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**RUSSIAN ECONOMY IN 2017  
TRENDS AND OUTLOOKS**

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**RUSSIAN ECONOMY IN 2017. TRENDS AND OUTLOOKS** / [Alexander Abramov etc.; Doctor of sciences (economics) Sergey Sinelnikov-Murylev (editor-in-chief), Doctor of sciences (economics) Alexander Radygin]; Gaidar Institute for Economic Policy. – Moscow: Gaidar Institute Publishers, 2018. – 544 p. – ISBN 978-5-93255-530-9.

The review “Russian economy in 2017. Trends and outlooks” has been published by the Gaidar Institute since 1991. This publication provides a detailed analysis of main trends in Russian economy, global trends in social and economic development. The paper contains 6 big sections that highlight different aspects of Russia's economic development, which allow to monitor all angles of ongoing events over a prolonged period: the socio-political issues and challenges; the monetary and budget spheres; financial markets and institutions; the real sector; social services; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

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□ **Gaidar Institute,**

## 4.2. Russian industrial sector in 2017 (based on surveys findings)<sup>1</sup>

This Chapter has been prepared on the results of business surveys of industrial enterprises which have been conducted by the Gaidar Institute using a European harmonized method in monthly cycles since September 1992, covering the entire territory of the Russian Federation. The panel size is around 1,000 enterprises employing over 13 percent of industrial employees. The panel is shifted towards large enterprises for each of the segregated sub-industries. The ratio of returned questionnaires is in the range of 70-75 percent.

Business survey questionnaire contains a limited number of questions (not more than 15–20). The questions are of a qualitative and not quantitative nature. Simple questions structure allows the respondents to fill out the questionnaire quickly and without using any documents. It is paramount that respondent at each enterprise is a manager of the highest level who has a full understanding of state of business and is directly linked to the business management.

We use specific derived index, which we call balance, for the analysis of business surveys results. Balances are calculated as difference between the percent of those who answered “go up” (or “above normal”) and percent of those who answered “go down” (or “below normal”). The obtained difference allows us to present responses to each question by one number with “+” or “-”.

Balance is interpreted as first derivative or process speed. When the balance of responses to a question of expected price shift is marked “+” this means that the average prices in the near future will be growing (for example, prevail those enterprises with responses about projected increase of their prices). For instance, increase of a monthly balance from +10 percent to +17 percent speaks about the fact that prices on average across industry will be growing faster because the number of enterprises projecting their growth have increased. Negative balance means a decline of average prices (more enterprises intend to cut their prices). Change of balance from -5percent to -12 percent is interpreted as an increase of price fall intensity.

### 4.2.1. Russian industrial sector in 2015–2017 – business assessment

Recent years have been complicated for the Russian economy as a whole and for industry, in particular. The crisis, which was launched by the ruble devaluation in 2014 lasted for two year. Already now, it is evident that the Russian industrial sector managed to encounter and walk in a relatively smooth manner through the crisis of 2015–2016 and to start recovering in the same manner from the crisis in 2017. This description of the recent years’ events in the Russian industry has been backed up by the findings of IEP’s (Gaidar Institute for Economic Policy) monthly business surveys of 1992–2017. We now consider the findings on a yearly rather than monthly basis (the latter is most common) to be able to view the crisis of 2015–2016 and the recovery in 2017 within the context of our long enough history of business industrial surveys.

The following features are characteristic of the crisis years. First, the crisis have not provoked a decline of demand for industrial products and its output. Second, insignificant

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<sup>1</sup> This section is written by Sergey Tsukhlo, the Gaidar Institute.

deterioration of these indicators resonated with a significant time span of the recession. Third, businesses were ready for the recession, and, it seems, for a more adverse recession, which was mostly owing to the authorities and experts who constantly in 2011–2014 discussed the chances for the “second wave of recession”. Fourth, this unordinary (compared to the crisis of 2008–2009) combination allowed Russian industry to smoothly face and pass through the crisis of 2016–2017 and in the same way to exit from the recession in 2017.

Composite indicators that derive from some of the business survey questions provide the first impression and a general view of the Russian economy. One of traditional indicators is *The IEP Industrial Confidence Indicator*<sup>1</sup> Similar surveys of other institutions most commonly rely on similar indicators that are reviewed on a monthly basis, which is more useful for online monitoring than for making a generalized analysis of the industry. Therefore, this indicator and the indicators described in this paper are estimated on a yearly basis for the entire period of IEP’s surveys with a view to evaluating the crisis of 2015–2016 and the post-crisis period of 2017.

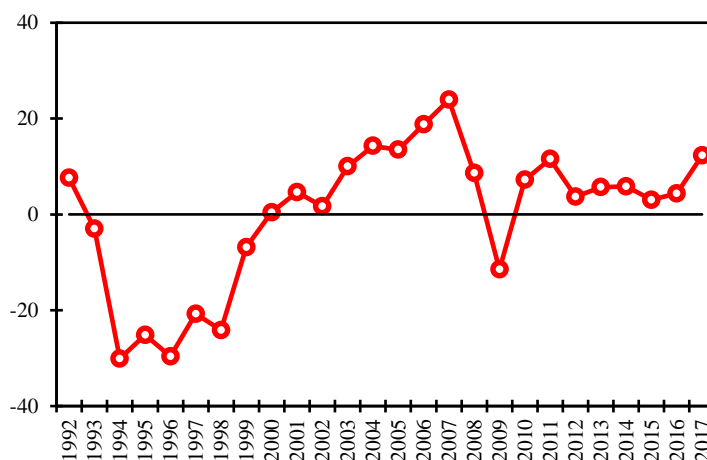


Fig. 10. IEP Industrial Confidence Indicator, 1992–2017, percentage points

The dynamics for the Industrial Confidence Indicator clearly demonstrates the Russian industry’s salient features in recent years (Fig. 10).

The industrial sector exhibited a minor recovery in confidence in 2010–2011 following the crisis of 2008–2009. The Indicator climbed to positive, albeit not pre-crisis, values in 2010 and then slid again in 2012, reaching modestly positive, and most importantly, stable values in 2012–2016, including in the crisis of 2015–2016. For the accuracy’s sake, there is a point to note that in 2015 the Index averaged annually 3 percentage points below the pre-crisis value of 2014. In particular, the Index lost 15 points during the crisis of 2008 and another 20 points

<sup>1</sup> The Indicator is computed as a simple arithmetic average (difference in responses) to four questions from the IEP’s monthly business survey questionnaire:

- 1) Actual change of demand, balance = percent growth – percent decline;
- 2) Estimate of demand, difference of assessments = percent above normal + percent normal – percent below normal;
- 3) Estimate of stocks of finished products, balance = percent above normal – percent below normal, opposite sign;
- 4) Plans for output change, balance = percent growth – percent decline.

Balances of questions 1 and 4 are seasonally and calendar adjusted. The Index can range from –100 to +100 points. Positive index values imply the prevalence of positive assessments. Negative index values mean that adverse assessments prevail. Decline of index’s values is the sign of deteriorating situation. Growth of index’s values – the sign of ameliorating situation.

during the crisis of 2009, making a total loss of 35 points during the crisis of 2008–2009. The dynamics for the Industrial Confidence Indicator for 1992–2014 was in line with the commonly held view of the Russian industrial sector. In 2015–2016, however, variations in the indicator started to disagree with the commonly-held views of analysts and government officials that the industrial sector was faced with a crisis. In other words, industrial enterprises did not view the events of 2015 as crisis-induced events.

As to the signs of crisis developments over the past few years in the Russian industrial sector, they started to emerge, according to industrial enterprises, in 2012, when the Industrial Confidence Indicator lost 8 points, varying steadily within a range of +3...+6 points throughout the period of 2012–2016. Thus, even such a broad treatment of the crisis facing the Russian industry is an indication of unusual nature of the crisis: a minor fall (posing no threat of crisis whatsoever) of key indicators and a long enough duration of these developments; at least, if one relies on the opinion of industrial enterprises. Our most recent data as of 2017 on the Russian industrial sector show a recovery following the period of 2012–2016. The Industrial Confidence Indicator rose to the level of 2011, marking 2011 as the best year for the industry since the crisis of 2008–2009.

The Russian industrial sector has managed to adapt easily to the recent years' economic environment because of the sluggish nature of the crisis. These processes are well depicted by another composite indicator – *The Russian Industry Adaptability ('Normality') Index* – that is based on a list of questions as part of another IEP's business survey (*Fig. 11*). The index is computed using only evaluative questions – enterprises are offered to self-assess their key performance indicators using grades such as “above normal”, “normal”, “below normal”. Therefore, the average proportion of “normal” answers indicates that enterprises self-assess their performance, i.e., adaptability to the ongoing economic environment, as “normal”.

The dynamics for the Industry Adaptability Index in 1994–2014 was also in line with the commonly held views of the Russian industry. The industry was faced with an extreme hardship prior to the Russian default of 1998, with an average annual level of adaptability ranging within 29–33 percent. After the 1998 default, the Russian industry saw things start turning for the better, with “normal” self-assessments reaching 71 percent by 2007. “Normal” self-assessments dropped to 54 percent because of the crisis of 2008–2009, but they recovered since 2011 to the pre-crisis level of 71 percent. The sluggish economic dynamics in 2012–2014 halted the growth in the Adaptability Index, even cutting it back to 69 percent in 2013. In 2014, the industrial sector was 70 percent adapted to the prevailing economic environment.

However, the 2015–2016 and even the 2017 values of the indicator was not in line with the commonly held beliefs based on official statistical data. During the initial and the second years of crisis, 71 percent and 73 percent of enterprises, respectively, said their key indicators (product demand, inventories, labour supply, production capacity, financial standing) were “normal”. Thus, not only did industrial enterprises see no crisis-induced threat during the crisis of 2015–2016, but they also said their adaptability to the ongoing economic environment was better than to the pre-crisis periods. Moreover, 77 percent of Russian industrial enterprises were adapted to difficult conditions of recovery from the crisis in 2017, with the indicator hitting an all-time high in the entire 24-year period of monitoring.

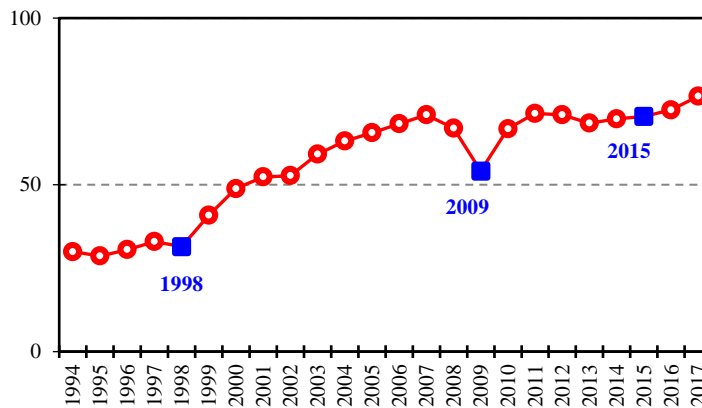


Fig. 11. Russia Industry Adaptability ('Normality') Index, 1994–2017, percent

We now consider business self-assessments of some key indicators.

The dynamics for product demand (Fig 12) self-assessments was relatively stable in 2010–2017, when “normal” product demand answers varied within a range of 50–60 percent, with the industry experiencing neither crisis-induced downturn nor any decline in satisfaction with demand in 2015–2016. In 2012–2015, 50–53 percent of industrial enterprises said they were satisfied with their product demand. For comparison, during the crisis of 2008–2009 this indicator plummeted to a historical low of 28 percent from the all-time high of 69 percent. The lowest level on record was reached in 1996, when only 8 percent of Russian industrial enterprises said their product demand was “normal”. However, satisfaction with product demand stood near all-time high throughout the four years preceding the default, increasing to a local high of 60 percent after the crisis, in 2017.

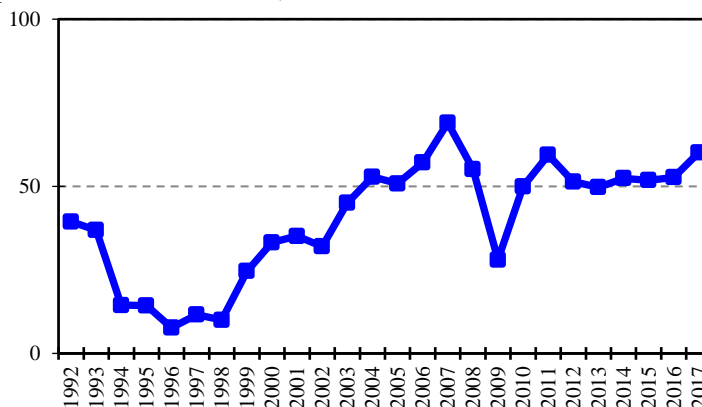
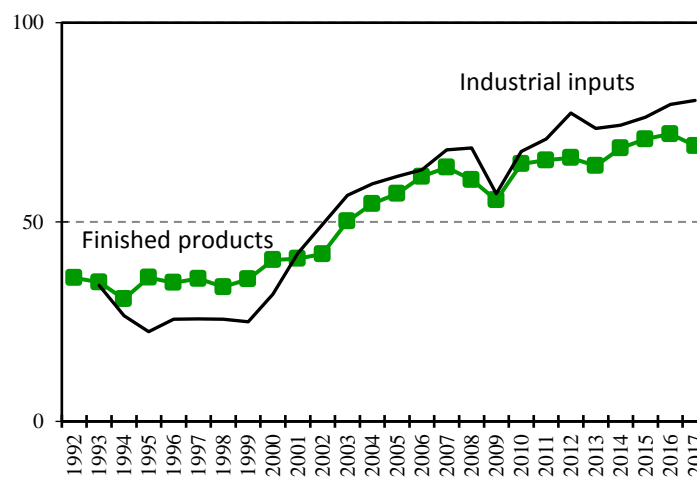


Fig. 12. “Normal” self-assessment of product demand, 1992–2017, percent

Enterprise inventory self-assessments (finished goods inventory, raw materials and supplies inventory) give a better non-crisis picture of the Russian industrial sector in 2015–2016.

None of the enterprise inventory types exhibited typical crisis-induced dynamics during that period (see Fig. 13). The balance of finished products inventory self-assessments (the difference between the proportion of “above normal” and “below normal” answers) during the initial year of the latest crisis turned out to be hit less (with less overstock) than before the crisis (in 2014). Furthermore, the balance turned out to be negative in the first month of the crisis, that is, enterprises were in need of big finished product stockpiles to be able to meet the expected new demand during the coming crisis. Such an onset is highly exceptional for crisis.

Producers are supposed to experience a shock in the first month of crisis, leading to a rapid increase in the overstock of finished products. In 2015, however, the Russian industrial sector swiftly coped with such a non-standard shock, making another record during the initial year of crisis – “normal” finished goods inventory self-assessments hit an all-time high of 71 percent (at that point). “Normal” answers increased to 72 percent during the second year of crisis, according to an inventory monitoring and the balance remained at near zero level. Hence, during that crisis enterprises managed (for the first time since 1992) to control their supply-demand balance and pursued a careful policy of managing their finished products inventory. In 2017 – during the recovery stage – “normal” finished goods inventory self-assessments saw a small decline as a result of scheduled accumulation of finished products overstock to be able to meet the expected increase in demand, with the highest expectations recorded in the second quarter of the year. However, slow recovery from the crisis forced the industrial sector to return to minimizing their overstock inventory, and therefore “normal” answers climbed back to a high level.



*Puc. 13.* “Normal” self-assessments of finished products inventory and of available industrial inputs, 1992-2017, percent

Against a backdrop of slow rolling 2015–2016 recession and sluggish recovery recorded in 2017, the Russian industrial sector has reached the best level of availability of industrial inputs in the period of 1993–2017. During the initial year of crisis, “normal” raw materials availability answers increased by 2 points from the preceding non-crisis year, getting close to the highest value recorded in 2012. During the second year of crisis, this indicator gained another 3 points, hitting an all-time high. During the recovery stage in 2017, the industrial sector has managed to achieve even a better level of availability of raw materials and supplies, with 81 percent of enterprises saying they have “normal” level of availability of raw materials and supplies, according to average annual self-assessments. Thus, the industrial sector during the ongoing crisis has experienced minimum difficulties with raw materials and supplies and managed to reduce their shortage to a historical low. This is what also makes the fading crisis different from previous crises.

Enterprise self-assessments of production capacity and labour supply add more details to the non-crisis picture of Russian industrial sector in 2015-2016 and demonstrate excellent readiness to get out of the crisis (*Fig. 14*).

According to our surveys, during the crisis of 2015–2016 the Russian industrial sector was able to solve their HR issues through staff recruitment rather than layoffs (as is commonly practiced amid crisis). It was not until the onset of the crisis of 2015–2016 that the former option became available. Enterprises therefore managed to achieve the best possible labour supply in 2017 as the Russian government achieved an unexpectedly low unemployment rate. The HR policy of the Russian industrial sector amid the recent crisis seems to be reasonable enough considering that the industry experienced shortage of qualified employees, primarily blue-collar workers, during years preceding the crisis. Moreover, a new influx of workers from vocational schools cannot be counted on due to a degrading secondary vocational education. In 2017, the Russian industry has managed to cope with the shortage of labour force owing solely to the crisis of 2015–2016.

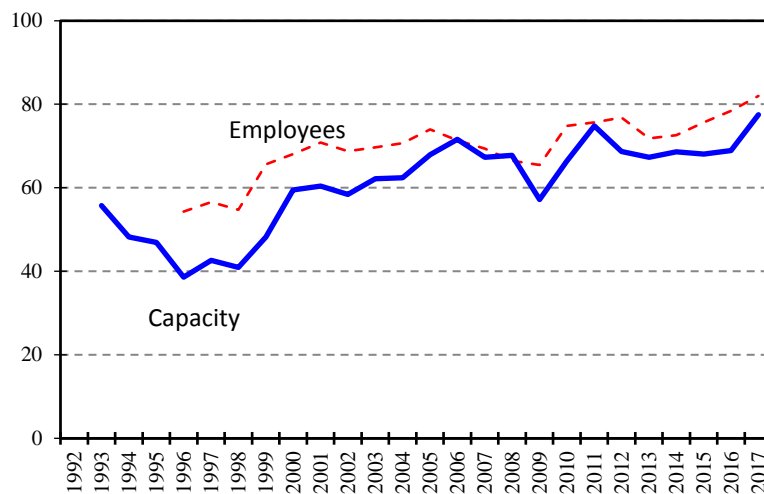


Fig. 14. Enterprises with adequate capacity and labour supply, 1992–2017, percent

The Russian industrial sector is in need of more qualified workers than production capacity. Enterprises have had excessive production capacity (with a potential to manufacture competitive products) since 2009. The balance of capacity self-assessments in the industry has been positive, which is unusual amid crisis, over the recent 9-year period of our monitoring. In 2017, “adequate production capacity led by the expected changes in demand” has hit a historical high of 78 percent.

Thus 2017 as a whole, was the year when the Russian industry was recovering from the protracted but slow rolling official crisis of 2015–2016. However, this post crisis year is distinctly divided into two periods, which coincide with the calendar half-year periods. In H1 Russian industry remained strong in overcoming the crisis of 2015–2016 and made some progress at the year-end. However, from July onwards positive trends recorded at the onset of the year have slowed down and in October fell to the lowest (worst) point of the first post-crisis year.

#### 4.2.2. Russian industrial sector in H1 2017

The Russian industrial sector started recovering in early 2017 from the protracted unrepresentative crisis of 2015–2016. Actual and forecast changes in demand, assessments of finished products, innovation plans of enterprises—all these indicators have been demonstrating long awaited positive development.



The demand for industrial products in H1 2017 was almost , attended by occasional and hence divergent movements leading toward a positive trend, the first of which was recorded during business surveys in February, the second one was reported in June. In general, however, the sales dynamics was found to be better than that in 2012–2016, even though enterprises tend to underestimate the demand for their products.

A similar positive context was observed through demand surveys. The seasonal and calendar adjusted demand continued to grow in early 2017, reaching a multi-year high in February, whereupon upbeat demand forecasts stopped growing, and the balance was secured at a level of +10 points. As a result, enterprises' expectations in H1 2017 were found to be the highest since 2011.

However, our business surveys regarding gains in (current) volumes of demand show that the Russian industrial sector in early 2017 had inflated expectations and hence forecasts for the pace of recovery from the crisis of 2015–2016. In February, when both actual and predicted demand growth rates reached multi-year highs, enterprises' satisfaction with gains in sales fell to 51 percent because they expected higher volumes of demand. Nevertheless, they were quick in rethinking the inflated expectations, and therefore the satisfaction with demand reached 65 percent as early as May 2017, the highest value on record since 2007.

The dynamics of enterprises' responses about the stock (finished products) adds to the picture of the Russian economy recovering from the “lukewarm” crisis of 2015–2016. In the first few months of 2017, the Russian industrial sector continued officiating the crisis-related ritual of maintaining the indicator around zero, whereas the stock was revised in March, and therefore the balance was up to +11, until June. The 25-year observations show that the specified level of stock glut cannot be attributed to the crisis. The reverse seems to be the case: similar values of the indicator were observed during the periods when enterprises were sure that the demand for their products would soon increase. It is difficult to tell on what volumes of stock their responses rely on, because no official statistics of stock volumes are available in the country. In addition, there is a scenario that cannot be ruled out: there was no growth in volumes of stock (finished products) in March-June 2017; instead, enterprises just “revised” the previous, unchanged volumes of stock after rethinking their expectations for the pace of recovery from the crisis of 2015–2016. This scenario is supported by the fact that demand change forecasts stabilized in February-June 2017.

The dynamics of output plans in H1 2017 also reflects that industrial enterprises varied in their expectations for the pace of recovery from the ongoing crisis. Indeed, this indicator saw a sharp increase in upbeat expectations in early 2017 after hitting in H2 2016 nearly the lowest values in the ongoing crisis (less optimistic responses were recorded only in early 2016, when industrial enterprises realized that promises of quick “rebounding from the bottom” are slippery). However, upbeat output plans were down almost by half in April-May 2017, which seems to be logical amid declining upbeat demand forecasts and spiking stock (finished products) glut. In June, however, the number of enterprises with upbeat output plans increased, reaching the highest level in 2012–2017, which, by the way, was recorded in late 2015, when enterprises' hopes for quick recovery from the crisis were unmet.

Enterprises' pricing policies in H1 2017 reflect both the monetary authorities advance in struggling with inflation and enterprises' efforts to rekindle demand for their products. Although industrial enterprises in January 2017 raised prices more intensively than a year earlier, they failed to reach the price target set in December 2016. It seems that industrial enterprises raised factory-gate prices in response to positive demand dynamics early in the year. However, industrial enterprises had to slow drastically the intensity of growth in actual prices

in response to Bank of Russia' consistent struggle with inflation. Enterprises reported in April-May that they had zero growth of factory-gate prices of their products, with price change forecasts in March showing hopes for a more intensive growth of factory-gate prices. Further, the industrial sector in June embarked on absolute price cut (-6 points) while forecasting a change at an average of +9 points for April-June.

In 2017, Russian industrial enterprises' HR policies continued to rip the benefits offered by the "crisis" of 2015–2016. Enterprises made new recruit plans early in 2017 (similar to what they did during the crisis of 2015–2016), which was not the case in the pre-crisis years of 2013 and 2014, and, most importantly, they did manage to hire more employees following the traditional peak of redundancies in January. Eventually this even resulted in a small oversupply of labour force – the balance of enterprises' responses about labour supply in Q2 2017 reached a positive value, which is quite uncommon for the entire period of 2010–2017 and for the crisis of 2015–2016. Furthermore, no spike in labour force oversupply was recorded at the very beginning of the recession period. Neither were there redundancies – a logical HR policy amid crisis – at industrial enterprises.

In Q1 2017, the Russian industrial sector exhibited a strong growth in upbeat expectations for investment. Twenty-four points were added to the balance of investment plans, eventually hitting a five-year high. Therefore, the 26-month period of upbeat expectations for investment – which began shortly after Russia joined the war of sanctions in August 2014 – is over. The industrial sector was prepared for a new cycle of investment growth. However, the plans stopped clambering higher on upbeat expectations and stabilized in the second quarter following the rethinking of expectations for the pace of recovery from the ongoing crisis. Indeed, there are not many incentives available for Russian enterprises to implement investment plans. Only 14 percent of enterprises considered a lack of investment as a headwind for output, which comprises nearly the smallest share of enterprises considering this factor as a constraint in 2014–2017. Only 9 percent of enterprises faced with a lack of machinery and equipment said investment in output expansion is relevant. Only 7 percent of enterprises said they were facing the issue of low labour productivity. Accordingly, it is also unlikely that the existing production facilities will be upgraded.

Crediting terms and conditions for the Russian industrial sector in H1 2017 continued recovering after the crisis-related credit crunch that fell, according to surveys, on February 2015, when 45 percent of enterprises reported they were facing the issue of credit availability, which, however, was 20 percentage points below the peak value recorded during the crisis of 2008–2009. Only 12 percent of enterprises faced the issue of credit availability in Q1 2017, 10 percent in Q2 2017, and 11 percent in June. Thus, the lack of credit availability for the Russian industrial sector in H1 2017 was finally secured at the pre-crisis level.

The average minimum interest rate on bank rouble-denominated loans to industrial enterprises dropped by January 2017 to 14.6 percent per annum. The indicator stood at 14.1 percent in March-April, 13.9 percent in May-June. Thus the interest rate dropped by 7 percentage points after hitting a post-crisis high. The inter-crisis lowest value of the indicator was recorded at 11.8 percent in 2011.

In Q2 2017, the ability of industrial enterprises to service their outstanding loans reached an absolute record in the entire period (2009–2017) of monitoring. Today, 90 percent (!) of enterprises have either adequate or more than adequate resources to repay their bank loans. The obtained result fits well with the estimates of financial and economic environment, which was considered good or acceptable by 91 percent of respondents. It should be noted that in this case we talk about the actual state of enterprises and not about reporting.

#### 4.2.3. Russian industrial sector in H2 2017

The second half of 2017 was a tough period for Russian enterprises. In the middle of the year industrial enterprises saw the demand for their products expand at a slower pace, which forced businesses to get rid of stocks of finished products, downgrade output, which is ordinary for that period and review for the worse the investment plans. Meanwhile, businesses kept hopes alive (plans) for the output growth and recruited employees. The first few months of H2 2017 saw a slow reversal of feeble positive trends that were seen earlier in the year. The pace (balance) of actual changes in demand saw a reversal to a negative trend in July. The latter looked rather flat and unlikely was a sign of a new wave of recession, if so a softer one like in 2015 and not a repetition of the across-the-board deterioration of November 2008. Demand forecasts also continued to lose the business confidence gained by February 2017. The industrial sector was still, albeit less intensively, hoping for an increase in sales. In that context, the industry continued to reduce the surplus in finished goods inventory, which was reasonable enough amid uncertainty about the time of switching to a statistically indisputable increase in output. Another logical result from that was the decelerating increase in output. Another logical result from that was the decelerating increase in output—even so symbolic that was observed previously in 2017.

Despite certain signs of slowing demand and output, the industrial sector continued to hire employees, having positive recruitment plans because the Russian industry was still running short of workforce on the back of “anticipated demand change”. Although the shortage was relatively small, the very fact of its existence shows which resource-related issue is most critical for the Russian industry.

Russian industry’s investment plans underwent sharp negative changes in July 2017, with this indicator balance losing 9 points during the month. Russian industry’s investment plans underwent sharp negative changes in July 2017, with this indicator balance losing 9 points during the month. While retaining this indicator at a five-year high level for four months, the industrial sector was not prepared to invest in its own production amid protracted stagnation with unpredictable timeline for recovery.

In August 2017, industrial sector’s recovery from the protracted crisis of 2015–2016 continued to lose momentum. The month (August) happened to be a time of hardship for sales. Enterprises’ self-assessments of current demand dropped to a 13-month low. The same was true for demand projections. In August 2017, enterprises lost the confidence they accumulated during the previous 15 months. However, Russian industry output dynamics did not change in August. Survey data also show that the industrial production continued to experience near-to-zero growth of the output rates. This fact again put at the top of the list competition between experts regarding adjustment of the Rosstat data with respect to industrial output and seasonality in search for an answer to the most popular and crucial question of 2017: “Is there a growth in Russian industry?” Industrial enterprises, however, revised their output plans upward rather than downward, adding 3 points to this indicator balance in August. There were still hopes for regaining growth.

The continuing recruitment of staff by Russian industry corroborates this thesis. In August, the balance of changes remained positive although minimal in absolute terms. The continuing recruitment was registered over six months of 2017 (excluding in January and May). The balance of projected changes in enterprises’ staff headcount also remained positive, albeit moderate.

The data for September showed that enterprises were no longer hoping for being able to achieve the demand they needed for rapid recovery from the crisis. Actual changes in sales

remained “below zero”, the forecast balance also went negative for the first time since early in 2017. Nevertheless, the proportion of enterprises that said their demand was “normal” still remained above 50 percent, thus indicating that the majority of enterprises were still satisfied with their sales volumes.

Revised plans of rapid recovery from the crisis prompted enterprises not to maintain their inventory at levels that can ensure the recovery. In September, the balance of inventories self-assessments indicated a decline in their surplus down to +6 points, хотя ранее промышленность удерживала показатель в интервале +9..+11 пунктов. Finished goods inventory were updated in September on the back of current output – the industrial sector started making minor cuts in output while adhering to output boost plans for late in 2017. In August-September, the balance of output plans added 6 points, reaching values that were decent enough in times of crisis. That helped industrial enterprises continue to hire workers even amid slowing recovery from the crisis. Staff recruitment plans remained at a positive level. However, the investment plans balance approached again a zero line late in the third quarter – the industry had completely lost the confidence accumulated in Q1 2017 and maintained at the five-year highest level in Q2 2017.

In October, the dynamics of demand for industrial products continued to be driven by a downward trend. Nevertheless, the majority of businesses said the demand for their products was “normal” in H2 2017. In October, there were 64 percent of “normal” responses, not less than 60 percent since April 2017. However, demand forecasts reflected dimming hopes of successful year-end outturns. The balance of those hopes neared a zero, i.e. businesses hoped for no demand contraction. The latter told on the stocks of finished products. In Q2 2017, enterprises brought the stocks of finished products to a high amount of redundancy, which is characteristic for a steady recovery. However, in late Q3–early Q4 they began to get rid of the unwanted stocks due to the loss of confidence in a prompt recovery. The output dynamics added to the negative outlook in Russian industry. The survey statistics demonstrated continuing output contraction. However, the output plans remained confidence for at least a symbolic growth, which was observed before.

In November 2017, according to Gaidar Institute’s survey statistics Russian industry attempted to recover from the prolonged crisis of 2015-2016. Changes in demand and depleted stock of finished products have contributed to it.

Demand for industrial products exhibited positive dynamics in November 2017 Both baseline and seasonally adjusted data showed positive changes of both actual sales and sales projections. Most impressive was a sharp upsurge in the expected demand change shortly before public holidays in January. For that matter, this sharp upsurge of projections confidence continued moderate October improvement of the indicator, which was successfully implemented in November. The latter, most likely, pushed businesses to further growth of demand projects confidence. The Russian industrial sector’s finished goods inventory were totally “depleted” due to positive sales dynamics in November and upbeat projections for growing demand. The balance of this indicator self-assessments lost another 6 points down to zero – the proportion of “above normal” answers was offset by the proportion of “below normal” answers, with “normal” answers showing an absolute and strong prevalence, 71 percent in November. The combination of finished goods inventory self-assessments amid increasing demand was supposed to further encourage enterprises to increase volumes of finished goods inventory due to the increase in output.

Indeed, surveys in November registered a positive change in enterprises’ actual output dynamics and production plans. November saw output reverse from negative to positive values.

Output plans underwent drastic changes in November as well. The seasonally adjusted balance rose during the month to +26 from +15 points, also hitting a multi-year high (like demand projections). Positive dynamics of demand and output coupled with the confidence growth of their forecasts and depletion of stocks of finished products forced businesses to recruit personnel. In November, the balance of change in the actual number of workers again was positive. Enterprises resumed recruiting workers even against a backdrop of sufficient number (better than ever) of qualified personnel.

In December, enterprises continued to provide positive self-assessments. For instance, the demand growth rate remained above zero and even gained a few percentage points, thus enabling enterprises to be highly satisfied with their current demand, with 66 percent of “normal”, as before, answers. Demand projections were also at a steadily positive level, as was registered in H1 2017. The industry’s response to the demand dynamics seemed logical enough – enterprises continued to increase output in December. The latter was used to meet the demand and to increase finished goods inventory. As a result, finished goods inventory self-assessments bounced back from a zero to above-zero balance, evidencing that the Russian industrial sector was prepared to recover from the crisis of 2015–2016. Enterprises’ investment plans also bolstered this scenario in late 2017/early 2018. While the balance of the plans stabilized, albeit still somewhat below zero, in November-December 2017. In 2018 investment confidence may once again prevail over investment pessimism as long as there will be stronger confidence in success of another attempt to recover from the crisis.

#### 4.2.4. Import substitution in Russian industry

From mid-2014, the issue of import substitution became an important component not only of the economic but also of the political agenda. In the wake of December (2014) ruble’s devaluation all buyers of imported goods who through carelessness had become dependent on imports found themselves in the sphere of import substitution. The task was clear for Russian engineers, producers and consumers, but the Russian statistics found itself in a hot seat—it turned out that to measure import substitution in a large open economy was very hard. The Federal service of state statistics provides a rather moderate set of indicators in that sphere. And it was more complicated to comprehend what issues during the implementation of the import substitution policy face Russian consumers (be it the state, companies or households). Just they decide what imports to replace with the Russian analogues.

Traditional approach to import substitution based on the foreign trade statistics provides only limited analysis of those processes in this context. Understanding the difficulty of measuring import substitution and related issues in the context of high demand of the actual data forces us to turn to more flexible tool—surveys. Surveys’ findings provide a more comprehensive and extended picture of the current problems of Russian import substitution than general trade statistics.

This chapter discusses the main results of our import substitution surveys, conducted by the Gaidar Institute business surveys laboratory in 2014–2017 on the basis of surveys of directors of industrial enterprises. In this connection, the enterprises were treated not as producers of Russian domestic products capable of ousting their competing counterparts from the Russian market in the framework of import substitution policy, but as buyers of imported machinery and equipment and imported supplies and raw materials forced to switch over to the domestic analogues of these items in conditions of an administrative ban on certain imports and/or their rising prices resulting from the ruble’s depreciation.

The first measurements of the potential changes in planned purchases across industry in response to growth of ruble-denominated import prices were done as early as April 2014, when it was still unlikely that the exchange rate movement was significantly influencing buyer behavior. That survey demonstrated Russian industry's high dependence on imports. The critical dependence index – the impossibility not to rely on imports notwithstanding any scale of price growth – was then hovering at around 40 percent (the share of enterprises reporting that dependence) with regard to both equipment and raw materials. At the other side of the spectrum of possible reactions to price growth were those enterprises which during that period reported that they were not importing anything. The estimated independence from imports reported by enterprises amounted to 22 percent with regard to machinery & equipment, and 33 percent with regard to raw materials and other supplies. Thus, the remaining group of enterprises continued to purchase imported products, but were prepared to do without those products in the event of further growth of their ruble-denominated prices. In April 2014, this group of enterprises across Russian industry amounted to 25 percent for raw materials, and to 39 percent for machinery and equipment.

Our second opinion survey of the preparedness of enterprises to discontinue import purchases took place specifically in December 2014, when the ruble's plunge trajectory hit its bottom, and the calls of authorities for import substitution were loudest. However, the plans of import purchases across industry remained the same as before. Nearly 40 percent of enterprises were not ready to operate without buying imported machinery and equipment, even in view of the ruble's obvious depreciation inevitably followed by a rise in ruble-denominated prices for these technologies in the forthcoming year 2015. In other words, the scale of Russian industry's critical dependence on imports remained unchanged.

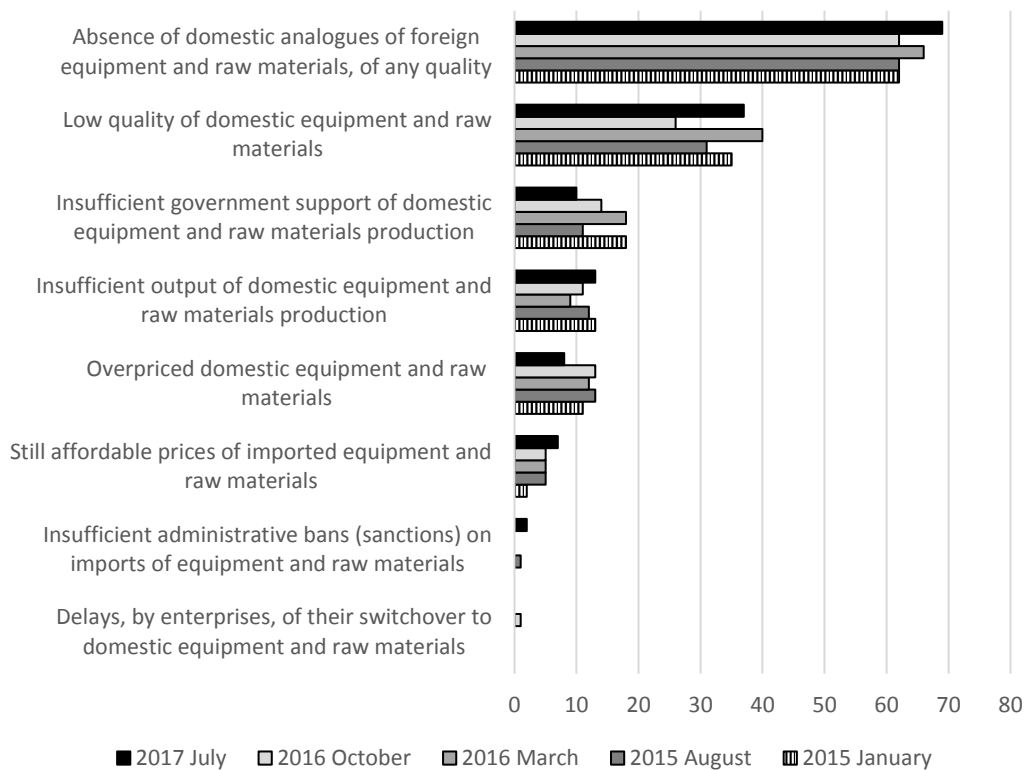
An almost identical situation could be observed with regard to Russian industry's dependence on imports of raw materials – the reported intentions of enterprises concerning purchases of such items. A maximum percentage share of all enterprises (37 percent), as before, were prepared to rely on these imports regardless any surge in their ruble-denominated prices. By late 2014, as before, only a third of all enterprises had not been relying on imports in order to secure their output.

The obvious reluctance (or unpreparedness) of Russian industrial enterprises to do without purchases of imported equipment and raw materials even in face of the inevitable growth (clearly made obvious in December 2014) of their prices urged us to begin monitoring, from 2015 onwards, the existing obstacles to successful import substitution across industry. Over the past three years, the survey participants were asked 5 times to answer the following question: “What prevents your enterprise from switching over from purchases of imported equipment and raw materials to purchases of their domestic analogues?” Their answers have yielded a rather comprehensive picture of the real issues that prevent successful import substitution in enterprises' purchases.

The main issue arising in the event of discontinuation of imports has always been and still remains the absence, in Russia, of any analogues of some imported items, no matter what their quality. The January (2015) assessments of the barriers in the way of import substitution were more than just an emotional reaction to the shock-like depreciation of the ruble in December. And our three-year monitoring failed to yield any positive observations that could confirm the creation, in Russia, of production of new equipment and raw materials (i.e., something that had never been produced before) – rather, the observable trend was the opposite (*Fig. 15*).

The low quality of domestic equipment and raw materials as compared with that of their imported analogues has been ranked stably second among the obstacles to import substitution.

A sizable group of enterprises (on the average, a third of them in all five surveys) constantly pointed to that issue. Other constraints on import substitution were mentioned far more rarely.



*Fig. 15. Hindrances for import substitution faced by Russian industrial enterprises in 2015–2017, %*

For example, among the other obstacles, industrialists noted insufficient government support of domestic equipment and raw materials production, but this kind of estimation of the government policy in the sphere of import substitution was voiced by only 18 percent of respondents in January 2015, and by 10 percent in July 2017.

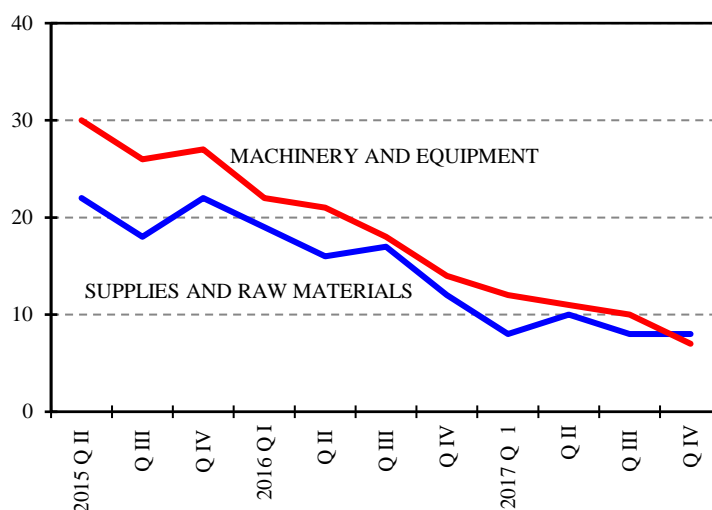
Overall, on the basis of the available set of estimations, it can be concluded that enterprises relied mostly on their own devices, including their ability to adapt to the ruble's new exchange rate. In this respect, by the end of 2017, domestic industry had achieved some very obvious successes: the negative effects on output by 'the weakening ruble and the rising prices of imported equipment and raw materials' (as worded in the questionnaire offered by the Gaidar Institute) in late 2017 were as low as 6 percent.

The estimations of those analogues of imported equipment and raw materials that were already being produced in Russia were also quite stable and well-defined. Complaints about the prices of Russian products that were unreasonably high compared with their quality were reported on the average by 11 percent of those Russian enterprises that were buying them, and these complaints remained unchanged over the three-year period.

Special attention should be focused on the estimates of the ability of Russian industry to increase output in the framework of import substitution. Issues associated with the demand for those products that were already being manufactured in RF territory were mentioned on the average by 12 percent of enterprises. Therefore, Russian industry possesses sufficient reserves

(idle capacities) for increasing output in an event of an increased demand for its products in the framework of the import substitution policy.

As demonstrated by the monitoring results obtained in 2015–2017, Russian industry during that period managed to achieve a relatively high success in terms of import substitution when buying new machinery and equipment (*Fig. 16*). This process was most notable in Q2 2015, when 30 percent of industrial enterprises reported a shrinkage, in terms of physical volume, of the share of imports of machinery and equipment in their total purchases (relative to Q2 2014), or their total disappearance. Perhaps, the corresponding period-end index for Q1 2015 was even more impressive in terms of import substitution scale, but it can be considered to be the upshot of the initial and excessively emotional response to the shock produced by the ruble’s December devaluation.



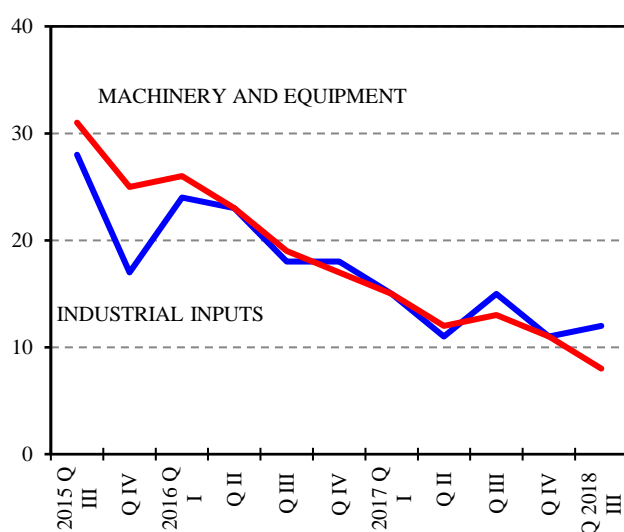
*Fig. 16.* The actual scale of import substitution in the purchases of equipment and raw materials by enterprises, percent

However, over the next ten quarters, Russian industry began to play down the intensity of actual import substitution. Therefore, in Q4 2017, only 7 percent of enterprises reported a shrinkage, in terms of physical volume, or a zero percentage of imports in their purchases of machinery and equipment. The shrinkage of imports of raw materials across Russian industry was less intensive due to the lower import substitution potential in that sector. The highest scale of substitution of imports of raw materials was 22 percent, and by Q4 2017, it had declined to 8 percent. The reason for this very modest success was, most probably, the dependence of Russian industry on imports that had emerged over the previous years. Having purchased imported equipment, Russian enterprises are forced to use industrial inputs that are compatible with that equipment. Such materials are not produced domestically, but can be supplied by foreign producers who usually offer comprehensive sets of supplies and take full advantage of any opportunity to make their customers dependent on their products for all the phases of their production cycle.

Another reason for the slow pace of import substitution in the sector of industrial inputs was the mildness of the 2015–2016 crisis, which did not trigger any dramatic output reduction across Russian industry. Such a situation did not require a large-scale substitution for the more expensive imports of raw materials and other supplies, and so the demand of enterprises for raw materials, including imported ones, did not dwindle markedly.



Let us now review the import substitution plans across industry (*Fig. 17*) over the period from Q3 2015 (survey in July 2015) through Q1 2018 (survey in January 2018).



*Fig. 17.* The planned scale of import substitution in the purchases of industrial inputs by enterprises, percent

The quarterly import substitution plans demonstrate that the expectations of a reduced scale of import substitution with regard to raw materials relative to that of machinery and equipment were true only for the year 2015. The plans for 2016–2017 have already confirmed the similarity of intentions of Russian producers in that sphere. The obvious collapse of investment plans and the obviously less than disastrous (non-crisis) scale of output decline predetermined that variance of plans across Russian industry in 2015. The situation became different in 2016, when industry was already capable of assessing the specificities of the protracted crisis of 2015–2016 and adapting to the new production conditions and the monetary policy implemented by the Bank of Russia. This was also true for the investment sector: there appeared certain signs of possible growth of investment in domestic production. Moreover, the strengthening ruble and relatively good financial result enabled enterprises to once again begin to purchase imported machinery and equipment.

The scale of import substitution planned by producers with regard to all categories of purchases (equipment and raw materials alike) was always below that of their own “import conservation” plans. In other words, industry preferred (or was compelled) to maintain the same share of imports in the purchases of new equipment and the use of raw materials.

Thus, the policy of import substitution definitely faces tough challenges, which are hard to overcome. Business surveys conducted before the December 2016 ruble devaluation demonstrated dramatic dependency of Russian industry from imports. The lack local production of necessary equipment, components and raw materials remains the main hindrance for the import substitution policy. The low quality of the local products poses a second problem. Russian industry is able to satisfy growth of import substitution demand for goods, which are already locally produced. In other words, Russian industry boasts of sufficient standby capacity. The ruble’s strengthening and successful adaptation of Russian industry to slow rolling crisis of 2015–2016 allowed the industry to cut in 2017 the scale of import substitution in their procurements to the 3-year minimum recorded by monitoring.