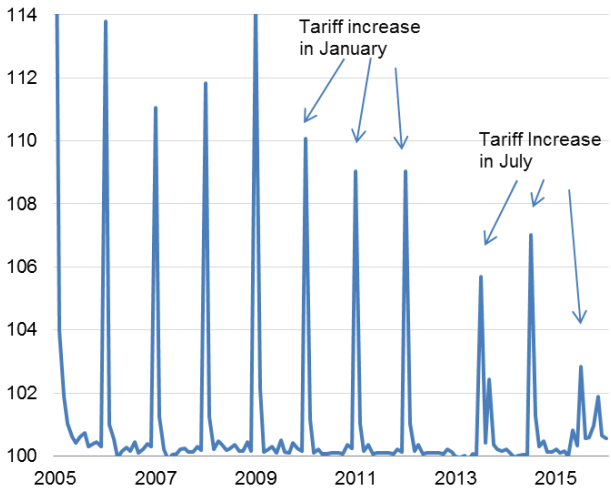
The first case is fruit and vegetable price dynamics. During the whole period, a considerable price fall is registered in August and September, but until 2011 the impact of seasonality also manifested itself in October while after 2011 seasonality in October is not registered (Figure 58).

Figure 58. Vegetable and fruit prices, index, MoM



Source: Rosstat

Figure 59. Utility service prices, index MoM



Source: Rosstat

The second case is the most pronounced in the dynamics of utility service prices and other components with a high share of regulated prices and tariffs. The fact that until 2012 tariffs were revised in January and after 2012 in July has shifted seasonal variations from January to July (Figure 59).

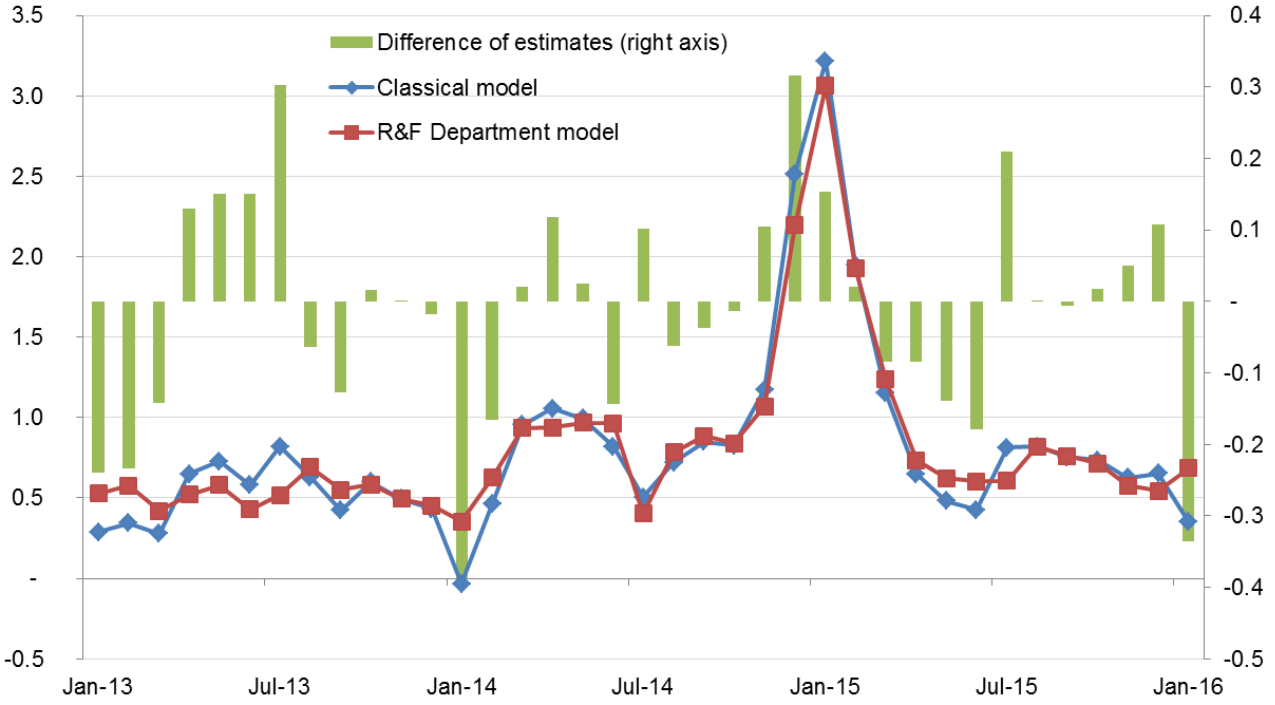
The analysis includes data for the period from January 2006 till January 2016. First, the TRAMO/SEATS method was applied to clear all the components at all aggregation levels. Then we analysed the dynamics of seasonally adjusted series and revealed the components displaying untypical spikes. Such components were seasonally adjusted again by the dummy variable method. The method is as follows: each month corresponds

to a dummy variable which is equal to *'1'* in the corresponding period and to *'0'* in other periods. The number of dummy variables is one less than the number of periods. The construction and analysis of the regression model allow to conclude on which months seasonal variations fall, how they manifest themselves and which values they take. We retained the adjustments by TRAMO/SEATS method in the components where no unstable seasonality was revealed.

We analysed seven aggregation levels recognised by Rosstat: from the consumer price index as a whole to a breakdown by 64 components. The next question is which aggregation level shall be applied for the final calculation of seasonally adjusted inflation. We have chosen the most detailed aggregation level as a more general aggregation may combine components with both normal and unstable seasonality (e.g., *Services >Utility services > Housing services*, including both regulated and non-regulated components).

Seasonally adjusted monthly inflation was further calculated by simple multiplication of monthly seasonally adjusted growth of each component by its weight in the price index.

Figure 60. Seasonally adjusted inflation, %, MoM



Sources: Rosstat, R&F calculations

Our final result has met the expectations of more correct results of a component adjustment model against the so-called classical model. The volatility of monthly data was reduced[18], and our model recognises the seasonality of revision of tariffs and

[18] Standard deviation of seasonally adjusted monthly inflation was down from 0.54% to 0.49% as for 2011-2015. Memo item: standard deviation of seasonally unadjusted monthly inflation stands at 0.65%.

regulated prices shifted from January to June, which allows us to eliminate underestimation of January inflation and overestimation of that in July (Figure 60).

The use of the above model will allow a better quality analysis of the current inflation dynamics. First of all, it allows for seasonality changes at the component level and changes in the structure of consumer basket used to calculate the consumer price index.

Research and Forecasting Department

Alexander Morozov

Director

Sergey Vlasov

Elena Deryugina

Arina Zarova

Ekaterina Ilicheva

Natalia Karlova

Egor Kozlitin

Dmitry Kreptsev

Alexey Ponomarenko

Alexey Porshakov

Sergey Seleznev

Andrey Sinyakov

Dmitry Chernyadyev

Ksenia Yakovleva