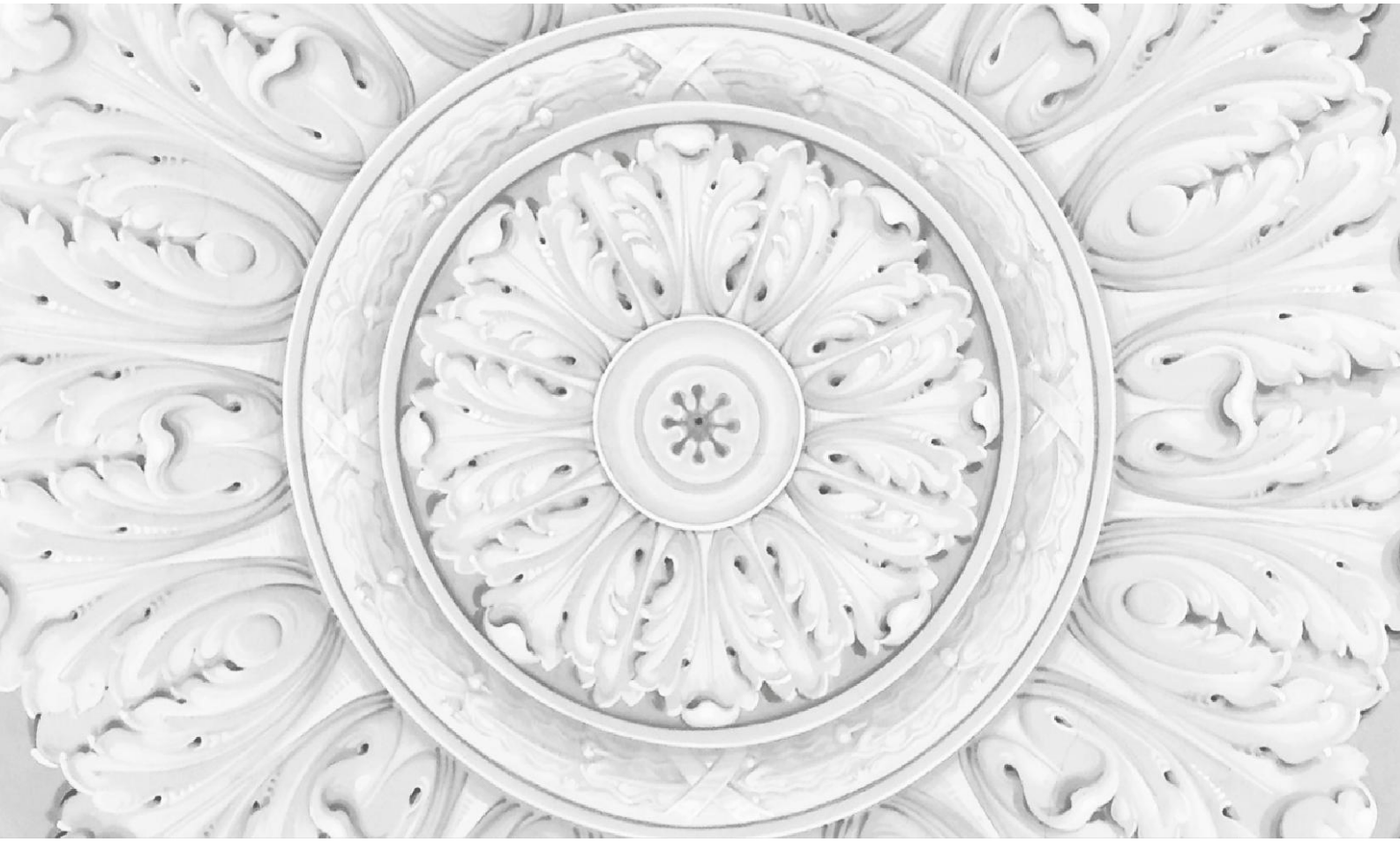
Bank of Russia

The Central Bank of the Russian Federation



TALKING TRENDS

Macroeconomics and markets

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The views expressed in the Bulletin are solely those of the authors and do not necessarily reflect the official position of the Bank of Russia.

Please send your comments and suggestions to dip_bulletin@mail.cbr.ru

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Summary

1. Monthly summary

- In September, inflation dynamics remained within the Bank of Russia's baseline scenario, while external economic and financial conditions were favourable. According to estimates, 2016 Q3 saw economic growth, although substantial heterogeneity in sectoral economic activity was observed.
    - Inflation remains on a downward path owing to, inter alia, the current monetary policy; however, the recorded slowdown in price growth appears insufficient for inflation to reach the 4% target in 2017. The strongly inertial inflation expectations of both households and businesses, coupled with the uncertainty about medium-term budget policy and risks that a consumption behaviour model may return, are all factors that check the reduction in inflationary pressure. Nevertheless, the current moderately tight monetary policy promises further relief in inflationary pressure.
    - The current data point to overall economic stabilisation, including in consumer expectations. Economic activity in 2016 Q3 showed stronger dynamics than in Q2. There are still signs of the economy hitting a slow growth path amid the ongoing slump in certain sectors.
    - Monetary conditions, although being tight, continued to be eased with regard to both interest rates and non-price lending conditions.

2. Outlook

- Russia's GDP index estimates for Q3 deteriorated slightly as compared with the previous month but inspire hopes for a slow economic growth in the past quarter.
- The Bank of Russia's tough rhetoric following its Board of Directors' September meeting made financial analysts downgrade their inflation expectations.
- The uncertainty about the global financial sector stability highlighted by Deutsche Bank stocks fall brought about a reduction in investor risk appetite.

3. In focus: Russian coal exports: risks in the light of global trends

- The uncertainty over the future of global coal demand is a major risk factor for Russian coal exporters. It relates to the implementation of a new energy policy by major consumer countries, ecological programmes, protectionist measures in China, as well as a vague potential for coal production growth in India.

1. Monthly summary

1.1. Inflation

The current inflation dynamics are in line with the Bank of Russia's forecast for 2016 made in the baseline scenario (5.5-6.0%). Price growth will be close to the lower bound of this range at the end of the year given the lack of new negative price shocks in the forthcoming months. The acceleration of monthly price growth in September is due not only to seasonal adjustment of prices for fruit and vegetables, but also to persistently strong pressure from price growth for non-food goods caused by the trade markup recovery. Inflation expectations ceased falling, although remained elevated. Therefore, risks are still in place that inflation fails to reach its target in 2017. The moderate indexation of natural monopoly tariffs by less than 4% would facilitate inflation deceleration amid lower interest rates in the economy.

1.1.1. Inflation reduction to 5.5% in 2016 is highly likely

- September saw monthly inflation accelerate due to seasonally adjusted prices for fruit and vegetables.
- Inflation continued to decline year on year. A high base effect will be conducive to annual inflation slowing in 2016 Q4 – 2017 Q1.
- The moving three-month inflation, which is characteristic of medium-term seasonally adjusted inflation trends, went down to 4.7% over the past few weeks. However, inflation still remains elevated.
- Although the past week data suggest a slight increase in inflationary pressure, inflation continues to be close to the required path.

According to statistical data, consumer prices in September increased by 0.2% following the zero growth in August. Fruit and vegetables were a decisive factor in September price increase with prices resumed growing late in the month. This was indicative of the seasonal disinflation trend completion. The reason for such dynamics is a gradual fading of positive impact from the reduction in fruit and vegetable prices typical of the autumn season.

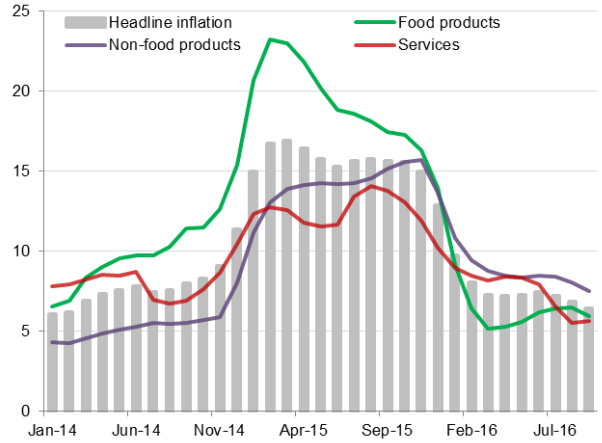
Price growth continues to slow down year on year: in September inflation dropped to 6.45% from 6.85% in August (Figure 1) due to the last year's high base effect. This effect will be conducive to annual inflation slowing in 2016 Q4 – 2017 Q1, provided that there are no new price shocks.

As far as inflation components are concerned, they also show downward dynamics, except for services whose prices grew from 5.5% to 5.6% YoY. The seasonally adjusted

monthly data point to a similar conclusion: growth in prices for services accelerated, while that of food and non-food goods slowed down.

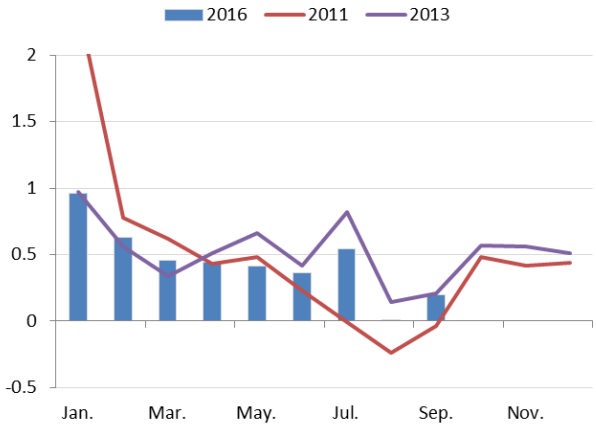
Preliminary calculations based on seasonally adjusted weekly inflation data also showed that seasonally adjusted inflation reduced in September due to the decline in price growth for food and non-food goods[1]. Nevertheless, non-food goods continue to exert an upward pressure on prices.

Figure 1. Inflation component growth rates, % YoY



Sources: Rosstat, R&F Department calculations.

Figure 2. Monthly inflation, %



Source: Rosstat.

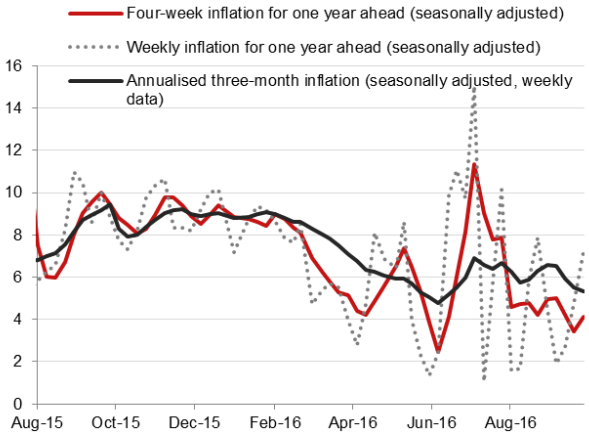
It should be noted that 2011-2013 also saw a fall in prices caused by a good harvest and the lack of exchange rate fluctuations (Figure 2). That is why inflation dynamics of those years are similar to the current inflation dynamics and may be used for comparison purposes. In the period under review, inflation stood at 6.0–6.5% on average at the year end, which is comparable with the current inflation level. For the time being, September inflation of 0.2% corresponds to inflation of the similar period in 2013 and only slightly exceeds the respective indicator for 2011, when September saw a deflation. The similarity of inflation dynamics in these periods makes it possible to project consumer price growth till the end of 2016 based on historical price dynamics with due account of the observed trend towards gradual slowing of monthly inflation, seasonally adjusted. According to calculations, inflation should reach 5.5% in 2016. These dynamics correspond to the Bank of Russia's forecast inflation path leading to 4% at the end of 2017.

The moving three-month inflation, which is characteristic of medium-term seasonally adjusted inflation trends, is going down for the fifth week in a row to reach 4.7% (Figure 3). However, this level is still considered to be elevated. According to the latest weekly data, the seasonally adjusted four-week inflation (calculated for one year ahead) accelerated from 4.2% to 5.19%. It points to the insufficient resilience of the trend towards slowing inflation.

[1] The seasonally adjusted inflation assessment by component will be specified as Rosstat publishes its detailed statistics on the whole range of goods and services included in CPI.

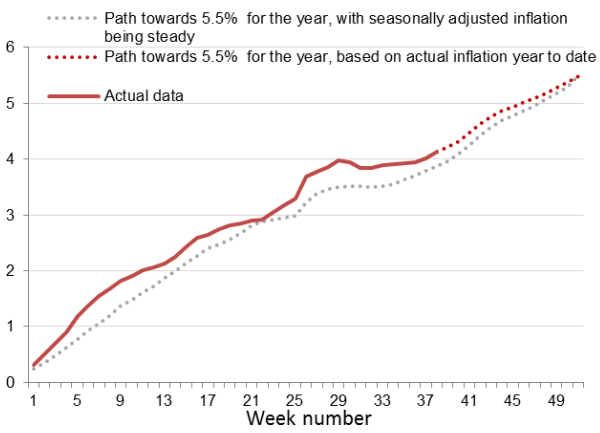
For the time being, price growth accrued since the start of the year stands at 4.1%. The end of September witnessed its slight deviation from the path leading to inflation of 5.5% at the end of the year (Figure 4). However, provided that there are no negative shocks, it is likely to fade away at the year end.

Figure 3. Seasonally adjusted weekly inflation calculated for one year ahead, %



Sources: Rosstat, R&F Department calculations.

Figure 4. Inflation accrued since the start of the year (weekly data), %

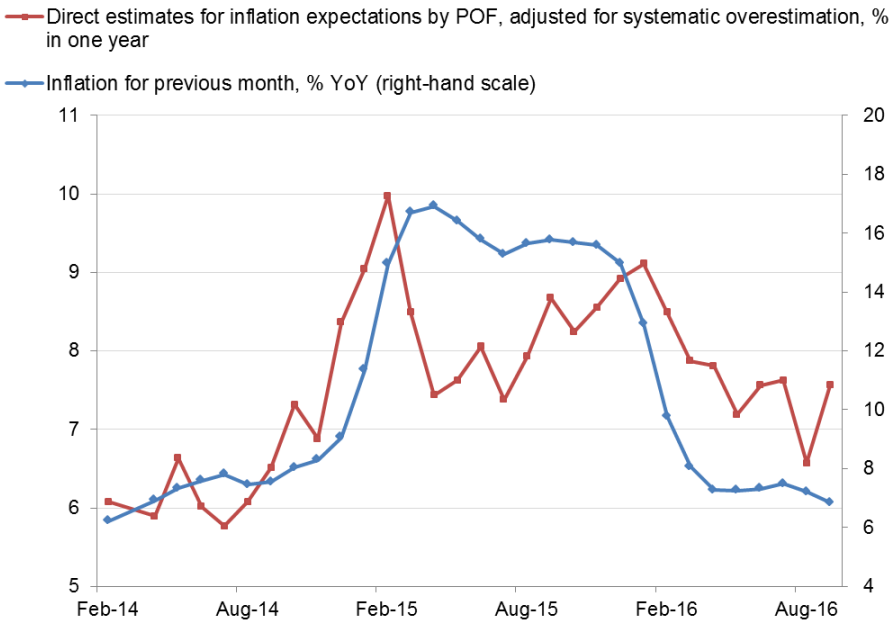


Sources: Rosstat, R&F Department calculations.

1.1.2. Household inflation expectations stop falling

- Inflation expectations for one year ahead adjusted for their systemic overstatement increased to 7.6% in September (Figure 5).
- The temporary favourable factors, which were conducive to slowing weekly price growth in the past few months, exhausted their positive impact, which may decelerate reduction in inflation expectations.
- Despite the ongoing moderately tight monetary environment and the continued inflation reduction, inflation expectations remain elevated.
- Risks for inflation reaching the 4% target at the end of 2017 persist.

Figure 5. Inflation expectations, %



Sources: inFOM, R&F Department calculations.

On methodology to calculate inflation expectations adjusted for their systemic overstatement

In order to calculate inflation expectations adjusted for their systemic overstatement the R&F Department applies the following pair regression estimated on monthly data:

$$\pi_{t+12} = \alpha 0 + \alpha 1 \times \pi_{expt+12},$$

where

$\pi_{expt+12}$ is a median value of expected inflation for one year ahead calculated by inFOM LLC according to the survey on inflation rate;

$\alpha 0, \alpha 1$ are constant factors.

The linear factor and absolute term of the regression reflect an adjustment for systemic overstatement of inflation expectations by respondents, showing to what extent inflation expectations deviate from the actual inflation over a year.

It should be noted that the said calculation, although seems to be useful at a first glance, has a number of objective methodological drawbacks. *Firstly*, the method insufficiently considers the impact of unforeseen inflation shocks. For example, the results obtained show that the majority of respondents predicted already in 2014 Q1 that consumer annual inflation would peak at the start of 2015. This conclusion is evidently wrong. *Secondly*, the pair regression is in itself a rather simplified approach, which fails to provide the full picture of transformation of household inflation expectations into actual

inflation.

As a result, calculations of inflation expectations adjusted for their systemic overstatement should be treated very cautiously. While interpreting their results, one should bear in mind that inflation expectations of economic agents influence actual prices through the model of financial decision-making by households and companies with regard to consumer and investment expenditures. The said decisions are taken, inter alia, by those respondents who are inclined to significantly overstate future inflation. Certainly, the answers of this category of median respondents to the question on the inflation rate over a year may not exactly correspond to their actual behavioural model. However, this category of households is rather large to be neglected while assessing inflation expectations through a survey. Therefore, the median value of expected future inflation without any adjustment, published by the Bank of Russia based on survey data by inFOM LLC, remains quite informative.

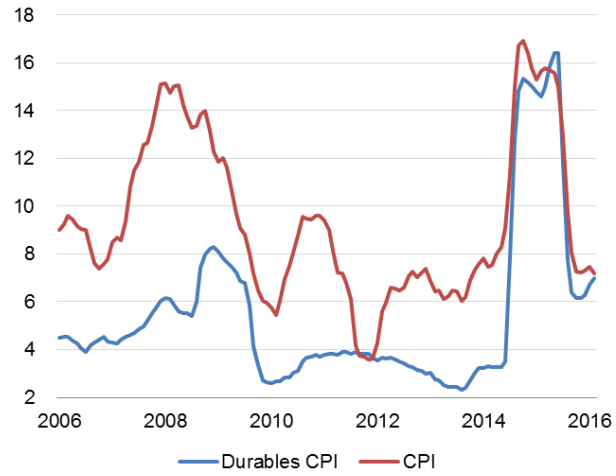
1.1.3. Recovery of margins of durable goods sellers hampers inflation reduction

- Growth in ruble prices for imported non-food goods slowed down significantly in the past few months.
- It did not evoke a comparable slowing in domestic price growth…
- …due to increased inflationary pressure from seller companies recovering trade markups.
- It may keep inflation expectations elevated and become their anchoring factor.

As a rule, prices for non-food industrial goods undergo changes infrequently (roughly once in six months). That's why their dynamics largely reflect long-term inflation expectations of companies, as compared with inflation of food or fuel prices. Since the end of 2014, prices for durables have been growing steadily in Russia (Figure 7). As a result, their gap with headline inflation narrowed sharply (Figure 6).

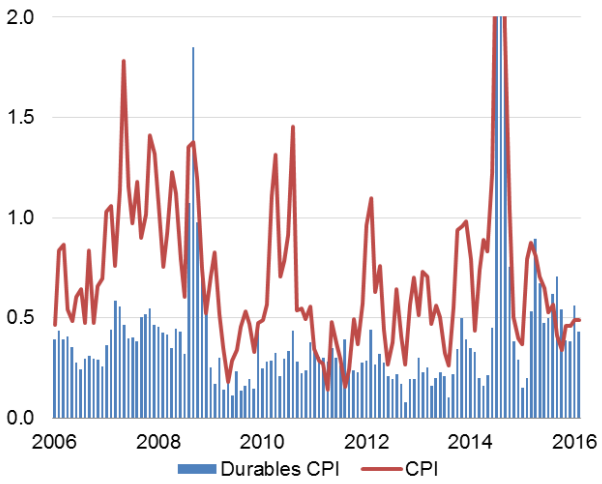
In late 2014 - early 2015, a simultaneous significant growth in CPI and CPI for durables could be explained by the pass-through effect on prices following a sharp ruble depreciation. The ongoing price growth in 2016 hinders price reduction to more conventional low levels. First of all, they may indicate the started recovery of margins of seller companies. According to Rosstat, trade markups in the non-food goods segment began growing amid the first signs of reinvigorated demand. This means that increased price growth for this category of goods may persist for at least several months. Therefore, this segment continues to witness the pass-through effect on prices from the ruble weakening deferred in 2015 due to slack demand.

Figure 6. CPI and CPI for durables, % YoY



Sources: Rosstat, R&F Department calculations.

Figure 7. CPI and CPI for durables, % MoM seasonally adjusted

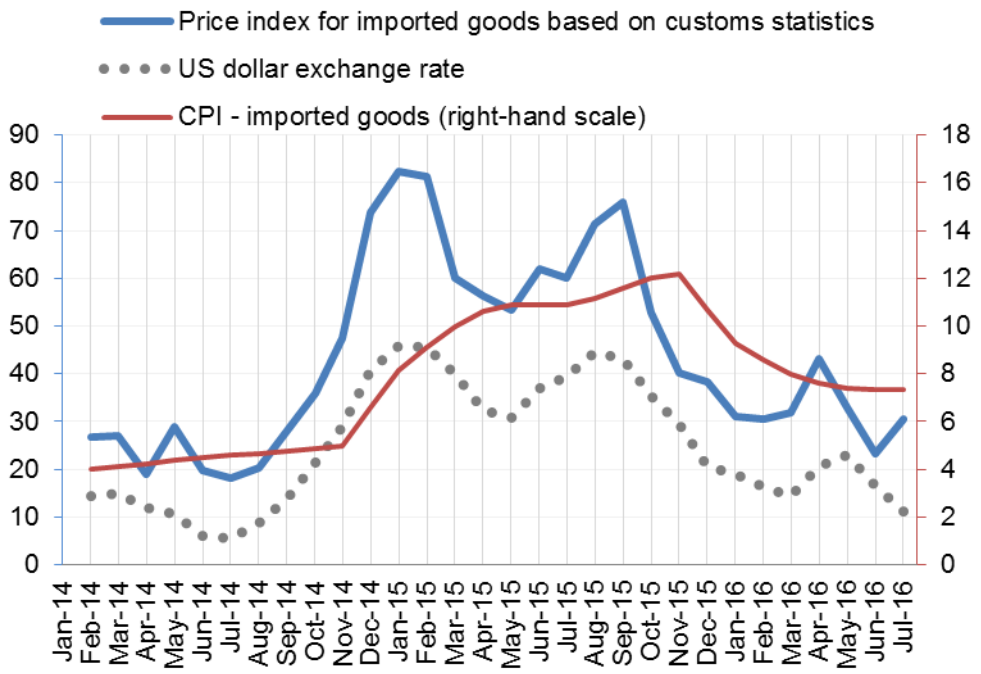


Sources: Rosstat, R&F Department calculations.

In order to assess the price influence of changes in seller companies' expectations we compared the dynamics of ruble price growth for imported non-food goods[2] calculated on the basis of Federal Customs Service data and the dynamics of CPI for similar groups of goods. The contribution of demand recovery factor to increased trade markups (margins) of seller companies is of particular interest.

[2] The index is an aggregate indicator constructed of price growth calculated on the basis of customs statistics on cost of goods and their quantities. Since the Federal Customs Service data are published in US dollars, the prices have been adjusted with due account of the dynamics of the ruble exchange rate against the US dollar. The goods included in the calculation comprise textiles, clothing and underwear, footwear (leather, textile and combined), detergents and cleansers, perfumes and cosmetics, haberdashery (all items, except for pram, umbrella, tulle, and toothbrush), electrical goods and other home appliances. The total share of these categories in the consumer basket of goods and services used to calculate CPI amounts to 13.2%.

Figure 8. Prices for imported non-food goods, % YoY



Sources: Federal Customs Service, Rosstat, Bank of Russia.

The data show that import price index for non-food goods increased much earlier than consumer market inflation. Categories included in such groups of goods as clothing (including underwear and textiles), footwear, detergents and cleansers, perfumes and cosmetics, haberdashery, and also electrical goods may serve as examples. Import price growth for these categories began to accelerate following the sharp ruble depreciation in September 2014, while consumer prices started growing only in December (Figure 8).

This confirms an assumption that given the sharp ruble depreciation and, as a result, accelerated inflation for imported non-food goods, seller companies adapted to a new consumer demand through lowering their own margins to the minimum. Sustainable expectations of low demand resulting from ruble depreciation forced sellers to hold back prices for a long time in order not to lose buyers[3].

Among the factors containing inflation of non-food goods the behaviour of retail companies deserves attention. Striving to maintain demand and customers' loyalty many retailers recovered losses caused by growth in input prices by raising prices for less consumable goods of the luxury segment. At the same time, sales and promotions became very popular to maintain public interest in staple goods. This price policy results in lower costs for sellers and less pronounced effect on inflation, since the share of staple goods in CPI is significant.

[3] We should admit that in the periods of the sharpest ruble depreciation many of these categories of non-food goods (for example, detergents and cleansers, as well as perfumes and cosmetics) registered an increase in production and internal consumption of domestic goods amid lower consumption of imported goods, which hampered the impact of the exchange rate on inflation and also brought down trade markups. However, we believe this factor's influence to be minor. The share of these categories of goods in total CPI stands at 2.26%.

However, as soon as demand recovers, the suppressed margin may have negative inflation implications. The fact that the past few months saw steady exchange rate dynamics accompanied by the sellers' improved expectations with regard to households' future demand and purchasing power may signal margin recovery and additional price pressure.

According to our research, CPI of the considered categories of non-food goods shows weaker response to the improved exchange rate dynamics in the past few months, while growth in ruble prices of imported goods continues to slow down noticeably. Margin recovery has been observed since the start of the year and currently largely relates to the slowing growth in prices for imported non-foods goods. Risks are still in place that sellers will increase their margins through price growth as the economic situation improves.

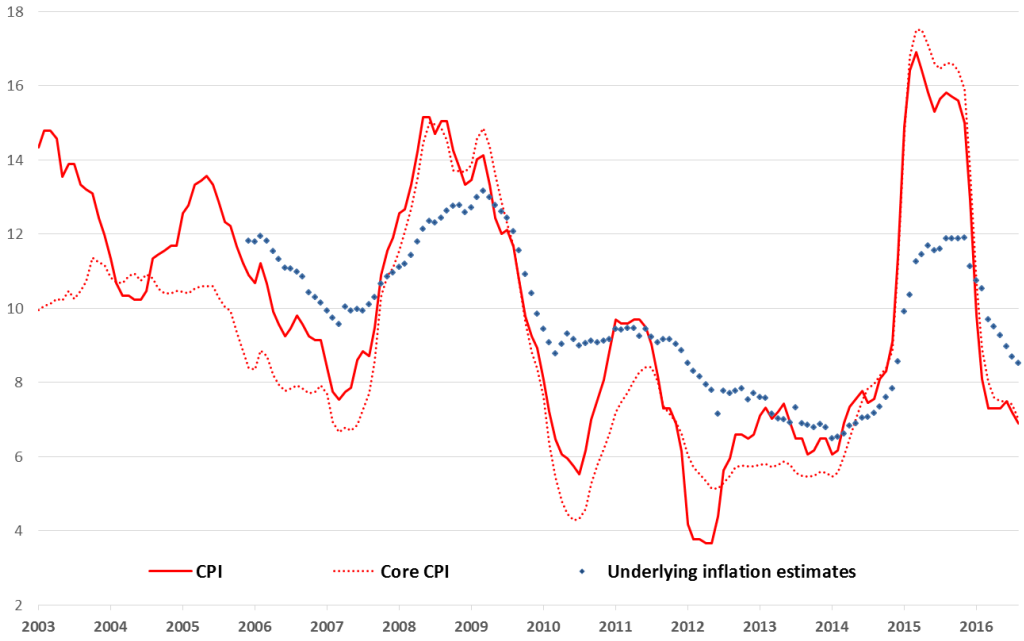
Anyway, the ongoing rise in prices for a number of non-food goods will hamper inflation slowdown. This may become an anchoring factor for elevated inflation expectations, which entails risks for inflation to reach its target in 2017.

1.1.4. Underlying inflation keeps slowing down

- Estimated annual rates of underlying inflation[4] in August were revised downwards to 8.5% from 8.7% in July, reflecting the eased inflationary pressure (Figure 9).
- Underlying inflation slowed to the level of late 2011.
- Given the current trends in price and monetary aggregate dynamics, we expect further gradual downgrades in estimates of underlying inflation.
- However, further slowing of underlying inflation may be hindered by the ongoing elevated inflation expectations.
- The risks for inflation to move away from the target in late 2017 are still in place. Underlying inflation still remains high and goes down slowly.

[4] The underlying inflation is understood to be the median value of the three estimates based on the identification of the unobserved general component in the set of price indicators, enabled by dynamic factor models. This method of measuring underlying inflation is detailed in the Bank of Russia's economic research papers: E. Deryugina, A. Ponomarenko, A. Sinyakov, K. Sorokin 'Evaluating the underlying inflation measures for Russia', *Working Paper Series*, March 2015, No. 4 and R&F Department Analytical Note 'Measuring Domestically Generated Inflation', May 2016, No. 2.

Figure 9. CPI, core CPI and historical BoR estimates for underlying inflation, % YoY



Sources: Rosstat, R&F Department calculations.

1.1.5. Tariff indexation impact on inflation

- Moderate indexation of natural monopoly tariffs by less than 4% would be conducive to inflation reduction amid lower interest rates in the economy.
- A decline in tariff indexation by one percentage point leads to a reduction in consumer price growth by 0.2 pp.

Administered tariff dynamics influence inflation both explicitly and implicitly.

Explicit influence

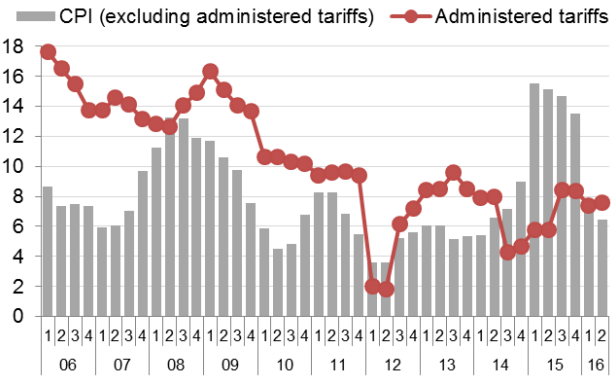
The explicit influence is conditioned by the fact that services provided to consumers at administered tariffs are included in the consumer basket used to calculate CPI. These services comprise certain communications services, passenger transportation services and utility services. Their total share in the entire consumer basket equals 12-13% of late. In the past few years, the dynamics of prices of administered tariffs differed much from the headline inflation dynamics (Figure 10).

From 2006 to 2013, administered tariff growth usually exceeded that of other prices. Therefore, the contribution to inflation from tariff growth exceeded their share in the CPI basket (Figure 11). In 2014–2016, an inflation shock caused by the ruble depreciation reduced the contribution of administered tariffs to inflation. As this shock's impact weakens and the Bank of Russia makes efforts to achieve the inflation target in the

medium-term horizon, tariff dynamics and their influence on inflation acquire particular importance.

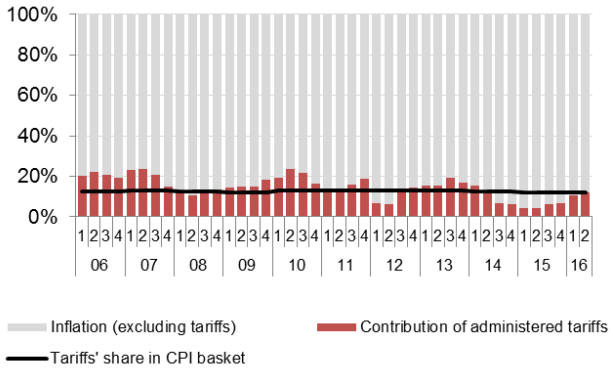
The explicit influence of tariff indexation is easy to calculate: their share in the CPI basket multiplied by the indexation value. Tariff indexation of a comparable size will be considered neutral for the inflation target of 4%. In this case, its contribution to price growth will be equal to about 0.48%.

Figure 10. CPI and administered tariff growth, % YoY



Sources: Rosstat, R&F Department calculations.

Figure 11. Tariff contribution to annual inflation



Sources: Rosstat, R&F Department calculations.

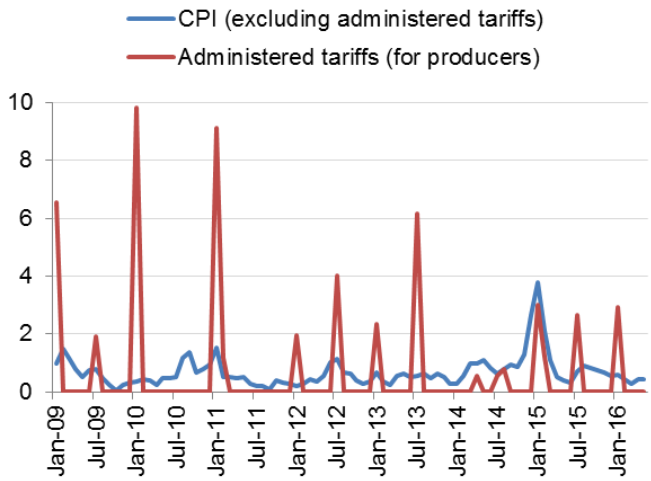
Implicit influence

The implicit influence of administered tariff growth is explained by increased producer costs to be translated to consumer prices.

In order to determine the implicit influence of producer administered tariffs, we assessed regression equations. Seasonally adjusted month-on-month price growth without taking account of administered tariffs for consumers served as a dependent variable. The current and lag values of the nominal ruble exchange rate (in order to eliminate the impact of the ruble exchange rate on inflation) and integral growth in administered tariffs for producers were used as explanatory variables. The integral growth was calculated as a weighted average change in tariffs for gas, fuels, electricity, and railway freight transportations for producers (Figure 12).

An analysis shows that a 1% change in administered tariffs leads to an aggregate change in prices of 0.06%, with the large share of growth falling on the month when the tariff indexation occurs. Therefore, if the annual growth in administered prices for producers equals 4% YoY, the implicit contribution of tariff growth to inflation will amount to 0.24% YoY.

Figure 12. Seasonally adjusted CPI and growth in administered tariffs for producers, % MoM



Sources: Rosstat, R&F Department calculations.

Overall influence

The previous calculations show that every percentage point of tariff indexation leads to consumer price growth of 0.12% under explicit influence and another 0.06% under implicit influence. Thus, the overall influence of one percentage point of tariff indexation on annual inflation, all else being equal, accounts for 0.18%.

If administered prices and tariffs remained unchanged, for example, as compared with tariff indexation in line with the Bank of Russia's inflation target, this would reduce the annual growth in consumer prices by 0.72 pp. This would allow inflation to slow down to the target amid lower interest rates in the economy.

1.1.6. Producer price growth continues to slow down

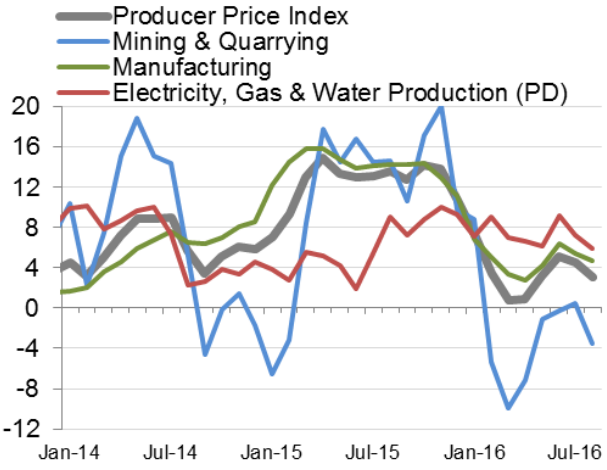
- Producer price growth continues to slow down largely due to oil price reduction.
- Low price pressure in production creates preconditions for slowing consumer inflation.
- Although in certain sectors (food, furniture, footwear) producer price growth began to outpace consumer inflation, which may hamper its reduction.

In August, producer price inflation continued to slow down standing at 3.1% YoY, which is 1.5 pp lower than the July figure. The slowing of growth in producer prices was observed in all the key types of activity. Producer prices in mining and quarrying continued to go down (to 3.5% YoY) following a slight growth in July. Price growth in manufacturing slowed from 5.5% YoY in July to 4.8% YoY in August due to low rates of

price growth in the production of petroleum products and chemicals. Electricity, gas and water supply saw price growth slowing from 7.2% YoY to 6.0% YoY (Figure 13).

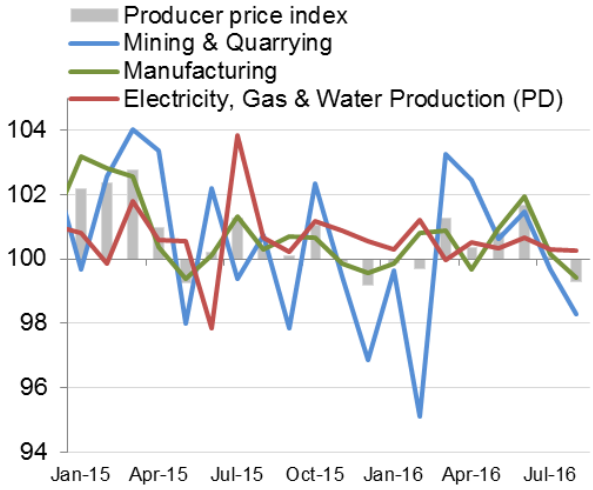
Seasonally adjusted decline in producer prices of industrial goods amounted to 0.7% MoM. All the sectors witnessed the slowing inflation dynamics in August as compared with July. Petroleum product and finished metalware producers made a greater contribution to slowing headline inflation. These sectors saw producer price index drop by more than 3 pp (Figure 14).

Figure 13. Core PPI components, % YoY



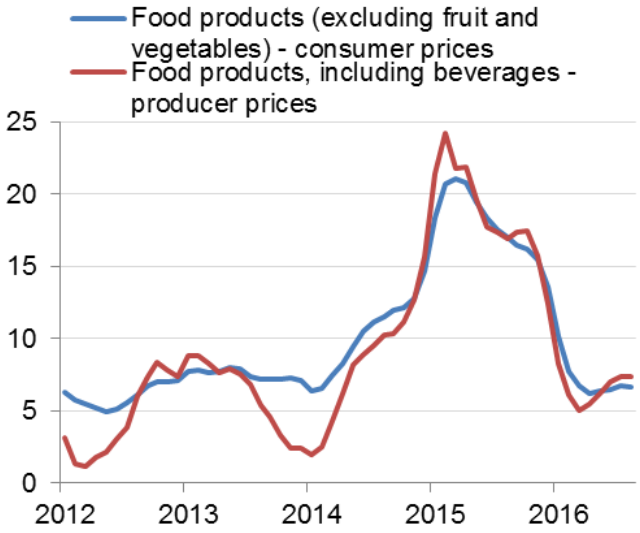
Sources: Rosstat, R&F Department calculations.

Figure 14. Core PPI components, % MoM seasonally adjusted



Sources: Rosstat, R&F Department calculations.

Figure 15. Food prices, % YoY



Sources: Rosstat, R&F Department calculations.

Producer price growth is still lagging behind consumer price growth, which brings about conditions favourable for further inflation reduction.

However, there are a number of sectors where risks of consumer price growth acceleration or their stabilisation at a high level are still in place. For example, producer price growth in food products (including beverages) turns out to be higher than consumer price growth in foodstuffs for the third month in a row (Figure 15). The similar trends are registered in certain groups of non-food goods (for example, footwear and furniture).

1.1.7. Inflation risks from the labour market intensify

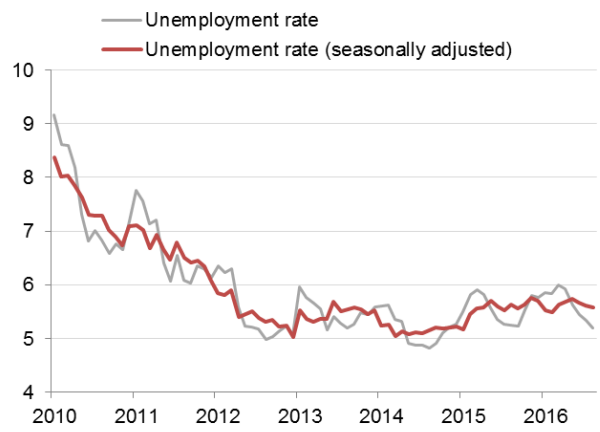
- The labour market situation continues to improve: the unemployment rate keeps falling.
- Labour force participation grows against the backdrop of increased job numbers and a shrunk working-age population.
- Latent unemployment indicators U5 and U6[5] showed better dynamics in the second quarter than in the first quarter.
- The growing demand for personnel amid the low unemployment rate entails inflation risks.

According to Rosstat, the unemployment rate in August reached its low of 5.2% since October 2014. Seasonally adjusted, the unemployment rate remained practically unchanged from the previous month at 5.6% (Figure 16). In August 2015, the unemployment rate stood at 5.3%. This year's decline was caused by a reduced number of unemployed and an increased number of employed. Overall, this led to a rise in workforce: the economically active population rate[6] keeps hitting the maximum values (Figure 17).

[5] This classification is applied for calculation of various unemployment indicators by the US Bureau of Labor Statistics. Their calculation is based on quarterly statistical data. The U5 indicator, beyond the registered number of unemployed, includes economically inactive population, that is, people who are not looking for a job or who lost hope to find it but are still willing to work. The U6 indicator includes U5 and part-timers (less than 30 working hours a week).

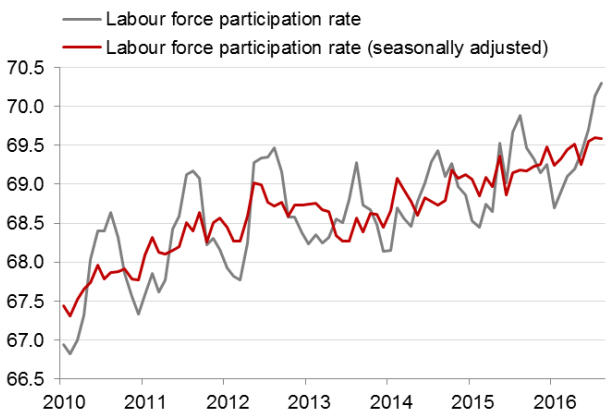
[6] Similar to labour force participation – the ratio between the labour force and the overall size of their cohort (national population of the same age range).

Figure 16. Unemployment rate, %



Sources: Rosstat, R&F Department calculations.

Figure 17. Labour force participation rate, %

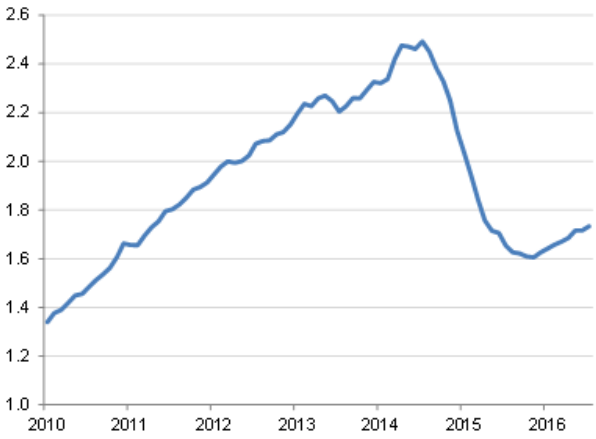


Sources: Rosstat, R&F Department calculations.

The unemployment structure points to the ongoing improvement of the situation in the labour market and in the economy as a whole. The share of unemployed who have left their jobs due to dismissal or job cuts, liquidation of a company or own business, fell compared with August 2015, while the share of those who have quitted their jobs voluntarily, increased.

A recovery in job vacancy rate[7] has been observed since late 2015, which is confirmed by employers' demand for employees reported to the government employment service (Figure 18). The growing demand for employees amid a stable number of employed and a reduced unemployment rate suggests that the labour market may be exposed to price pressure. Given the growing demand for personnel, especially highly qualified employees, and the reduced labour supply due to the demographic situation, competition between employers may increase, which will result in real wage growth acceleration.

Figure 18. Job vacancy rate, %



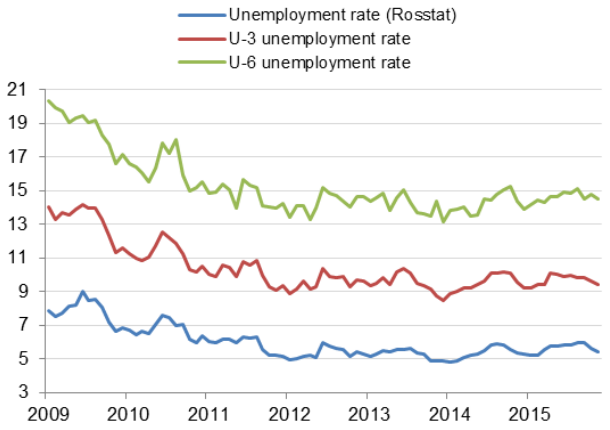
Sources: Rosstat, R&F Department calculations.

[7] It is calculated as the ratio between the employers' demand for employees reported to the government employment service and the economically active population.

2016 Q2 saw a reduction in unemployment rate U5 which fell from 9.7% to 9.6%[8] over the three months (Figure 19). The broader unemployment rate U6 also fell to 14.6% in July from 14.8% in March. The improved dynamics of broader unemployment rates U5 and U6 were caused by a reduction in the official unemployment rate U3 published by Rosstat. All the above indicators have similar dynamics that is why we should consider the difference between them[9] to analyse the situation in the labour market more profoundly. The latest Rosstat data point to the improved situation in the labour market. The difference between U6 and U3 decreased in Q2 compared with Q1 (Figure 20).

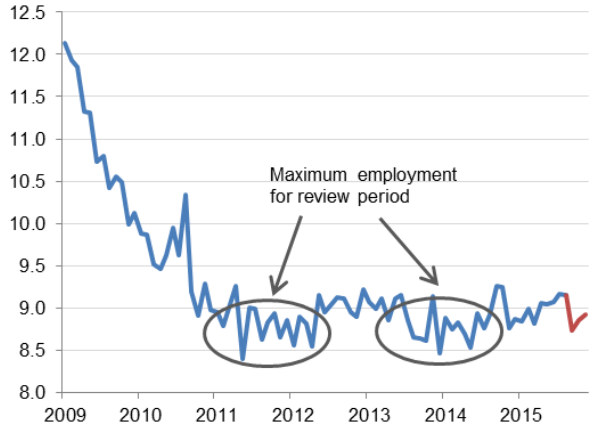
According to R&F Department estimates, the natural level of unemployment NAIRU stands at 5.9%. The actual unemployment level has already been below. A NAIRU assessment may be overstated due to structural changes in the labour market, in particular, the deteriorated demographic situation. Nevertheless, as the current unemployment rate comes close to NAIRU, this may exert additional inflationary pressure.

Figure 19. Various unemployment rates, % seasonally adjusted



Sources: Rosstat, R&F Department calculations.

Figure 20. Difference between U3 and U6 unemployment rates, % seasonally adjusted



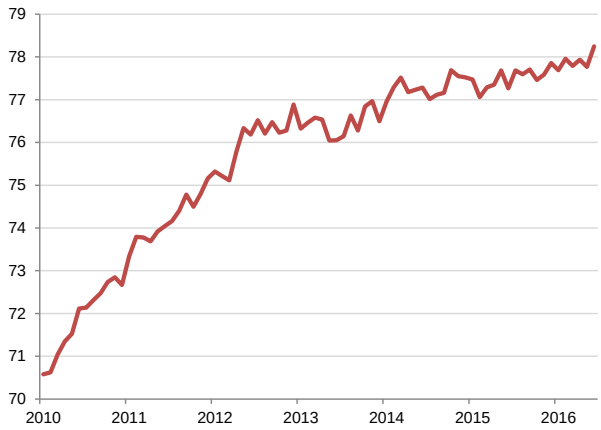
Sources: Rosstat, R&F Department calculations.

Employment data confirm the improved situation in the labour market. Both formal and non-formal sectors observe employment growth. Their share in the total number of working-age population continues to be at the maximum (Figure 21). A reduction in the number of working-age population along with employment growth contributes to the improved situation. This indicator may grow further thus intensifying competition for labour resources which may entail certain inflation risks.

[8] Seasonally adjusted.

[9] For example, the greater difference between U3 and U6 points to the increased number of people, who have to work shorter hours, as well as persons, who are actually unemployed but do not officially belong to the workforce, reflecting a deterioration in the labour market.

Figure 21. Share of employed (including non-formal sector) in total number of working-age population, %



Sources: Rosstat, R&F Department calculations.

1.2. Economic performance

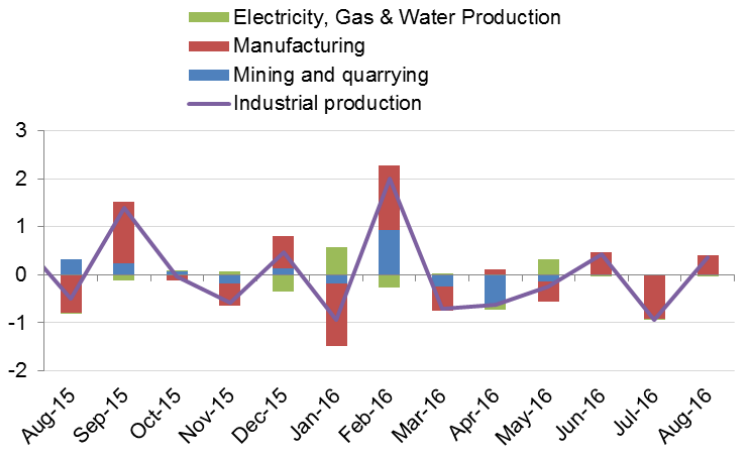
Short-term business activity indicators improved in September. Also, most poll data suggest the emergence of frail economic growth as early as this year, driven by a number of factors including a recovery in investment. Structural constraints in some key industries remain crucial obstacles for the economy to overcome the current stagnation, which are among primary risk factors for sustainable growth.

1.2.1. 'New seasonality' in manufacturing

- The bulk of industrial production growth of 0.4% MoM in August was generated by expansion in manufacturing.
- The rebounding imports of investment goods may appear a precursor to a recovery in sustainable expansion in the manufacturing sector.

According to Rosstat data, industrial production in August returned to growth, both on an annualised (+0.7% YoY), and a monthly basis (+0.5% MoM, seasonally and calendar factor adjusted). Our estimates show that industrial growth in August totalled 0.4% MoM and owns its origin almost entirely to the advance in manufacturing (+0.4% MoM). On this background, the mining industry posted stagnation (0% MoM); in defiance of this, annualised readings in the sector continue to show impressive growth rates: +2.4% YoY between January and August 2016.

Figure 1. Individual components' contribution to the industrial production index, % MoM (seasonally adjusted)



Sources: Rosstat, R&F Department calculations.

In recent months, as both mining and the distribution sector were posting stagnation, the state of manufacturing proved central to overall economic performance (Figure 1). However, it is premature to speak of any positive trends. The industrial movements between July and August were essentially determined by the calendar factor. In this way, there were two more working days in August in comparison with both July 2016 and August last year. July, on the contrary, was two working days shorter than the previous year. The difficulties related to seasonal and calendar factor adjustment (see the box 'Uncertainty factors in seasonally adjusted estimates of short-term monthly economic indicators') are key obstacles to appropriate interpretation of manufacturing trends.

Beyond the commonly known methodological difficulties in calendar and seasonal factor adjustment, special caution should be exercised when it comes to monthly growth rates driven by the so-called 'new seasonality' that has found its way in the manufacturing industry. Over a span of more than six months, growth in the manufacturing industry has given way to contraction, and vice versa. This zigzag-like pattern, most likely connected to the corresponding production cycle in one of the branches, indeed complicates the identification of the 'true' seasonality, impacting on the resulting estimates. Given these data, resumption in industrial contraction cannot be ruled out for September. Nevertheless, notable is a rebound in investment imports (see Section 1.2.3 'August imports suggest a rebound in investment'), which may well indicate an incipient turnaround in the performance of manufacturing. The Federal Customs Service statistics fail to expose recipients of car and equipment imports; except for mining, manufacturing is set to show sustainable growth in the next few months. This coming growth is set to bring along recovery in overall industrial growth.

Uncertainty factors in seasonally adjusted estimates of short-term monthly economic indicators

Once short-term trends across multiple macroindicators are analysed, the seasonal component of time series must be eliminated. However, the inaccuracies in seasonal adjustment, owing to several reasons including the instability of short-term macroindicators, the seasonal wave's evolution, the impact of crises (*the so-called echo-effects*[10]) are responsible for the problem of substantial interpretation of these indicators, resulting in misrepresentations of overall economic data and leading to potentially wrong decisions.

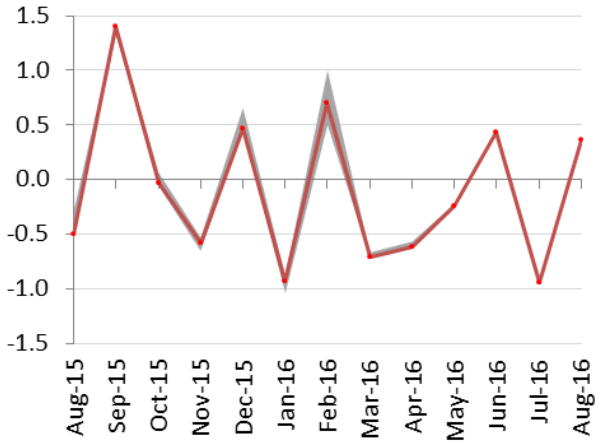
The standard seasonal adjustment algorithms used globally (e.g. TRAMO-SEATS, X11 etc.) may pick another model (not necessarily better than the previous one) as new measurements are added at the end of the series, which results in revision of the retrospectively estimated seasonal component. As suggested by the global practice of short-term economic data releases, revision in seasonally adjusted series occurs simultaneously with addition of a new month / quarter to a statistical indicator. However, the calculations based on the example of the industrial output index show that new data added subsequently lead to no material changes to the estimate of the seasonal component of the series (Figure 2). Importantly, the resulting range of fluctuations in seasonally adjusted monthly industrial output is a lot less than corrections which Rosstat makes after one observation is added to this series (Figure 4).

The use of software products and commonly accepted seasonal adjustment methods help improve comparability in international statistical data. Currently, the commonest are adaptive and model-based methods, namely, X11 (and similar ones), each of them enabling to set a variety of initial specifications and regression variables. These methods are based on inherently different algorithms (while TRAMO-SEATS enables seasonal adjustment filters based on statistical models to identify time series components, X11 enables selection from pre-set moving average filters); for all their differences, they bring insignificantly different adjustment results.

Once different initial settings are used within the confines of one method, the results show a stronger differentiation gap. The result of seasonal adjustment made to the industrial output index showed that a seasonal adjustment estimate is to a great degree under the influence of the calendar effect and shifts in series levels (Figure 3). Where different initial settings are used within the confines of one method, seasonal pattern will be affected much stronger than where new measurements are added or retrospective data are revised.

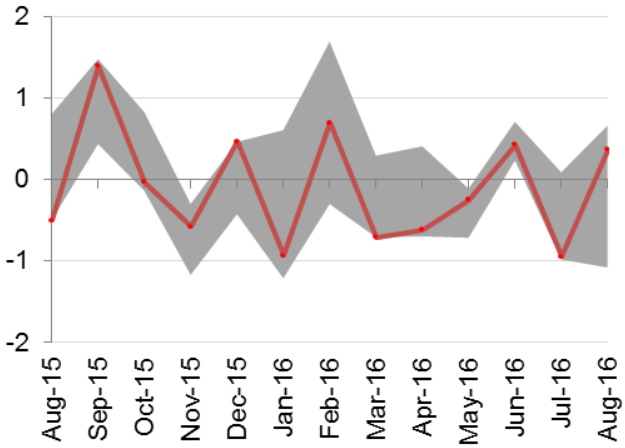
[10] For more details see: Бессонов В.А., Петроневич А.В. «Сезонная корректировка как источник ложных сигналов» - Экономический журнал ВШЭ, №4 (2013).

Figure 2. The range of seasonally adjusted monthly industrial growth rate estimates with subsequent additions of new measurements, % MoM (the red line is the smoothed series on the current full selection through August 2016)



Sources: Rosstat, R&F Department calculations.

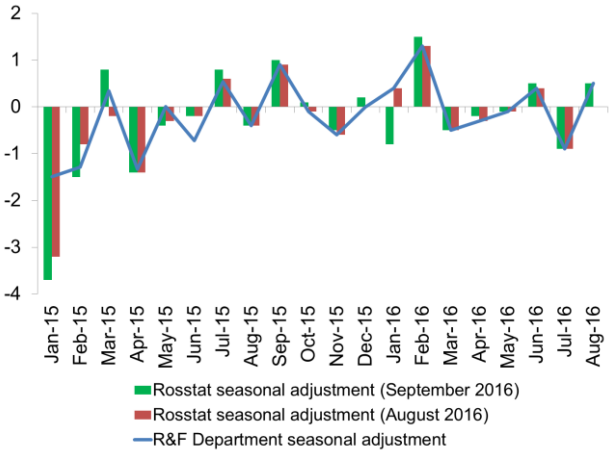
Figure 3. The range of seasonally adjusted monthly industrial growth rate estimates based on different seasonal adjustment parameters , % MoM



Sources: Rosstat, R&F Department calculations.

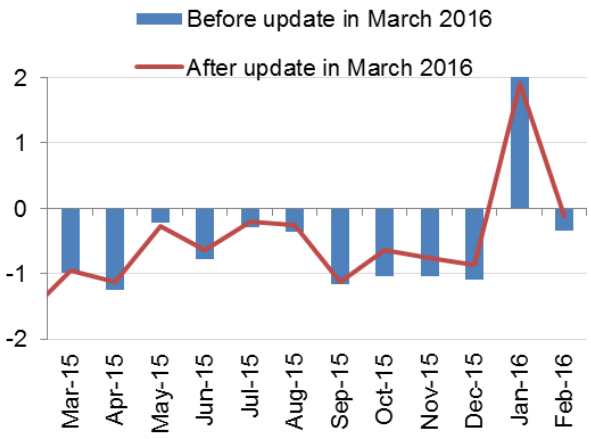
It is to be noted that in addition to the seasonality measurement complexities, coming as a result of econometric problems, additional uncertainty is produced by Rosstat-implemented periodical data revisions. At the same time, a seasonal component estimate for retail sales, wherein statistical data for several preceding periods were revised in March 2016, suggests that as new information comes in, periodical updates in data make but an unessential impact on qualitative-level conclusions (Figure 5).

Figure 4. Seasonally adjusted industrial output: Rosstat and R&F Department adjustment outcomes



Sources: Rosstat, R&F Department calculations.

Figure 5. Retail sales, % MoM (seasonally adjusted)



Sources: Rosstat, R&F Department calculations.

1.2.2. Decline in intermediate and investment demand industries is ongoing

- The growth in investment demand industries proved short-lived and gave way to contraction in production
- Consumer demand sectors still post insubstantial growth as the production of durable goods is in decline.
- The negative trend in metallurgy is responsible for negatively performing intermediate demand sector industries – which runs counter to resumed growth in chemicals and the oil-refining industry.

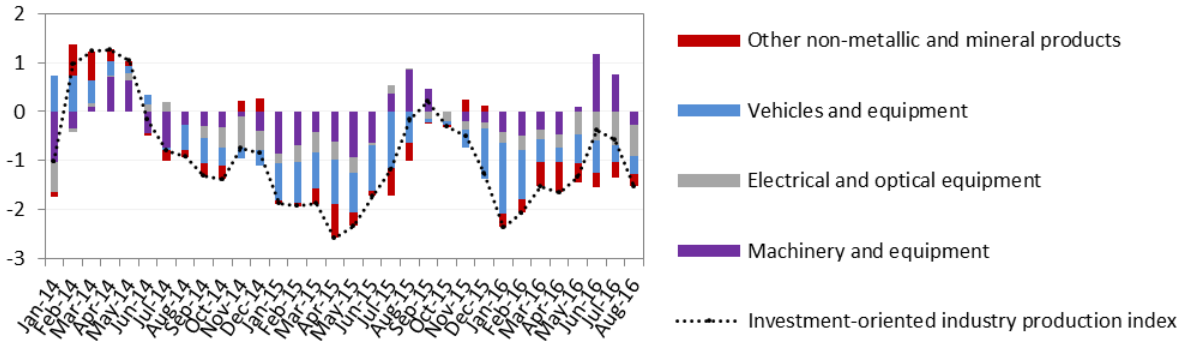
In August 2016, the output index in the group of investment demand industries dropped to this year's spring lows (Figure 6). The upsurge in the production of machinery and equipment seen between June and July 2016 proved short-lived and was the result of the state support incentives for agricultural machinery. Having said this, September data suggest that retirement rates in equipment fleets outrun the rates of commissioning – despite the subsidies to machinery manufacturers and buyers. The other investment demand industries show essentially the same rates of contraction as before.

Against slower rates of contraction in retail sales, as well as those of contraction in real wages, the industrial production index in consumer demand industries in August performs positively (Figure 7). The positive contribution is still coming from the food industry. Over the past two months, there has been growth in the printing sector, probably stemming from the election campaign. The output of durable goods, as before, is declining because of insufficient demand.

The insignificantly positive contribution to the performance of consumer demand industries comes from leather and leather products / footwear production. Consumers are switching from imports towards less costly domestically manufactured products. Import substitution is making forays into clothing industry, albeit with less dynamism. The advance of clothing manufacture is hampered by the lack of high-quality domestic fabric and garment accessories. In addition, the insufficient demand still pressures the footwear and apparel industry, along with such durable products as furniture.

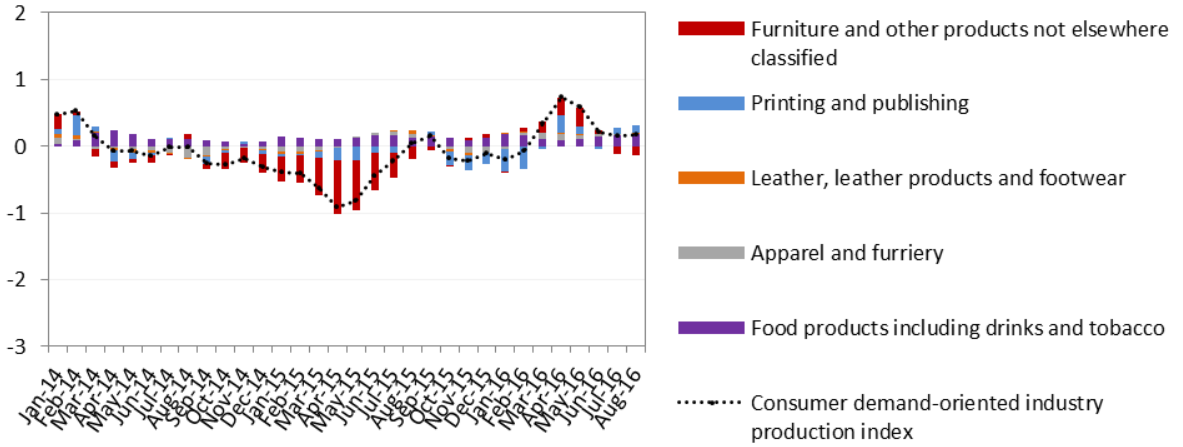
The sectors focused on intermediate demand post a slower slump (Figure 8). The dynamics are however multidirectional across industries. Output recovery finds its way in chemicals – occurring on the back of a rebound in the pharmaceutical industry. The last few months have seen nascent growth in the oil-refining industry. Its positive performance is determined by expanding primary distillation, helped by the price stabilisation around $40-50 a barrel, seen since April 2016. The bulk of the impact however comes from metallurgy where negative trends persisted on the background of weak domestic demand and stubborn glut of supply in the global market.

Figure 6. Investment demand-oriented manufacturing output index (trend), MoM %



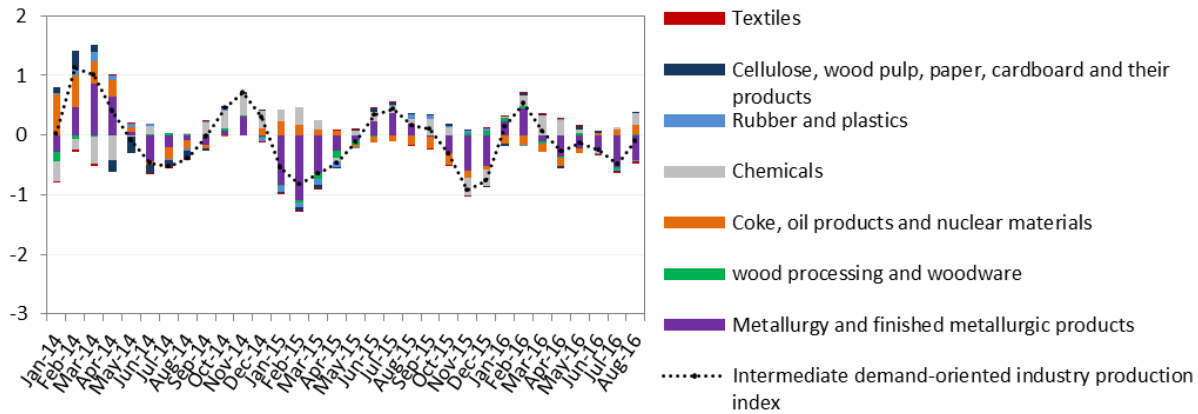
Sources: Rosstat, R&F Department calculations.

Figure 7. Consumer demand-oriented manufacturing output index (trend), MoM %



Sources: Rosstat, R&F Department calculations.

Figure 8. Intermediate demand-oriented manufacturing output index (trend), MoM %



Sources: Rosstat, R&F Department calculations.

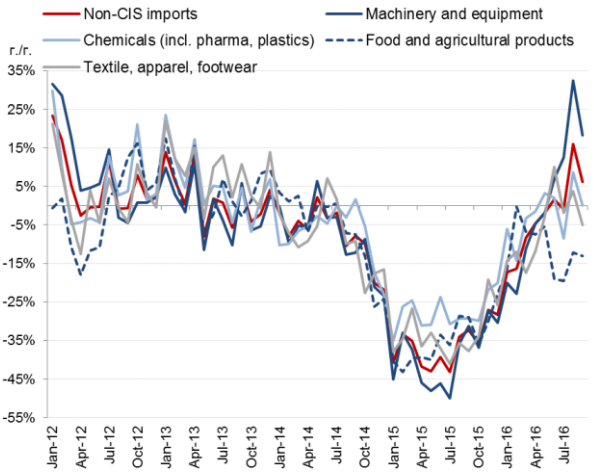
1.2.3. August imports suggest a rebound in investment

- According to tentative Federal Customs Service data, non-CIS imports are trending higher, mainly in the category of investment products.

- The above suggests that a rebound in investment is highly likely in the next few months.
- Nevertheless, the slump in construction may continue, which is set to push back overall improvement in investment activity.

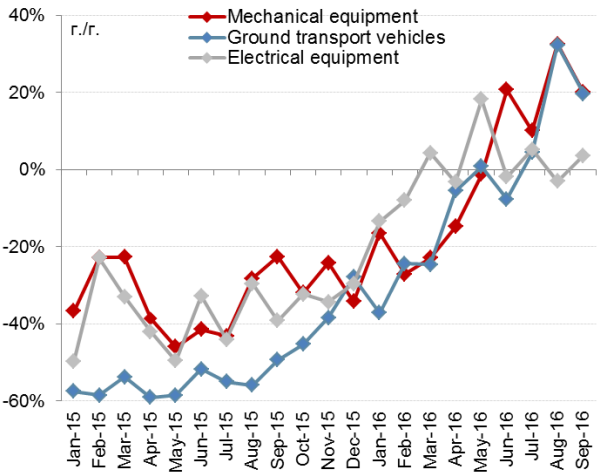
According to tentative Federal Customs Service data, non-CIS imports showed an unexpected rise in August 2016. For all expectations for imports to hit a recovery growth trajectory, there has been no proof of this trend emerging until recently. In August, non-CIS imports grew to $15.8 billion against $13.7 billion in July and $13.65 billion for the same period last year. In such a way, both annualised month-on-month data showed a marked improvement.

Figure 9. Growth rates of non-CIS imports' components, % YoY



Sources: Federal Customs Service, R&F Department calculations.

Figure 10. Investment imports' components, % YoY



Sources: Federal Customs Service, R&F Department calculations.

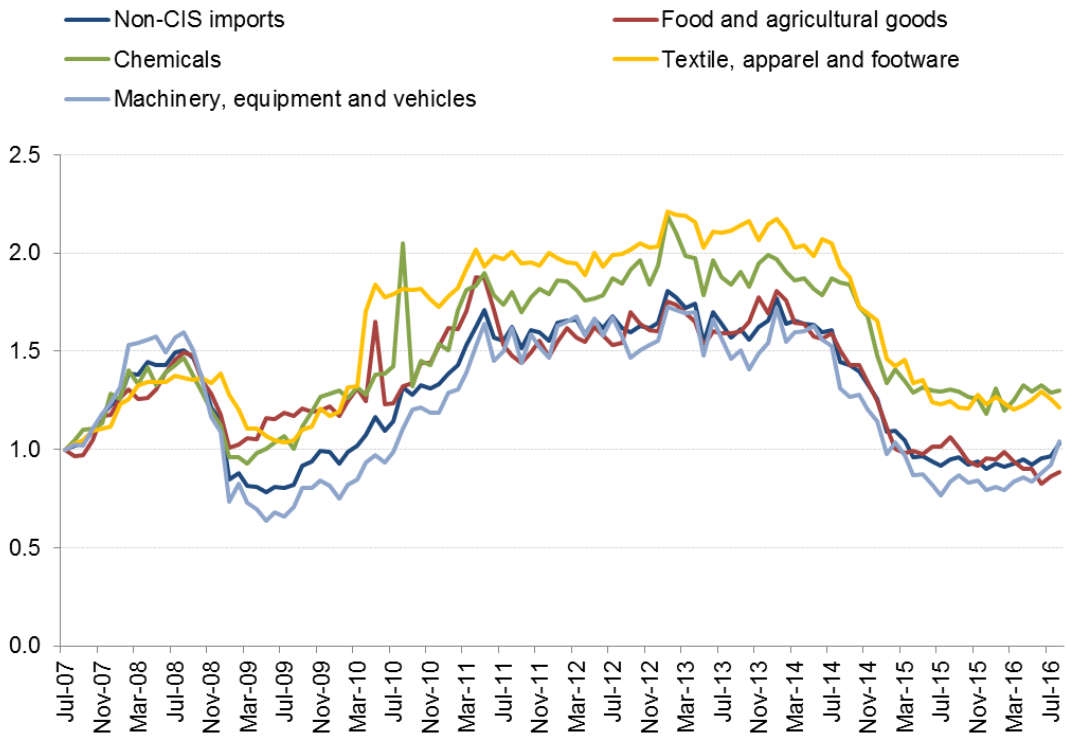
Even seasonally adjusted, imports in August posted a considerable acceleration of growth. Our estimates show that seasonally adjusted growth rates for imports from non-CIS countries increased last month to 6.6% MoM against 1% MoM in July. And, the recovery in imports has been ongoing for the third month in a row.

Higher machinery and equipment imports became a key factor driving indicators to positive territory – an investment category which on average accounts for about 50% of all imports. Meanwhile, the remainder of imports (first of all, consumer products) show protracted negative dynamics, which suggests that the rebound in consumer activity is unsteady.

In August, the growth of imports of machinery and equipment, seasonally adjusted, totalled an impressive 12.7%, whereas in the previous months it remained close to 5%. The bulk of the growth was brought about by increased purchase of mechanical

equipment and vehicles, which account for about 30% of all imports and approx. 60% of investment imports.

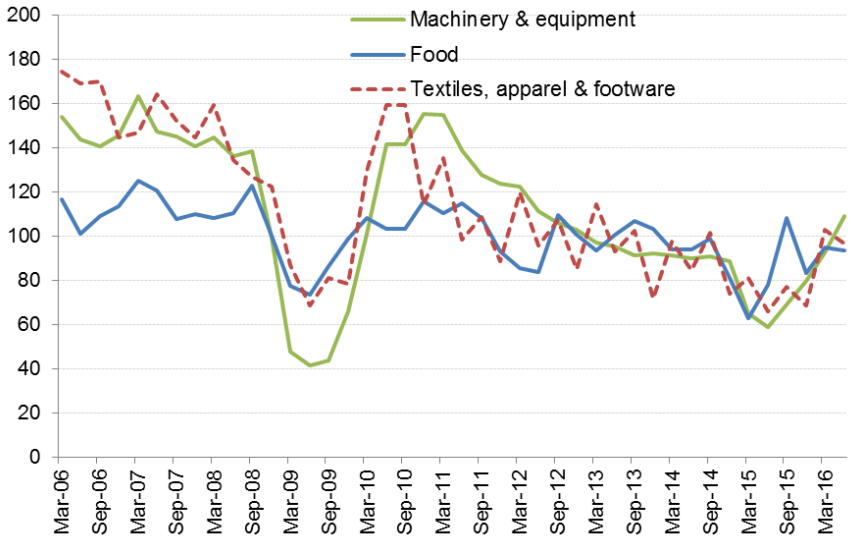
Figure 11. Core non-CIS import components, accrued and seasonally adjusted, pp



Sources: Federal Customs Service, R&F Department estimate.

It should be pointed out that investment demand for these products is the first to recover, which is supported by historical data. This comes as no surprise for investment in machinery and equipment, this type of investment being both the most productive and flexible. Equipment and production assets may be upgraded quite quickly, while the other types of investment take longer to recover.

Figure 12. Physical components index – key import components, % YoY



Sources: Federal Customs Service, R&F Department estimate.

In such a way, investment in machinery and equipment is a good leading investment activity indicator. Their positive dynamics, now confirmed by new statistics, suggest that investment demand may be on the rise in the months ahead.

At the same time, there is no escaping the fact that the core investment component – capital construction – shows stubbornly negative dynamics. The construction industry, which most likely finds it more difficult to adapt to a recovery in domestic demand, is set to remain weak in the near future, constraining the overall investment indicator.

1.2.4. Muted recovery in consumer demand

- The signs of recovering demand are emerging more clearly in the segment of non-food products and services; for individual product categories, this is explained by import substitution.
- The relatively modest data on retail sales are connected with a number of factors including the advancement of farm households.
- Moving forward, a recovery in consumer demand may well be hampered by the emerging decline in real wages.

Rosstat data showed mixed data on consumer activity components in August. In this way, annualised decline in retail sales was somewhat less profound (a drop from 5.2% to 5.1% YoY). However, amid the strengthening low base effect, the deceleration of decline proved rather modest and failed to amount to -4.9% YoY, which were expected in the market. Additionally, the downward revision of retail sales data for the second quarter

and July of the current year[11] suggests a reading still lower than previously expected. On the contrary, the volume of commercial services surged by a solid 1.0% YoY after a 1.0% YoY drop in July, which confirmed a steady PMI growth in the service sector over the last few months.

The analysis of indicators with seasonality adjustments identifies some signs of a recovering consumer demand (Figure 15). According to R&F Department estimates, retail sales of non-food products have been rising for the second month in a row (+0.3% MoM), as well as commercial services (+0.1% MoM). At the same time, August saw a resumed decline in retail sales of food (-0.6% MoM); this may not necessarily suggest weakness in domestic demand and may come as a result of stronger consumption of household farm products. This is indirectly evidenced by the growth, recorded in 2015, in the number of households making consumptive use products. It may well be the case that this trend was continuing into 2016. The difference between food and non-food retail sales may have been caused by a resumed growth in retail lending (+0.8% MoM, adjusted for forex revaluation in August). Having said this, it should be stressed here that some of the seasonally adjusted estimates given are marked by rather high uncertainty.

In connection with this uncertainty, we have additionally analysed monthly data on retail sales in real terms (across 41 product categories); the analysis has found several trends.

First, in the final months of the summer, retail sales of potatoes and vegetables were declining at faster rates than seen in the same period of the previous years. In August, there was a 20% MoM drop in sales of potatoes and a more than 15% MoM drop in vegetables.

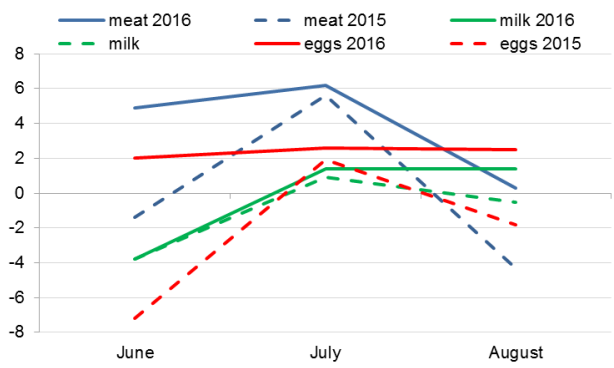
Second, around the same time, there was a faster – compared to the same months in 2015 – growth in sales of meat and dairy produce, eggs and fish.

Third, in the period between June and August, the atypically high – against 2013-2015 – growth rates are seen in retail sales of construction materials and petrol. Together, these trends suggest that farm households do make some impact on the dynamics and structure of retail. The money saved through vegetable grown for consumptive use may be partially spent on other food products (which were consumed in less numbers in 2015). Additionally, the expansion in summer house-related activities is borne out by higher sales of petrol and construction materials.

The dynamics of retail sales in real terms suggest some import substitution accomplishments in the leather industry. In July-August 2016 growth rates of sales of leather footwear surpassed the corresponding indicators of previous years. Also, quite strong growth in the summer months was posted by some household appliances. But in terms of absolute readings, retail sales remain below the pre-crisis mark. It is not ruled out that the recent rebound in sales is connected with resumed expansion in consumer lending.

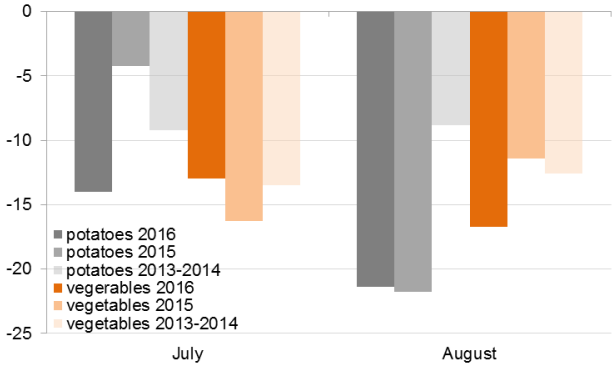
[11] The indicator's growth was 0.2 pp lower.

Figure 13. Monthly retail sales growth rates in real terms, % (seasonally unadjusted)



Sources: Rosstat, R&F Department calculations.

Figure 14. Monthly retail sales growth rates in real terms,% (seasonally unadjusted)

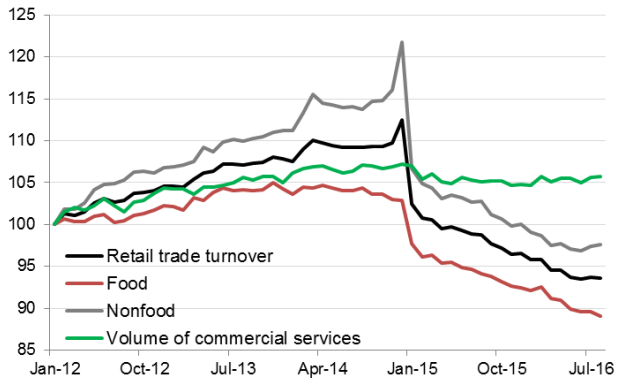


Sources: Rosstat, R&F Department calculations.

The uncertainty as to future consumer spending is still high. The recent months saw real disposable incomes and real wages dwindle. The latest set of data, once downgraded, has almost won back all the gains recorded since the first months of the year (Figure 16). The comeback of negative wage growth in real terms comes as a result of smaller nominal wage indexation in the beginning of the half-year (+5.8% YoY). In all likelihood, the figures we observe for July and August appear to be the amount of wage indexation employers are prepared to implement in the current context. The higher rates of nominal wage growth in the first half seem to have been connected with a temporary growth in bonuses. Employers were able to set off the drop in salaries in real terms in 2015 as they had the appropriate resources to do so. Corporate profits in 2015 rose 51.3% YoY. This movement to a certain degree explains the difference between demand and wages, seen in 2016 H1. The rise in the variable component of salaries could have been perceived by households as a temporary factor; this rise was therefore left unspent and helped support the high savings ratio.

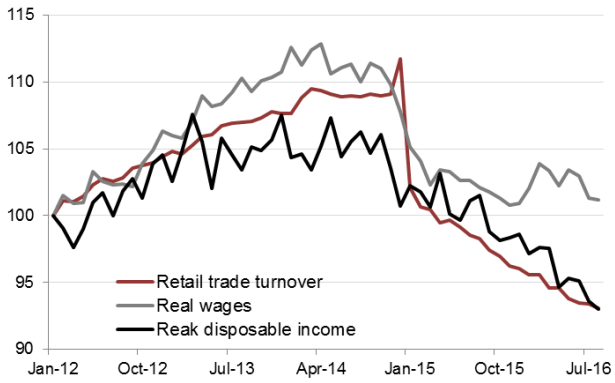
Given the expected slowdown in inflation, it is quite likely that by late 2016 real wages may resume growth at the current rates of indexation. However, consumer demand growth may remain feeble enough.

Figure 15. Core consumer demand components, January 2012 = 100, seasonally adjusted



Sources: Rosstat, R&F Department calculations.

Figure 16. Retail sales, wages and disposable incomes, January 2012 = 100, seasonally adjusted



Sources: Rosstat, R&F Department calculations.

Having said this, this analysis of sales broken down by component should be treated with caution. According to our estimates, deflators in several product categories came in lower, distorting the real dynamics of retail sales.

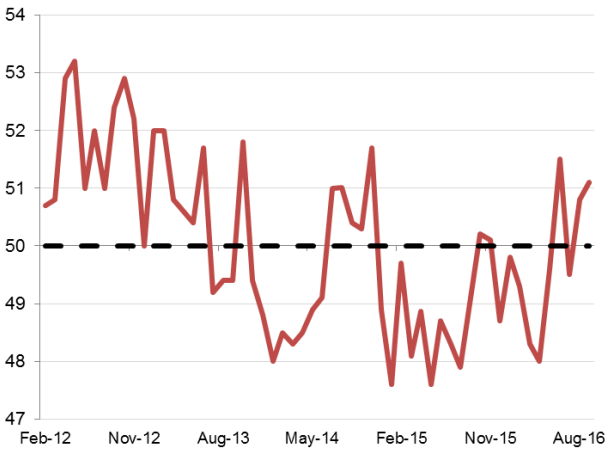
1.2.5. Manufacturing PMI: growth in business activity holds

- In September, PMI in the manufacturing sector showed expansion in business activity for the third time since the start of the year.
- Outputs accelerated to a peak since November 2014, with a rise in new orders and substantial expansion in procurement.
- This development is supported by domestic demand and is at the same time constrained by new export orders and employment.

In September, manufacturing PMI rose to 51.1 from 50.8 points seen in August, beating the breakpoint of 50 points separating growth from recession, for the third time since the start of the year (Figure 17). Improved business activity was helped by considerable acceleration in output compared to August: manufacturing output PMI grew from 52.0 to 53.4 points, reaching its highest level since November 2014 (Figure 18).

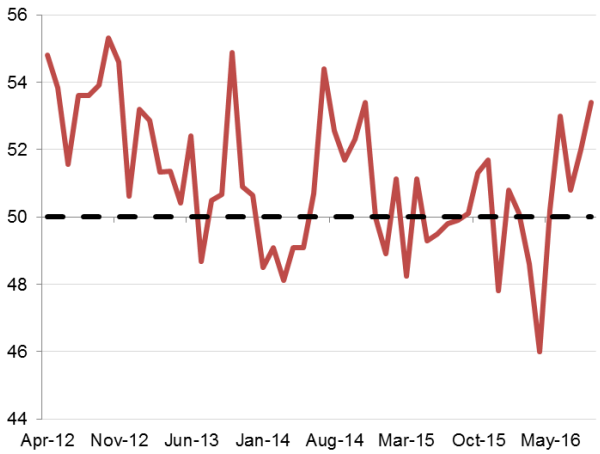
Stronger outputs and business activity were determined by a rebound in domestic demand as new domestic orders in September continued to rise and hit a mark second only to the June peak recorded since the beginning of the year. At the same time, the rates of decline in new export orders accelerated to the highest mark for the period since July 2014 (Figure 19).

Figure 17. Manufacturing PMI, points



Source: Bloomberg Finance L.P.

Figure 18. Manufacturing PMI – output, points



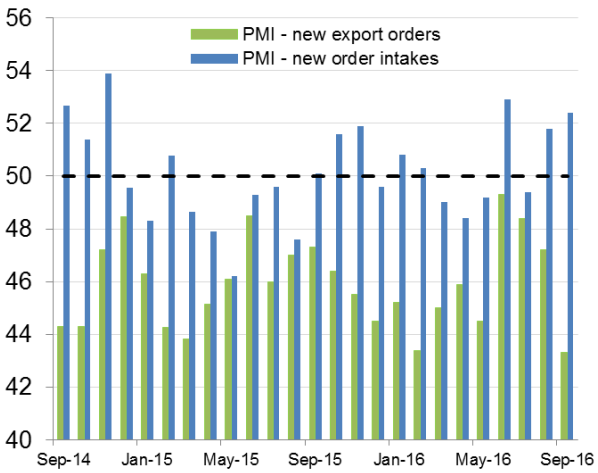
Source: Bloomberg Finance L.P.

Despite the multidirectional data on domestic and external orders, September saw a substantial rise in procurement (to 53.2%) – a maximum value since June 2013. According to a survey, increased procurement was connected with rising outputs and new orders.

Growth in the output and procurement of businesses was accompanied with accelerated reduction of employment in progress since July (Figure 20). Nevertheless, as the rates of employment reduction were approaching in May and June values close to zero and given the moderate rates of employment reduction in recent months, we may speak of a start in the recovery process, at least regarding manufacturing subsectors. On the background of rising new orders and the high capacity utilisation in the sector, there are solid grounds to expect a gradual stabilisation in the sectoral employment in subsequent months. Against growth in both new orders and output and taking into account high utilisation of capacity in the sector, there are reasons to expect a gradual stabilisation in the sectoral employment in the months to come.

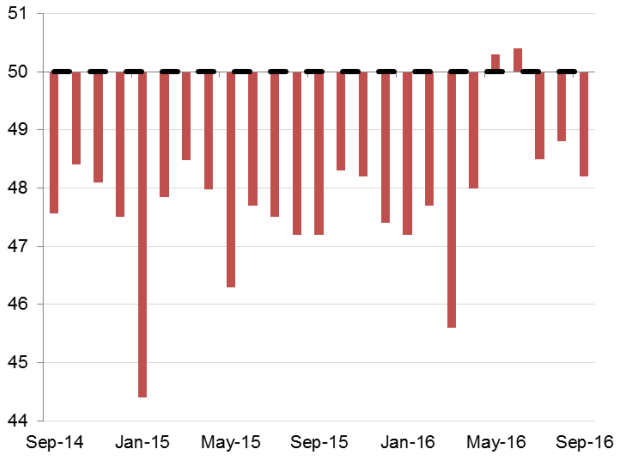
The trends in PMI indexes in manufacturing in September suggest a conclusion that the rebound in business activity in manufacturing is ongoing. This is reinforced by the recovering procurement on the background of rising domestic orders and output.

Figure 19. Manufacturing PMI – new orders, points



Source: Bloomberg Finance L.P.

Figure 20. Manufacturing PMI – output, points



Source: Bloomberg Finance L.P.

Nevertheless, any overly optimistic conclusions based on manufacturing PMI polls would be premature as they significantly depend on which companies are selected. In this way, Rosstat's business confidence index for manufacturing in September remained level with last month, indicating the invariable level of output and a minor improvement in the demand estimate. The recovering domestic demand is also confirmed by the reduction in the share of companies citing insufficient domestic demand as a business constraint. At the same time, according to Rosstat, the limiting impact from insufficient demand in the foreign market in September remained unchanged.

The mixed data in the PMI polls may be attributable to the lack of a universal recovery trend across manufacturing activities, and that is confirmed by the recently released batch of industrial production statistics. Consequently, considering the uneven production recovery across subsectors and the preservation of volatility in the trends of the PMI indexes, in the months ahead the consolidated business activity index may continue to fluctuate in positive territory at around the breakpoint, which separates growth from recession.

1.3. Global economy, financial and commodity markets

1.3.1. Most leading economies are on the verge of a renewed softening in monetary conditions

- Both the Federal Reserve and the ECB kept key settings of their monetary policies unchanged following the outcome of the September meetings. The Fed is expected to raise rates in December and the ECB is set to expand its QE programme.

- The Bank of Japan currently addresses the management of its 10-year bond yield, having promised to deliver a sustainable 2%+ rise in inflation.
- In China, the strong macrostatistics for August reduce the chances of further accommodative policies to be adopted in the reminder of the year.

The US Fed, although holding the federal funds rate as decided at its September meeting, looks set to resume a monetary policy tightening cycle. This is suggested by the mixed yet overall positive macroeconomic statistics for August-September. Conversely, the other leading economies' central banks are contemplating a softer monetary policy stance to be enabled through a set of unconventional measures. The monthly statistics for China proved surprisingly positive – which is why Chinese authorities are unlikely to roll out any significant extension to their accommodative package through the end of the year.

USA: estimates for a potential rise and level of the long-term rates are downgraded

At its September meeting, the Fed's Open Market Committee (FOMC) kept its key rate at 0.25–0.5 pp, having predetermined the outcome of its future December meeting. The highly probable rate rise, to be approved at the last meeting in the year, is suggested by both market expectations and the unusual split of the voting members at the last meeting: 3 of 10 voting directors were prepared for immediate rate rise. Also, the press release noted that the environment for the rate hike had become more favourable while the risks with potential impact on further economic developments had become more balanced. The change in the tone of the press release is also indicative of a rate upgrade coming soon.

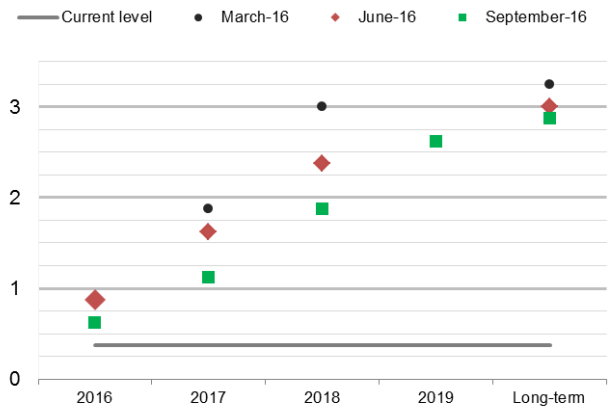
Following the September meeting, economic forecasts were updated. Once again, the future rate evolution path was revised downwards (Figure 21). According to the median estimate, the rate hike is going to be twofold in the course of 2017 (so it will take the rate to 1–1.25%), with a threefold rise in 2018-2019. The Fed's estimate for the long-term equilibrium rate is downgraded to 2.75–3% as potential growth estimates continued to be revised lower (to 18 % YoY) (Figure 22).

The intent to increase the rate in December may only be reversed in case of very poor macroeconomic statistics. For the time being, in line with Fed estimates, the economy has been adding jobs sustainably and inflation, remaining low in many ways thanks to declining oil prices, is set to reach the target level. The release of macroeconomic statistics of late September is overall positive. Annualised Q2 GDP growth totalled 1.4% QoQ (against the slightly lower consensus forecasts of 1.3% QoQ). The data on August orders for durable goods proved markedly higher than market expectations (0.0% against the consensus forecast of -1.4% MoM). Speaking on the

Conference Board consumer sentiment index, it even reached a local peak value for the period since August 2007.

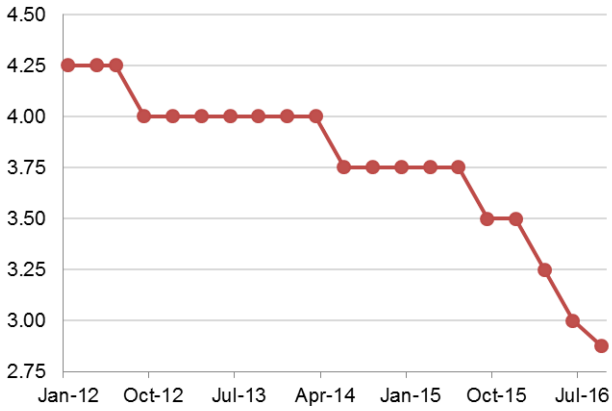
The negative news in the USA include soft macroeconomic data on retail sales in August (-0.1% MoM vers. the forecast of +0.4% MoM) and those on industrial production (-0.4% MoM against the consensus forecast of -0.2% of MoM). Amid the more favourable trends in the other short-term indicators, the Fed is likely to view these data as a temporary deterioration unlikely to derail the rate trajectory. In general, as Fed estimates suggest, unemployment is already at its long-term level and inflation is set to reach 2% in 2018.

Figure 21. Change in the Fed's own expectations for the key rate, %



Sources: Bloomberg Finance L.P., US Fed.

Figure 22. Fed's estimates for the long-term interest rate, %



Sources: Bloomberg Finance L.P., US Fed.

Eurozone: a stream of bad news from Germany and the ECB's inaction

In the follow-up to the 7 September meeting, the ECB Governing Council left unchanged its core operational settings. Any major decisions are likely to be made at the end of the year. Alongside with the bond purchase extension for at least six months through September 2017, the agenda may include new steps to boost QE and extend the list of securities purchased.

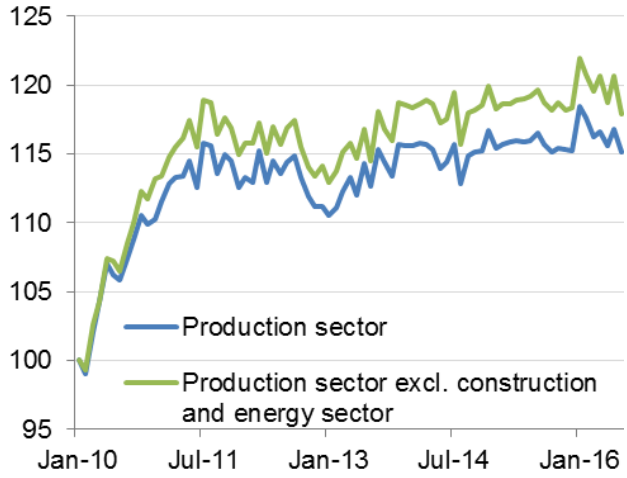
Mario Draghi, as many time before, urged the eurozone governments to stimulate growth with structural reforms and fiscal policies, in particular, through increased infrastructure spending. The ECB President stressed the special role in this process of Germany with its palpable budget surplus (+1.2% of GDP in 2016 H1).

Also, the European Central Bank updated its quarterly forecast, in which it once again cited the probability of a minor decline in economic growth rates and rates of inflation (Figure 24). Inflation in 2017 is set to total 1.2% YoY (instead of 1.3% previously expected) and to remain below the target throughout 2018. Next year's eurozone GDP is set to grow 1.6% YoY, not 1.7% YoY as previously expected. The downgrade is

attributable to weaker external demand as a result of Brexit – although this downgrade is of a minor scale.

Germany posted a big influx of bad news. In addition to the bad manufacturing data[12] (Figure 44), i.e. ZEW and PMI both suggesting the country is poised to lose its status as the eurozone's growth engine, the attention of the markets was grabbed by Deutsche Bank. This time, it was because of the US Department of Justice claim of $14 billion as settlement in the mortgage securities investigation. If the penalty is paid, Deutsche Bank is almost certain to face capital adequacy problems. The events brought down the bank's shares to their lowest in thirty years as the markets were contemplating another Lehman Brothers scenario. With Deutsche Bank's panicking customers and considering that the current national legislation prevents the bank to address the capital inadequacy problem on its own, the authorities are increasingly likely to step in.

Figure 23. Germany's manufacturing data (January 2010 = 100)



Source: CEIC.

Figure 24. September and June ECB forecasts compared

	2016		2017		2018	
	Sept	June	Sept	June	Sept	June
GDP growth, % YoY	1.7	1.6	1.6	1.7	1.6	1.7
Inflation %	0.2	0.2	1.2	1.3	1.6	1.6
Unemployment, %	10.1	10.2	9.9	9.9	9.6	9.5

Source: ECB.

Japan: on the way to targeting of long-term rates

In its September meeting, the Bank of Japan transformed its monetary policy concept. The regulator refers to its policy now as 'quantitative and qualitative monetary easing with yield curve control' and seeks to control its short-term and long-term interest rates until inflation has been sustained over the two per cent mark.

The short part of the yield curve is supposed to be controlled through the rate for current accounts financial institutions maintain at the Bank of Japan, which remains unchanged following the September meeting (-0.1%). There are plans to manage long-term government bonds through targeted zero rate of ten-year government bond yields. For the time being, the volume of government bonds purchased, in line with the plans, will

[12] -1,5% MoM, -1.2% YoY in July after +1.1% MoM and +0.9% YoY in June.

be approximately the same at 80 trillion yens a year – which runs counter to the yield targeting concept. The regulator may withdraw from the practice of implementing this link, to be discussed at one of its forthcoming meetings, once the market develops indifference towards the volumes of bonds purchased.

Once the Bank of Japan has implemented this change in its key monetary policy tool, it now seeks to address the need to reach a higher rate of inflation. While its former policies centred on the two-percent inflation target, this two-percent inflation target covers the whole business cycle: deflation is to be set off by the future inflation in excess of two percent. The key question is still whether economic agents will believe the Bank of Japan this time – following its three years' failure to lift inflation to 2%. In August, consumer goods failed to post any growth against July and even decreased 0.5% in annual terms.

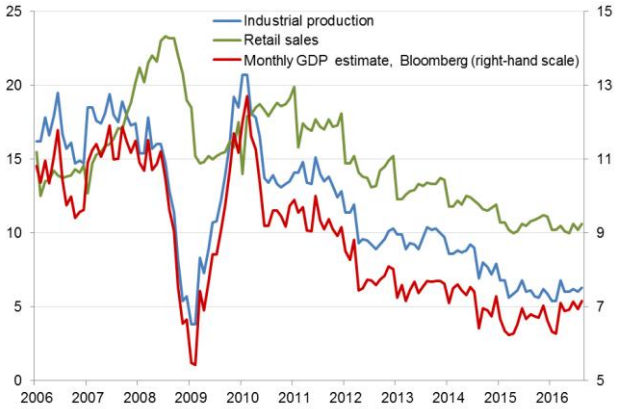
The market's perception of the Bank of Japan changed monetary policy concept was as a signal that the regulator is in deadlock as it had almost exhausted all its monetary policy tools. The only positive implication from the Bank of Japan's recent policy decisions could be weakening pressure on bank margins and institutional investors' yield badly affected by negative rates. Once the outcome of the meeting was unveiled, shares in financial institutions rallied.

China: further accommodative steps are less likely in 2016

According to Bloomberg estimates, China's monthly economic growth rate in August was at its maximum since late 2014 (Figure 46). For the first time since November 2014, both indexes, the official one and Caixin PMI, appeared above or equal to 50.0 points. Retail sales rose 10.6% YoY (in July – 10.2% YoY) against the ongoing boom of web-shopping (the period between January and August posted growth of 27% YoY). Industrial production expanded 6.3% YoY (in July – 6.0%) (Figure 46). Both government and private fixed capital investment bounced off from the preceding month's low (Figure 26).

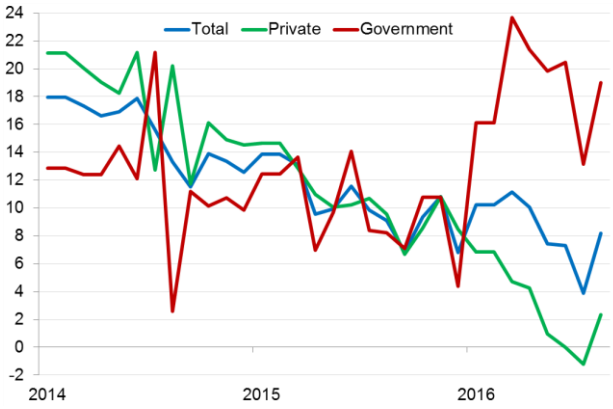
The strong August statistical data are in many ways attributable to the calendar effect (23 working days against 21 in 2015), especially as compared to the July data (when the reverse trend was seen). Still, once the mean readings for the period between July and August are considered, most indicators show deterioration. At the same time, experts agree that China's economy fares better than previously believed and no further accommodative measures in the reminder of the year will be required.

Figure 25. GDP growth, industrial production and retail sales, % YoY



Source: Bloomberg Finance L.P.

Figure 26. Fixed capital investment growth rates by property type, % YoY



Sources: CEIC, Bloomberg Finance L.P., R&F Department calculations.

1.3.2. Shrinking risk appetite in global markets

- Investors' positive mood on the backdrop of soft monetary policies in the advanced economies…
- … has given way to shrinking risk appetite as concerns are growing over stability in the financial sector, triggered by the slump in Deutsche Bank shares.
- While the overall liquidity cushion in the banking sector is appropriate, it is distributed unevenly, resulting in higher interbank rates.

Global markets

Germany posted a big influx of bad news last month. In addition to the poor manufacturing data[13] (Figure 44), i.e. ZEW and PMI both suggesting the country is poised to lose its status as the eurozone's growth engine, the attention of the markets was grabbed by Deutsche Bank. This time, it was because of the US Department of Justice multi-billion claim as settlement in the mortgage securities investigation. If the penalty is paid, Deutsche Bank's is almost certain to face capital adequacy problems. The events brought down the bank's share to their lowest mark in thirty years as the markets were contemplating another Lehman Brothers scenario. With Deutsche Bank's panicking customers and considering that the current national legislation prevents the bank from solving capital inadequacy problem on its own, it is increasingly likely that authorities will step in.

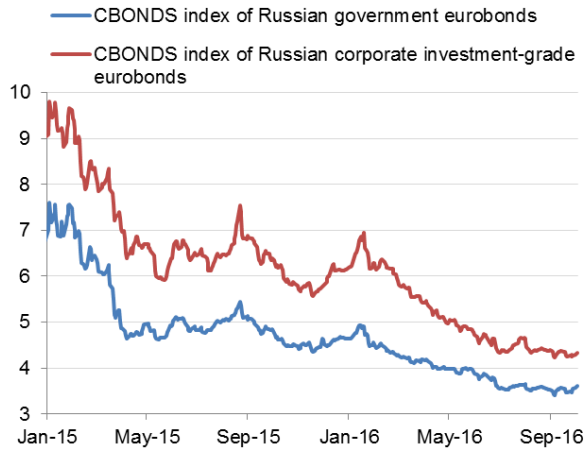
[13] -1,5% MoM, -1.2% YoY in July after +1.1% MoM and +0.9% YoY in June.

Russian markets

September saw some changes in the money market. While throughout the preceding period the RUONIA to the key rate spread had been negative[14], by late September this difference came back to positive territory, for the first time since spring. This saw a rise in RUONIA, despite net inflows of liquidity into the banking sector seen in September[15].

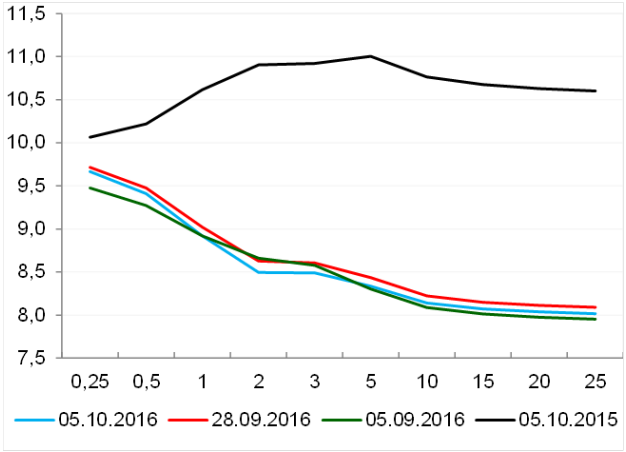
These inflows were to a large degree connected with rising debt of banks to the public sector as they were increasingly in need of additional liquidity. Given the lack of appropriate inflows from treasury accounts as generated by the spending of budget funds, banks had to balance their insufficient liquidity with the help of Bank of Russia funds they were attracting.

Figure 27. Russian Eurobond yield, %



Source: Cbonds.

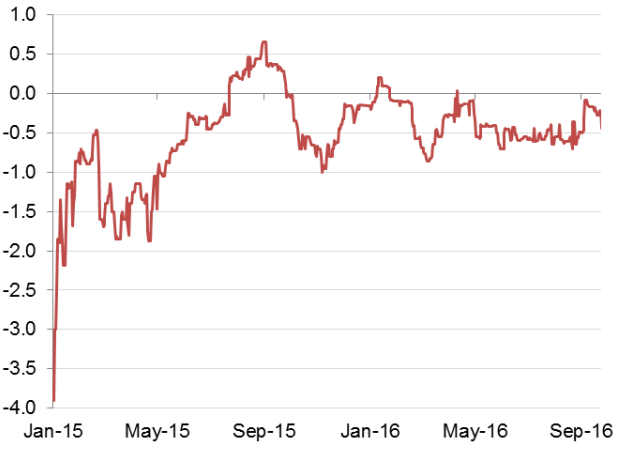
Figure 28. GKO-OFZ yield curves, %



Source: MOEX.

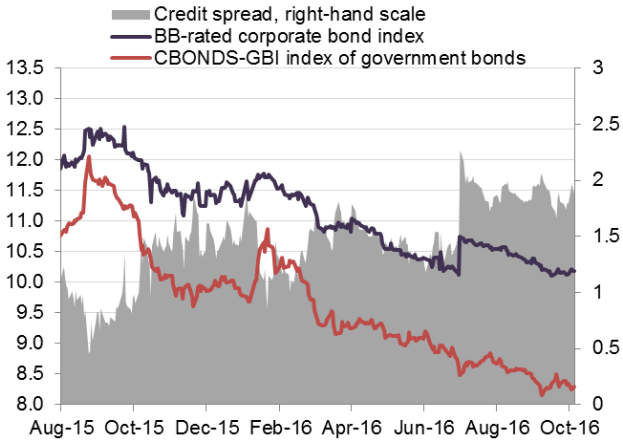
[14] The trend in progress since spring.
[15] 508 billion rubles.

Figure 29. FRA 3X6 to Mosprime (3 months) spread, % p.a.



Sources: Bloomberg Finance L.P., R&F Department calculations.

Figure 30. Ruble bond yield overview, %



Source: Cbonds.

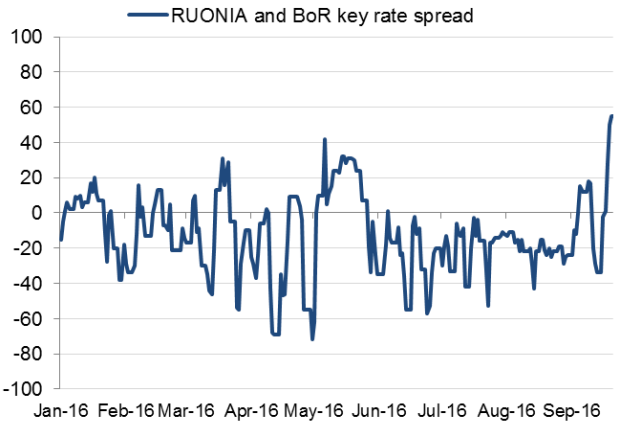
The most likely reason behind the sharp upswing in demand for ruble funds was the need for higher liquidity to ensure compliance with required reserve ratios. The latter were raised in August; however, the bulk of effect from this measure was seen in September considering that the balances on Bank of Russia correspondent accounts were too low at the beginning of the new averaging period (starting from 10 September) [16]. For example, by 16 September the balance of Bank of Russia correspondent accounts fell to a local minimum of 1.36 trillion rubles. It took just several days and Bank of Russia facilities to have it restored to 2.5 trillion rubles, through week repo auctions and short-term loans secured by non-marketable assets or guarantees. This move helped the RUONIA to the BoR key rate spread to return temporarily to negative territory.

In the last week of the month, the Bank of Russia resumed its efforts to absorb liquidity. Following the replacement of one-week repo with deposit auctions, banks had to pay off a large amount of debt under auction repos (-620 billion rubles), the substantial part thereof was replaced with Bank of Russia repo operations with a higher fixed rate[17]. Additionally, the deposit auction helped withdraw temporarily as much as 180 billion rubles from the system. Some banks accumulated debt under RF Treasury instruments amounting to 440 billion rubles. The concentration of these funds with just several banks did not help the situation in the money market. Hence, by the end of the month, short-term rates in the money market were in excess of the Bank of Russia key rate, for the first time since spring 2016[18].

[16] The liquidity overhang, which accumulated on Bank of Russia correspondent accounts and deposits, was spent gradually in the course the tax period.
[17] Its rate is higher than the minimal repo rate by 1 pp
[18] Up to +50 bp to the Bank of Russia key rate.

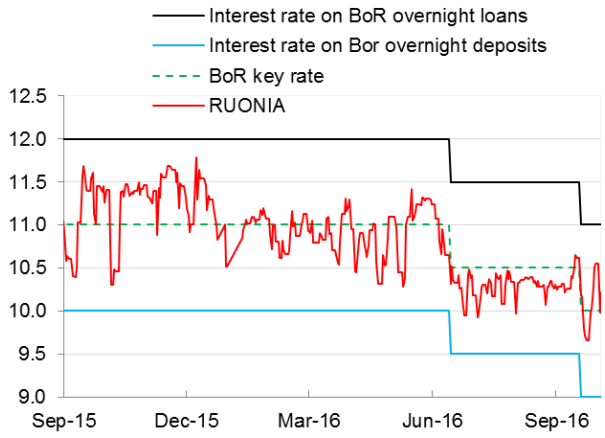
At the same time, notable is the fact that overall the banking system has by the present time accumulated the appropriate liquidity level, so the recent surge in the rates is linked with uneven circulation of monetary funds and highly concentrated money market, rather than with a shortage of funds. It is quite possible that the bulk of monetary inflows generated through the spending of the Reserve Fund are transformed into Bank of Russia deposits. Whatever the case, short-term rates in the interbank market still have only minor deviations from the key rate.

Figure 31. RUONIA to the BoR key rate spread, bp



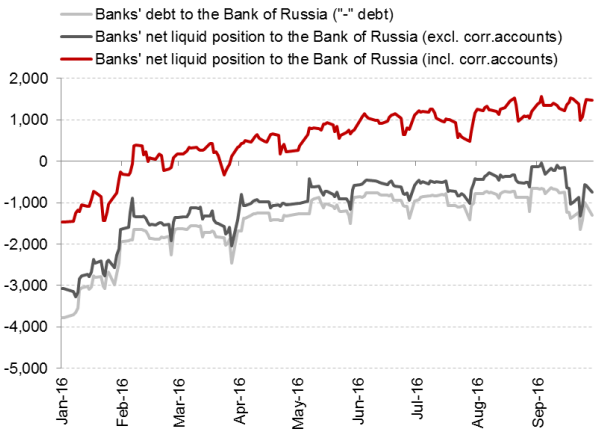
Sources: Bank of Russia, R&F Department calculations.

Figure 32. BoR interest rate corridor and short-term interbank rate, % p.a.



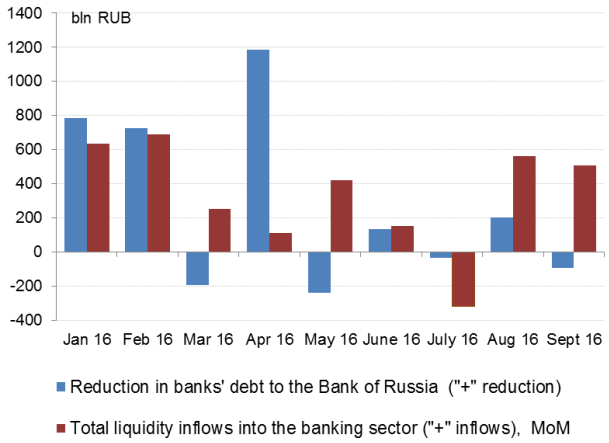
Sources: Bank of Russia, Bloomberg Finance L.P.

Figure 33. Banks' net liquidity position to the Bank of Russia, billion rubles



Sources: Bank of Russia, R&F Department calculations.

Figure 34. Comparative dynamic pattern of contraction in banks' debt to the Bank of Russia and net liquidity inflows



** R&F Department estimate based on data for 1–30 September.*

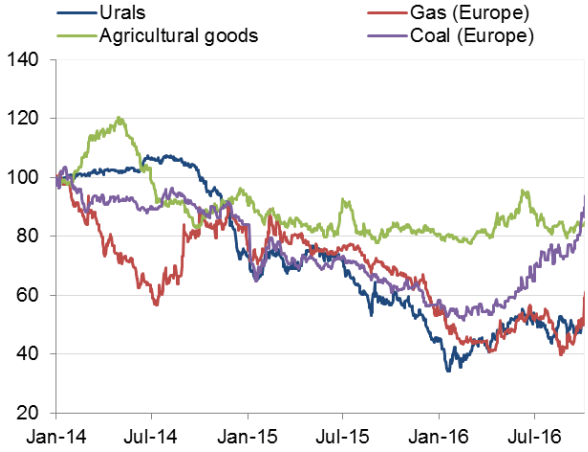
Sources: Bank of Russia, R&F Department calculations.

1.3.3. Commodity markets: have OPEC countries struck a deal?

- In September, oil prices remained under the pressure from fundamental factors as expansion in production on the back of, inter alia, steadier US production was responsible for the delay in expected equilibrium in the oil market (currently expected in 2017 H2).
- Yet, month-end crude prices rose thanks to the OPEC agreement to cut production.
- Implementation of this deal is likely to be a challenge, so the outcome could be only a short-lived uptick in oil prices.
- Crude is currently supported by China where production remains in decline and strategic reserve accumulation has intensified.

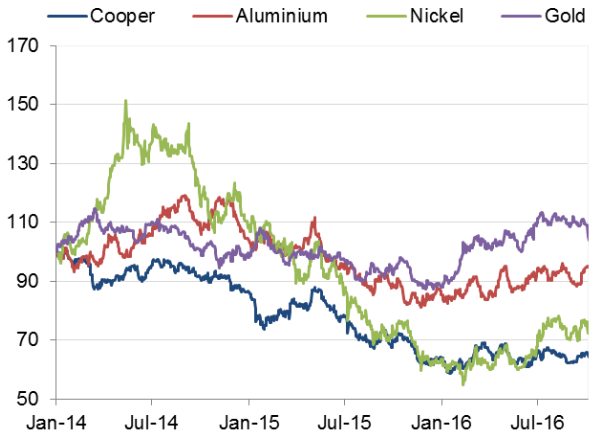
In September, commodity and metal prices rose, too (Figure 35 and Figure 36). The Bloomberg Commodity Index gained 3%.

Figure 35. Core commodity prices (January 2014 = 100)



Sources: Bloomberg Finance L.P., R&F Department calculations.

Figure 36. Base metal prices (January 2014 = 100)



Sources: Bloomberg Finance L.P., R&F Department calculations.

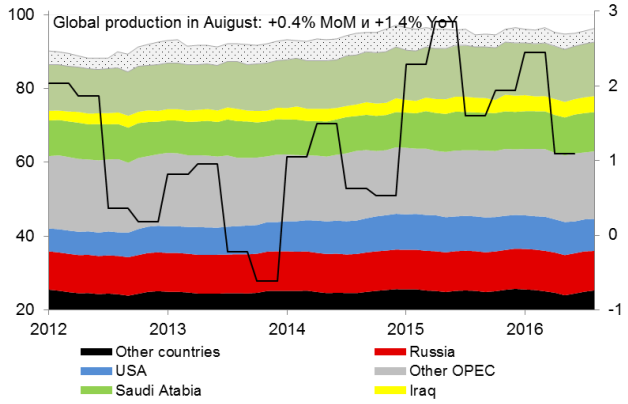
Oil prices in September remained under pressure from fundamental factors. According to Bloomberg, crude and fuel oil production in August grew 0.4% MoM and 1.4% YoY, with both OPEC and other producing countries showing positive data (Figure 37). The September data are set to show further improvement. In particular, according to Bloomberg, both OPEC and Russia beat their own oil production records.

The International Energy Agency, OPEC and the US Energy Information Administration (EIA) revised upwards their forecasts for supply with an outrunning rate against demand, and the delay in the expected market equilibrium (currently due in the middle of 2017 (Figure 38)).

JBC Energy estimates show that the oil market may take years to rebalance as supply is set to be expanded in the coming few quarters as the market is due to receive

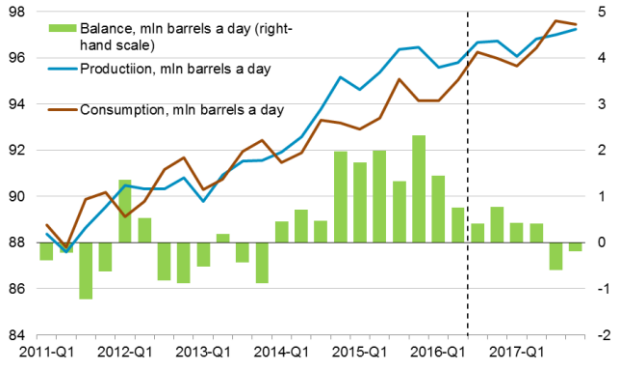
barrels of crude from new fields in traditional mining areas. These fields were launched during the periods of high prices and are expected not only to replace depleting brownfields, but also add some 2.7 million barrels a day to supply. If these calculations are correct, it will take at least three years for the slowly increasing demand to absorb the comparable volumes of crude.

Figure 37. Production and balance in the oil market, million barrels a day



Sources: Bloomberg Finance L.P., OPEC, R&F Department calculations.

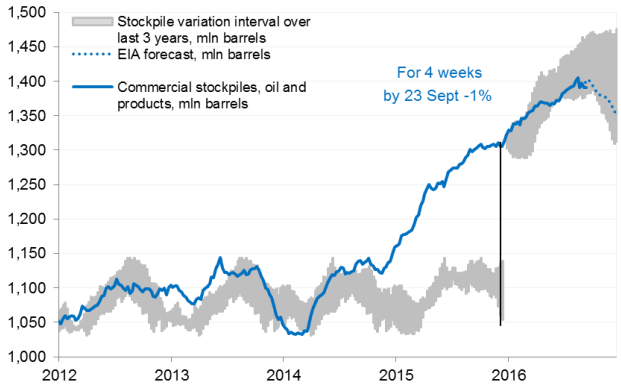
Figure 38. EIA estimates for production, consumption and balance in the global fuel oil market



Source: EIA.

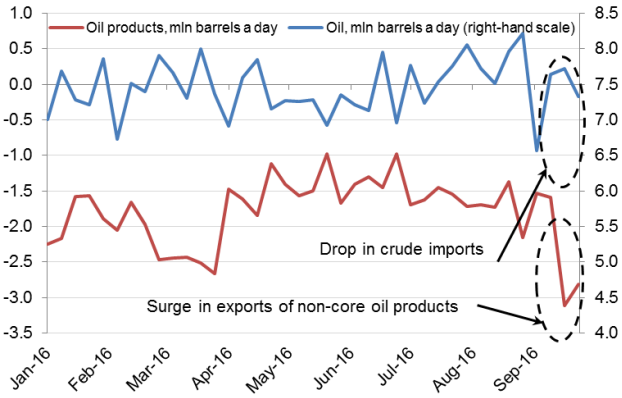
US oil market statistics are putting continued pressure on prices. Commercial crude and oil product stocks movements were slightly negative (Figure 39), triggered by the temporary decline in crude imports, mainly caused by the hurricane, as well as the uptick in the exports of non-core oil products[19] (Figure 40). Once these data are adjusted for these fluctuations, the oil market shows no improvement.

Figure 39. Total US commercial oil and oil product stocks



Sources: EIA, R&F Department calculations.

Figure 40. Net crude and oil product imports in the USA



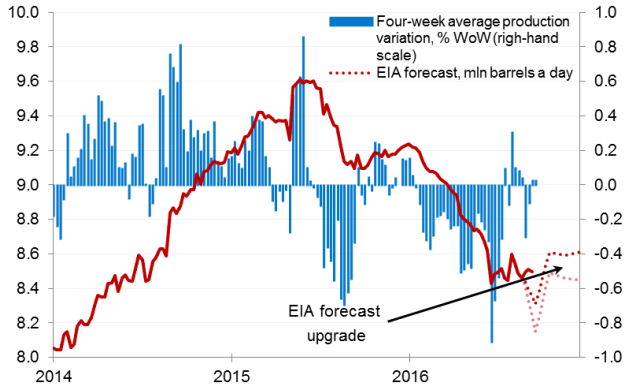
Source: EIA.

The EIA again improved its evaluation of how resilient US oil production is to low prices, and we believe that further upgrades may be in store, with production becoming

[19] In EIA statistics individual hydrocarbon types are undifferentiated.

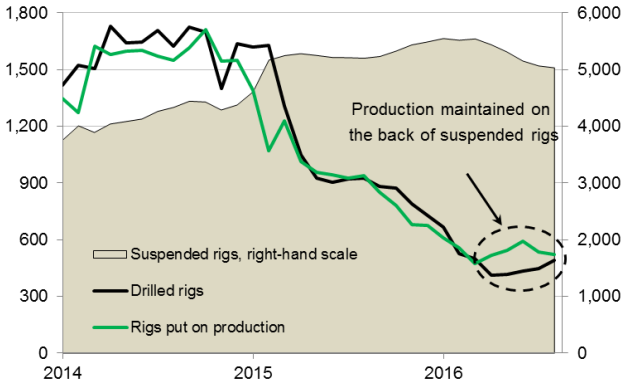
stabilised at around the level of 8.5 million barrels in day (Figure 41). The analysis shows that shale oil production is shrinking across all regions except Permian, and yet stronger decrease in production constrains a consecutive commissioning of wells suspended since April (Figure 42). However, in recent months slower declining shale production is increasingly connected with the fundamental factors including a rise in drilling activity (+4% for four weeks by 30 September – Figure 43) and continued improvement in the efficiency of production (+2% MoM in August – Figure 44).

Figure 41. US oil production



Source: EIA.

Figure 42. Operational shale rigs (on a monthly basis) and stacked rigs (for the month-end) in the USA*

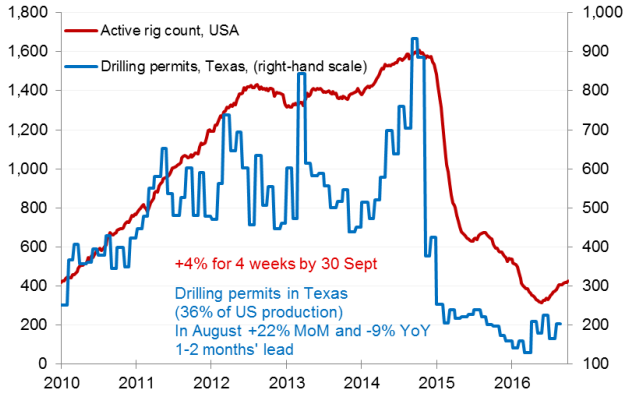


** September – October 2016 –EIA forecast.*

Sources: EIA, R&F Department calculations.

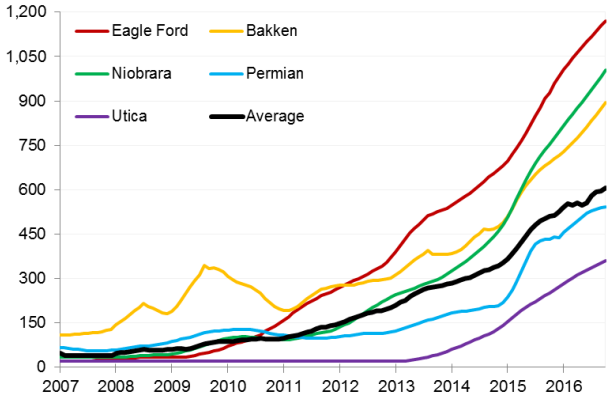
According to Dallas Fed 2016 Q3 energy review, economic activity of energy companies in the Eleventh District (including Texas and adjacent states) has been growing. This has been the case for both production companies and service providers. In particular, capital costs were up in the third quarter, setting off the negative data of the second quarter.

Figure 43. Active drilling rigs and drilling permits in Texas



Sources: EIA, Railroad Commission of Texas.

Figure 44. Average production efficiency of US shale deposits, barrels a day



Sources: EIA, R&F Department calculations.

However, month-end oil prices ultimately did post growth (Brent rose 4%) on the back of the OPEC decision to limit production to 32.5–33.0 million barrels a day, which Bloomberg estimates to be 0.5–1.0 million barrels lower than the current output. Based on major international organisations' data indicative of supply glut, the expected market equilibrium may not come before late 2016 – early 2017.

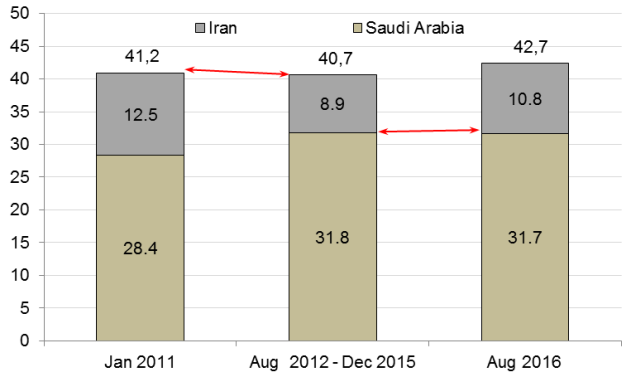
Most analysts are however pessimistic over the prospects for implementation of this decision. Apparently, such implementation is only possible provided it is joined by the overwhelming majority of OPEC countries. Logically, the decision should provide for each producing country to reduce its share in the total output by, based on OPEC's August output, 1.5–3.0%. It is evident also that one single country will keep from implementing the deal if its current revenues are compromised, keeping the capabilities to boost production in the months to come.

At the subsequent meeting in Algeria, the producers attempted to agree on national quotas. Yet, first, the countries provided exaggerated estimates for their outputs. Iraq and Iran, for example, claimed that OPEC underestimated their outputs by 0.3 and 0.2 million barrels a day, respectively. Second, the countries were pressing for the most favourable periods to be taken for output calculations. In this way, Iran was after a return to its pre-sanctions level, that is, according to Bloomberg data, approx. 12.6% for January 2011, or almost 2 pp higher than in August 2016. The bulk of this share was taken by Saudi Arabia, which keeps it after the sanctions were lifted from Iran (Figure 45). In the course of 2016, national shares were substantially redistributed, too, e.g. the shares of Venezuela and Iraq were substantially down.

These developments prompt suggestions that the agreement could only be implemented if a disproportionately substantial cut is made by Saudi Arabia and other relatively rich OPEC members against their interests. The chances of the agreement look yet slimmer considering that OPEC would probably demand that non-OPEC countries should join the potential production cut deal, too.

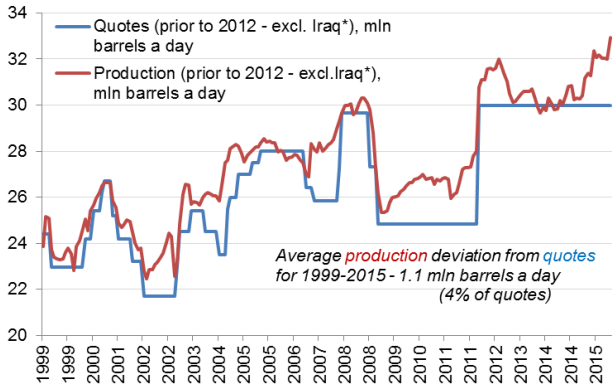
And, finally, even were OPEC countries to reach a potential quote distribution agreement, experience suggests suchlike agreements have been broken on many times before: between 1999 and 2015, the actual output was on average 4% higher than OPEC quotas (Figure 46). Currently, this is on the order of 1.35 million barrels a day.

Figure 45. Saudi Arabia's and Iran's shares in OPEC output, %



Sources: Bloomberg Finance L.P., R&F Department calculations.

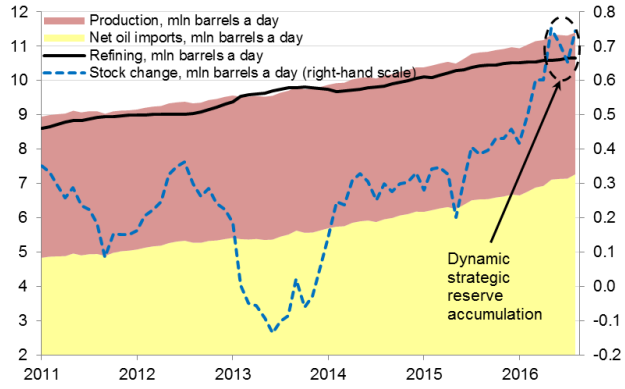
Figure 46. OPEC quotas and actual outputs compared



** Iraq was excluded from the quotas.*
Sources: Bloomberg Finance L.P., R&F Department calculations.

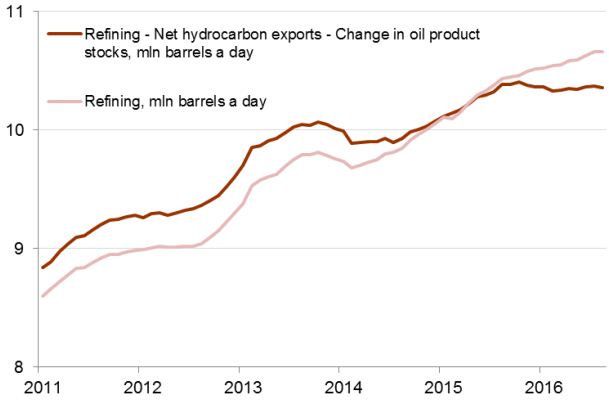
Ongoing support to crude prices is coming from China. From the supply side, material decline in production is ongoing, the latter amounted to 0.4 million barrel a day in January through August, or almost 10% of output (Figure 47). From the demand side, there was resumption in accumulation of strategic reserves, which we estimate at almost 0.9 million barrels a day for July-August (Figure 47). On this background, stagnation in the consumption of oil products is ongoing (Figure 48).

Figure 47. Production, net imports, refining and changes in oil stocks in China, 12 months' average



Sources: Bloomberg Finance L.P., R&F Department calculations.

Figure 48. Oil refining and consumption in China, 12 months' average



Sources: Bloomberg Finance L.P., Xinhua News Agency, R&F Department calculations.

2. Outlook: leading indicators

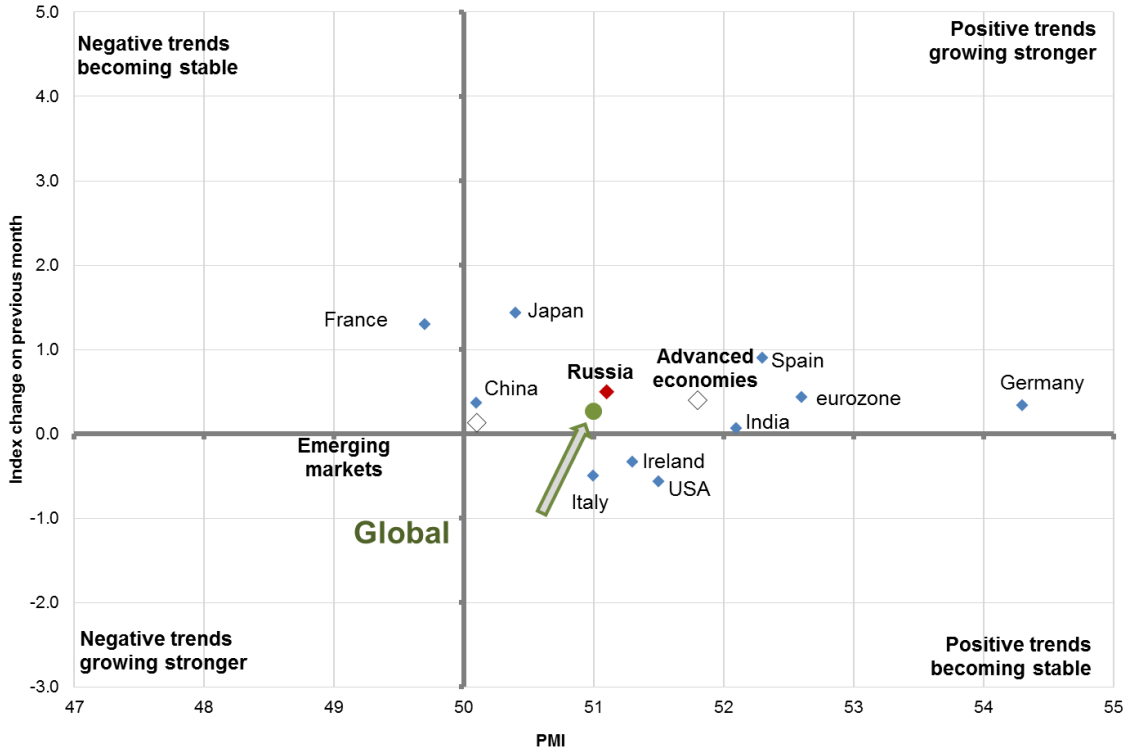
2.1. Global leading indicators

September PMI data (Figure 49) show that business activity growth is slowing down in the US while going up in the euro zone.

For the US, only tentative manufacturing PMI was published. In September, it fell from 52.0 to 51.4. The composite PMI of the eurozone dropped to its 20-month low. Germany is losing the position of a driving force with its composite PMI (52.7) being inferior to that of France (53.3). The eurozone total manufacturing PMI went up, while services showed a tangible decline in business activity growth. Leading components' performance does not provide for any considerable speed-up in the sector in the near future, either.

Thereby, global leading indicators do not imply any acceleration of the global economy in the months to come.

Figure 49. Manufacturing PMI in September and change against the June-August average



Sources: IHS Markit, Bloomberg Finance L.P.

2.2. What do Russian leading indicators suggest?

2.2.1. Index GDP estimate still implies growth

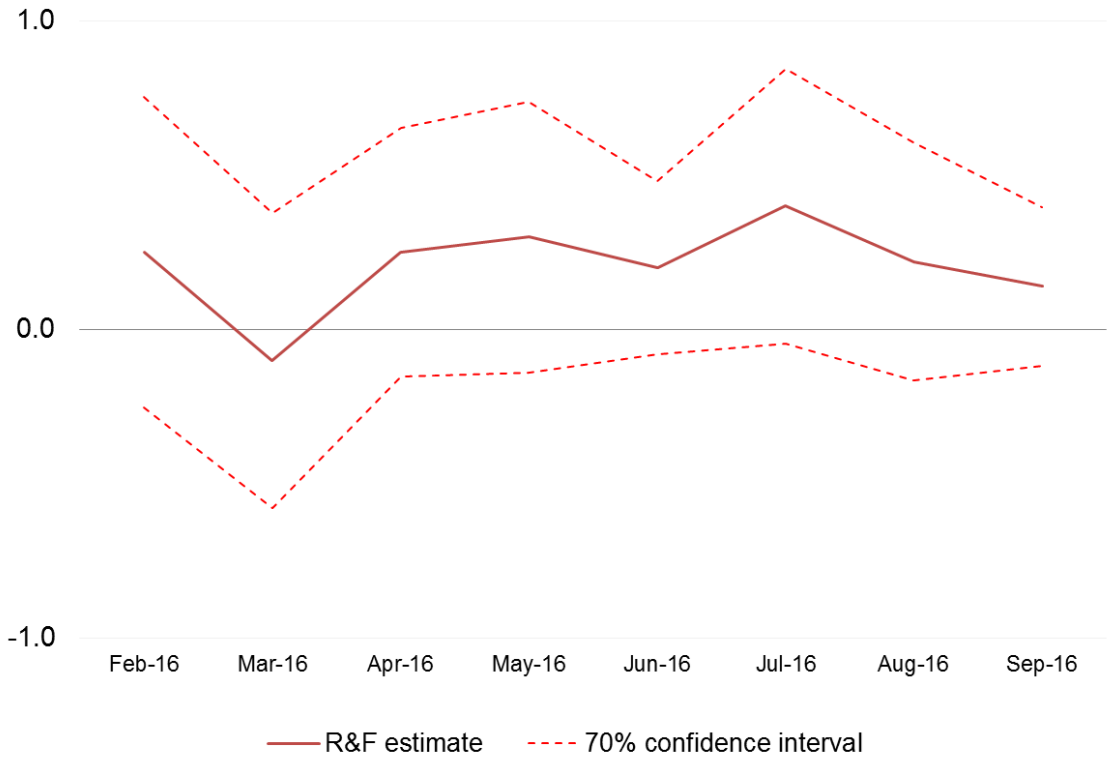
- Q3 index GDP estimate hardly changed in September against the August data with model estimates pointing to a positive GDP growth of 0.1-0.2% QoQ in the current quarter, seasonally adjusted.

	September 2016	August 2016
	% QoQ	% QoQ
Q3 2016	**0.1-0.2**	**0.2**
Q4 2016	**0.3**	**0.4**
Q1 2017	**0.3**	**-**

Estimated values take into account the provisional Rosstat estimate for Q2 GDP at the level of -0.6% YoY.

- The actual economic activity of the past several months complies with leading business activity indicators – model estimates were merely immaterially revised in the past six months (Figure 50).
- Our estimates also showed that R&F Department's index GDP estimate, based on Rosstat August data on short-term economic activity indicators, may vary depending on the seasonal adjustment of these indicators. Nevertheless, model estimate error does not exceed 0.1 pp.
- 2017 Q1 model estimate points to GDP growth of 0.3% QoQ, seasonally adjusted. However, this estimate is highly uncertain and may be repeatedly revised in future.
- We estimate 2016 growth to be close to the lower border of the Bank of Russia's official baseline scenario forecast (0.3-0.7% drop).

Figure 50. Estimate of GDP growth in 2016 Q3, % QoQ



Sources: Rosstat, R&F Department calculations.

2.2.2. The Bank of Russia's strident rhetoric dragged down analysts' inflation expectations

- Financial analysts revised their key rate expectations upwards.
- This pushed analysts' 2017 key rate forecasts upwards, but the path of the Bank of Russia's key rate cut is not expected to change next year.
- The inflation expectations gap in late 2017 persistently exceeds the 4% benchmark.

According to Bloomberg's consensus forecast, financial analysts revised both their key rate and inflation expectations in September.

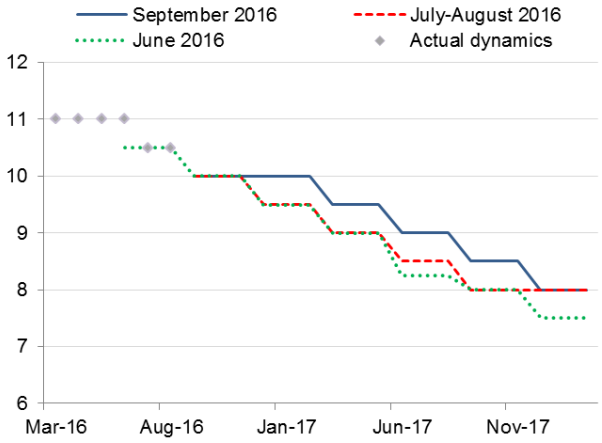
The Bank of Russia's press release in the follow-up to the Board meeting of 16 September, when the key rate was reduced by 50 bp to 10% p.a., emphasised that it intended to hold the key rate flat until the end of 2016 and was likely to cut it in 2017 Q1-Q2. The Bank of Russia believes that its decision to keep the key rate steady will allow it to lower inflation expectations.

Analysts automatically revised their median key rate forecast upwards (Figure 51) on the back of the Bank of Russia's relatively tough forward guidance. At the same time, they abstained from considerable adjustments to the path of the Bank of Russia's further

key rate cut, which will deliver on the 4% inflation target by late 2017 if there are no new external shocks. Thereby, experts largely tempered their expectations of monetary policy easing and took up the Bank of Russia's narrative regarding the need for relatively tight monetary conditions to hold. The median forecast provides for four 50 bp key rate cuts in 2017. The key rate is expected to stand at 9.5% as of end-2017 Q1.

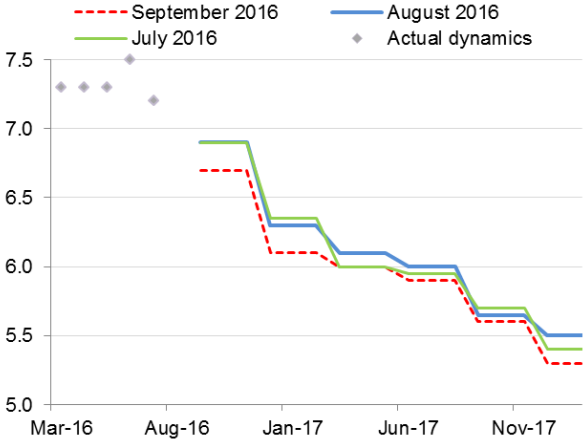
Tougher than expected rhetoric of the Bank of Russia's previous press release could also signal the central bank's intention to reduce inflation to the target level by the end of next year. Thus, the consumer inflation forecast was revised downwards as compared to surveys of July and August (Figure 52). Nevertheless, median inflation expectations in 2017 are persistently above 5.0%.

Figure 51. Analysts' expectations of the BoR key rate



Source: Bloomberg Finance L.P.

Figure 52. Analysts' expectations of inflation, % YoY



Source: Bloomberg Finance L.P.

3. In focus
Russian coal exports: risks in the light of global trends

- Should countries meet their obligations under environmental programmes, world demand for coal may drop.
- Having said that, transition to a new energy policy takes time and investment. Thereby, countries' will not deliver on their obligations to cut coal usage in time. Therefore, the pace and the scale of changes brought about by implementation of environmental programmes remain unclear.
- China's and India's policy bring most uncertainty to the market.
- China is reforming its coal industry to support domestic producers to the detriment of coal imports. In future, costs are expected to go down in the industry constraining competitiveness of coal imports in the Chinese market.
- Given India's capability to step up domestic coal mining, the path of Indian imports remains uncertain.
- In the light of global trends, plans to expand Russian coal exports eastwards and develop the necessary transport and port infrastructure risk to be implemented only in part.

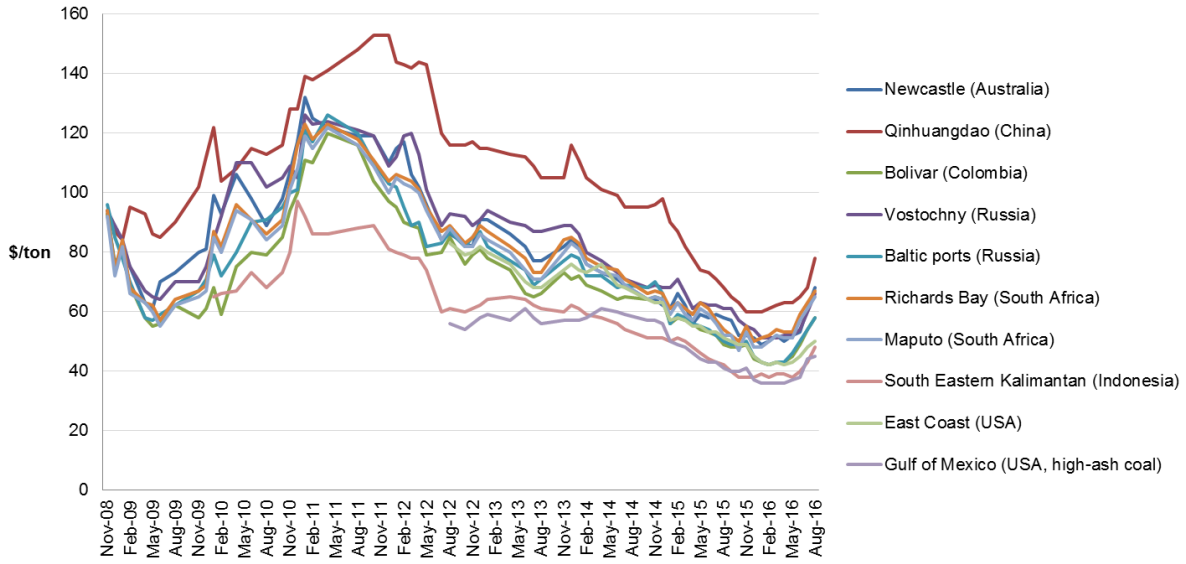
Amid stagnant domestic demand for coal, exports become the key driver of coal mining in Russia. Export share in the supply structure grows (46.4% in 2015) while domestic supply of coal remains relatively stable.

In 2002-2011, world coal consumption grew by 50%. Consumption stabilised in 2012-2014 but declined in 2015. The global coal market experienced a supply glut with prices for thermal coal falling to their lowest since 2012 by early 2016 (Figure 53). In the medium term, uncertainty in the global demand for coal may affect Russian exports exposing the long-term development of coal mining in Russia to risk.

First, there is uncertainty over the pace and the scale of changes brought about by obligations of the EU and the US to cut carbon emission and China to reconstruct coal power generation. On the one hand, these measures are to drag global demand for coal down. The International Energy Agency (IEA) estimates that world coal consumption will hold at the current level (8 billion tons) until 2020 and decline by 2.5-3.5% a year to 5 billion tons in 2035, if countries implement their environmental programmes[20].

[20] Carbon Constraints Cast A Shadow Over The Future Of The Coal Industry. *Standard & Poor's RatingsDirect*. 2015. Aug. 27.

Figure 53. Thermal coal price in the global spot market in the shipping port, FOB, $/ton



Source: Rosinformugol.

On the other hand, transition to a new energy policy takes time and investment, and countries are unlikely to deliver on their environmental obligations. According to S&P, changes in the energy pattern of China, the US and the EU may stabilise growth in demand for coal in the years to come, and coal consumption is unlikely to shrink considerably in the medium term as there are no alternative sources to cover total energy consumption for the period.

Second, China's and India's policies bring most uncertainty to the market. In the medium term, global coal prices will be sensitive to imports from these countries.

China is a leading coal producer and consumer (45% of global consumption). However, China's demand for coal is unlikely to grow at the previous pace (7.5% a year). In 2015, the PRC launched a programme to reconstruct coal power generation, which provides for limited coal production and consumption in the country and transition to cleaner energy sources – natural gas and renewables. Under this programme, coal consumption shall not exceed 4.2 billion tons by 2020 (currently, 3.9 billion tons), and average annual consumption growth shall decline to 3.5%.

Slower economic development and the unavailability of large volumes of high-quality coal in the long term will also constrain demand for coal in China, exposing the coal power generating economy to risks. According to BP, the current 113 billion tons of coal reserves (about half is low quality) will last less than 30 years at current consumption levels[21].

Gas may substitute for coal in the long run. The Chinese government aims to step up shale gas production to 150-250 million tons in the coal equivalent by 2020. It will

[21] Carbon Constraints Cast A Shadow Over The Future Of The Coal Industry. *Standard & Poor's RatingsDirect*. 2015. Aug. 27.

account for only 4-6% of its domestic consumption[22]. In addition, the achievement of these goals may fail following geological problems, the unavailability of necessary infrastructure, etc. Another source is natural gas supplies from Russia to be started in 2019-2021. With these supplies, China intends to double its natural gas consumption by 2020. To deliver on this target, liquefied natural gas storages will need to be built. Therefore, it will take some time for the effect of the new programmes to manifest itself.

Low prices for imported coal made Chinese producers reduce prices in the domestic market. As a result, the industry suffered losses. In 2015, about 70% of Chinese coal companies were unprofitable. In April 2016, the Chinese government took measures to restructure coal industry within the reform designed to reduce capacities primarily by cutting the number of business days in coal mining companies from 330 to 276 days a year.

China's regulatory measures became a global coal price driver in 2016. Had the government failed to interfere in the Chinese market, global thermal coal prices could have held at $50 a ton, the level achieved by the last year-end, which is the lowest since 2012. Instead, global prices approached the price level in China by the end of this summer. The arbitrage between prices for Chinese and Australian coal (a benchmark in the global coal trade) shrank, discouraging China from importing it. Thereby, the ongoing policy to back Chinese producers is pursued to the detriment of coal imports.

Interruptions in sea coal shipments following the floods in Indonesia, a weak US dollar and the ongoing oil price recovery triggered a partial revival of thermal coal prices since the second quarter of this year. Nevertheless, slack demand persistently deteriorates the market climate.

China's policy will continue to back up global prices for seaborne coal . Goldman Sachs forecasts that in this context global prices for thermal coal (Newcastle, Australia) will rebound from their low of $50 a ton within the next 12 months, but will not go higher than $60-65 a ton[23]. This corresponds to the prices of early 2015. At the same time, mine restructuring, excessive job cuts, and renminbi depreciation against the US dollar will reduce costs in the industry and shift the position of Chinese producers leftwards in the cost curve, because the demand for coal continues to fall in China.

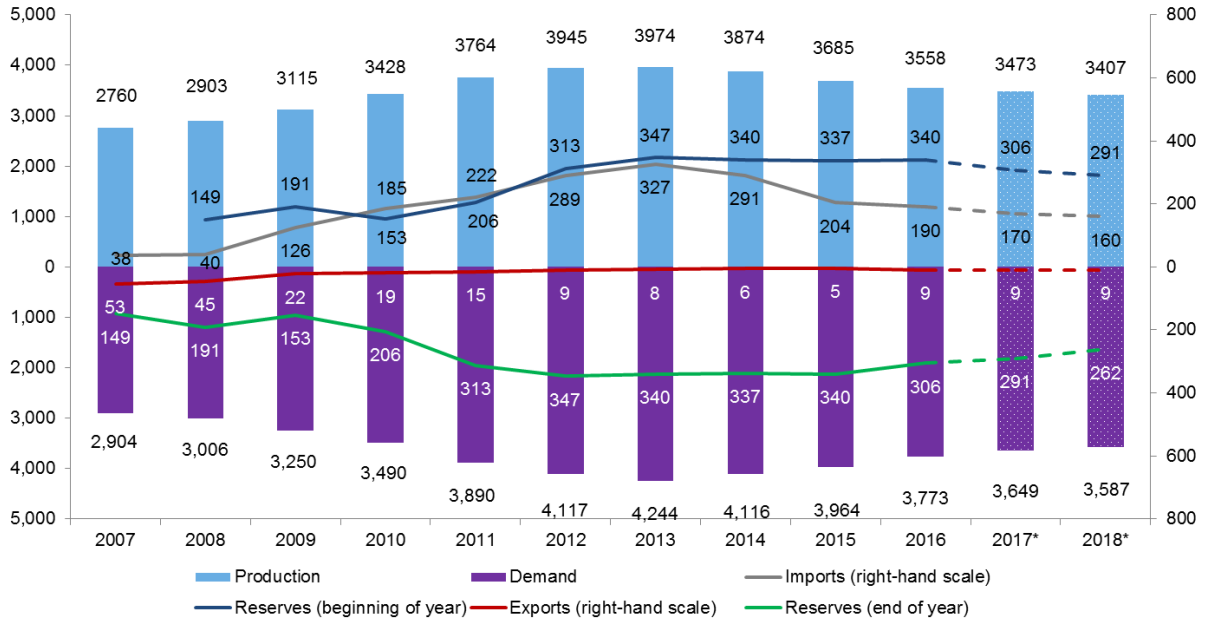
However, the equilibrium will be shifted in the long term. The government will curtail its support as soon as the sector shrinks enough to remain viable amid the ongoing decline in the share of coal in the global fuel balance and the related revenue shrinkage.

The reform assumes that the Chinese government curtails coal mining capacities by 500 million tons in the course of 3-5 years. It will shrink the labour force by 1.3 million workers (of 6 million workers currently employed in the industry). Tensions in the labour market will be mitigated by the negative dynamics in the number of the employed and the

[22] Carbon Constraints Cast A Shadow Over The Future Of The Coal Industry. *Standard & Poor's RatingsDirect*. 2015. Aug. 27.
[23] China: Metals & Mining: The New Old China – Why capacity exits will accelerate from 2H16, June 27, 2016. Goldman Sachs Global Investment Research.

share of the employed in the country's population, as well as a lower influx of migrants. Besides, migrants' age increases and, as a result, the demand for jobs goes down due to a shorter period left before retirement. In addition, labour force may be redistributed between sectors (e.g., construction, services or renewables production).

Figure 54. Coal supply and demand in China, million tons



Source: Goldman Sachs.

A special fund to back local authorities accomplishing capacity contraction is meant to encourage regional governments to carry out the reform.

Goldman Sachs allows even a stronger than planned coal mining capacity shrinkage (by 800 million tons or 16% in 2016-2020)[24]. At the same time, capacity utilisation is set to increase from the current 72% to 77%. The return on equity of major producers is supposed to advance from the 2015-2016 lows following the increase in capacity utilization and in the absence of other shocks. The market share and cost competitiveness will ensure favourable standing of industry leaders. It will result in lower competitiveness of coal imports in the Chinese market.

On the back of the drop in demand from China, India comes to the fore with coal production lagging strongly behind its consumption. According to S&P, demand for coal in India is to grow to 1.1 billion tons by 2020 from the current 900 million tons, given the presently observed growth rates. Various estimates suggest that it may result in import growth from 230 to 300-400 million tons. However, the path of Indian imports and their capability to offset the shortfalls in supplies to China are still unclear. The country enjoys sizeable coal reserves and if domestic production develops, the global market will face more imbalances.

[24] China: Metals & Mining: The New Old China – Why capacity exits will accelerate from 2H16, June 27, 2016. Goldman Sachs Global Investment Research.

The US coal industry is stagnant. The discovery of shale gas in the US in early 2010 resulted in a slump in gas prices and a shift from coal to gas energy. Tighter emission regulations and a drop in coal prices inflicted losses on many coal miners.

Investment outflow from enterprises adds to the industry's tough condition. Pension insurers will withdraw funds from coal miners because of their poor financial performance and negative impact on the environment.

In 2014, US coal miners exported about 110 million tons of thermal coal. Tentative data suggest that in 2016 US exports may fall to 80 million tons.

However, shale gas is unable to completely replace coal in the US. According to S&P, cheap gas may substitute 100-200 million tons of coal (12-24% of current domestic coal consumption)[25]. In addition, rising oil prices will underpin coal usage.

EU countries also cut coal consumption on the back of tighter environmental standards. In 2015, Russia saw a fall in its coal supplies to Britain and Germany. Low prices make alternative energy production in Europe unprofitable. Slower economic growth in some European countries (e.g., Germany) drags down subsidies for renewable energy and triggers gas consumption.

Carbon constraints programmes are not expected to have a strong impact on coal production in emerging Asian economies. Most South-East Asian countries (Vietnam, Thailand, Malaysia, and Indonesia) show high coal consumption growth, though absolute values still remain low.

In the light of global trends, Russian coal exports to the Atlantic region (European and CIS countries) will hold close to the current level of 80 million tons in the medium term, but may tend to go down. Plans to expand exports to Eastern countries (from 72 million tons in 2015 to 84-115 million tons by 2020 and 110-160 million tons by 2030[26]) and develop additional minefields, transport and port infrastructure are unlikely to be implemented in full scale.

[25] Carbon Constraints Cast A Shadow Over The Future Of The Coal Industry. *Standard & Poor's RatingsDirect*. 2015. Aug. 27.
[26] In line with the Coal Industry Development Program up to 2010.

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