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R95 **Russian Economy in 2018. Trends and Outlooks. (Issue 40)** / [V. Mau at al; ed. Editors – Alexei Kudrin, doctor of sciences (economics), Alexander Radygin, doctor of sciences (economics), doctor of sciences Sergey Sinelnikov-Murylev, doctor of sciences (economics)]; Moscow: Gaidar Institute Publishers 2019. – 616 pp. – ISBN 978-5-93255-556-9

The review “Russian Economy. Trends and Outlooks” has been published by the Gaidar Institute since 1991. This is the 40th issue. 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 sphere; institutional changes. The paper employs a huge mass of statistical data that forms the basis of original computation and numerous charts confirming the conclusions.

Reviewer: Lev Yakobson, Doctor of sciences (economics), professor, first pro-rector, NRU-HSE.

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Russian industrial sector in 2018: slowdown of exiting from stagnation of 2012–2016 (based on surveys findings)¹

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.

* * *

The year 2018 became a hard one for the Russian industrial sector. On the one hand, dynamics of indicators including a wide range of measured indicators did not

¹ This section was written by S. Tsukhlo, a researcher at the Gaidar Institute for Economic Policy.

demonstrate crisis-style features. On the other hand, slowdown of positive trends registered in the Russian industrial sector seen in 2017 disaffected enterprises. Exiting from 2012-2016 stagnation slowed down in 2018.

4.2.1. General assessment of 2018

Prolonged period of industrial business surveys conducted by the Gaidar Institute and representative range of indicators permit to resolve the first task – analyze the situation in the sector in 2018 – determine the place for the year 2018 in all the 27 years since the IET launched and carried out business surveys between 1992–2018. For this purpose, we will use aggregate indicators. The latter are usually calculated on a monthly basis on the findings obtained from monthly surveys. They became widely popular owing to promptness of the findings and shortage of data released on the Russian industrial sector. However, this approach to present surveys' findings complicates assessment of each year as a whole. That is why we analyze all consolidated indicators in a year-on-year basis.

The IEP Industrial Confidence Index¹ is the most general characteristic computed by all organizations on the basis of surveys and provides the first insight into the state of business in the sector.

The Index in 2018 remained unchanged since 2017 (*Fig. 12*). Thus, the Russian industrial sector in 2018 managed to recover from the 2012–2016 stagnation. Note that the Index gives no reasons for separating the 2015–2016 period as a stand-alone crisis period. In the Russian industrial sector, the two past years saw just the continuation of stagnation (or according to terminology adopted in 2011-2014 – “the second wave of the crisis”). However, the discussion of a possibility of “the second wave” allowed the industrial enterprises astonishingly easy to face somewhat deterioration of the situation in the sector – and what is more important – pro-crisis-like verbal intervention of early 2015. Business surveys' findings provide enough ground for calling 2015-2016 “the second wave of the crisis” or (taking into consideration weaknesses of crisis-style events) – the stagnation period. In 2017, industry launched exit from stagnation but failed to continue exiting in 2018.

¹ The Index 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 finished goods inventory, 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.

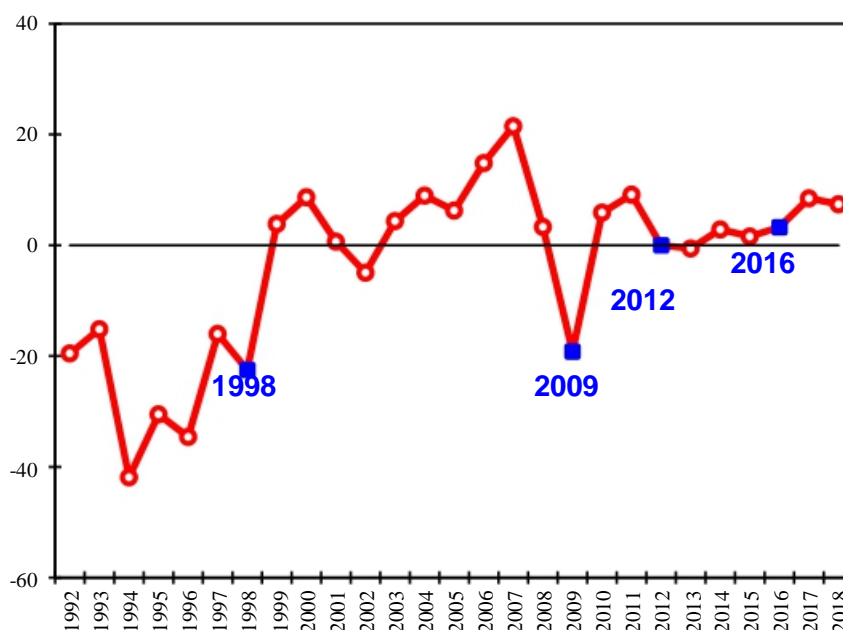


Fig. 12. IEP Industrial Confidence Index, 1992–2018, percentage points

Stabilization of the Industrial Confidence Index in 2018 was provoked by a reduction of two basic indicators out of four used in its computation, nominal growth - third and invariance – fourth.

The worsened dynamics of industrial goods demand was the key factor in 2018. According to average annual data, the balance of actual changes in sales was down 6 points and again was negative, i.e. responses about demand decline during last year were more than responses about its growth. In 2017 this indicator stood at zero and was top since 2011.

In this context, industrial enterprises opted for minimizing their excessive finished goods inventory. The balance of average annual inventory assessments was down from +7 to 0 points. Note that a small positive balance of assessments in 2017 suggested that enterprises were confident that sales could boost and fundamentally differ from the crisis surplus of finished goods inventory, which surveys registered in 1992-1996 and in 2009. Year 2015 did not see crisis surplus of finished goods inventory in industrial sector. Even on the contrary. Balance of responses regarding inventory of finished goods in crisis 2015 was below the balance of responses seen in 2014 by 3 points. In January 2015 the industrial sector registered shortage of inventory, which was very surprising for the first month of the crisis. Nominal reduction of the balance of responses seen in 2018 positively affected the change in the Industrial Confidence Index because this balance is used with a reversed sign in measuring the Index. However, such positive effect there is a fall of the Russian industrial confidence regarding the new future prospects.

Industrial enterprises' production plans in 2018 were less optimistic. The average annual balance of their expectations was down 2 points after an increase of 5 points in 2017. Note that in the first official crisis year 201, the industrial sector exhibited a

reduction of industrial optimism by less than 1 point and this indicator mainly suffered in 2016 – second year of the official crisis – coming to 5 points.

Such more negative than positive dynamics of three main indicators (demand, inventory, expectations) nevertheless did not affect the balance of major assessments of demand volumes seen in 2018, which remained at the previous year’s level when the demand indicator demonstrated fundamental growth (+25 points) after standing in 2012–2016 in the range of +2...+11 points. In crisis 2015 the balance of assessments declined by a mere 1 point. Major decline of this indicator (satisfaction with demand) following the crisis of 2008–2009 was registered by surveys in 2012 and constituted 15 points.

However, the notable slowdown seen in 2018 in recovery from stagnation after the success in 2017 affected industrial enterprises’ assessments of the situation that prevailed. The Industry Adaptability (Normality) Index for the Russian industrial sector posted for the first time since 2013 a decline in the average annual data (*Fig. 13*). This Index – is the second consolidated indicator measured according to the findings obtained in the course of business surveys conducted since 2015. Then, assessment of the situation by the Russian industrial sector – far from the non-crisis-like – made to turn attention to a business survey questionnaire asking industrial enterprises to measure their key performance figures using a grading scale: a “higher than normal”, “normal”, “lower than normal” performance. The average share of answers like “normal” shows the extent to which industrial enterprises consider their situation as acceptable, that is, the extent to which they are adapted to present economic conditions. The Industry Adaptability (Normality) Index is measured by industrial enterprises’ assessments of demand, finished goods inventory, raw and other materials, number of workers, provision of capacities and financial and economic situation.

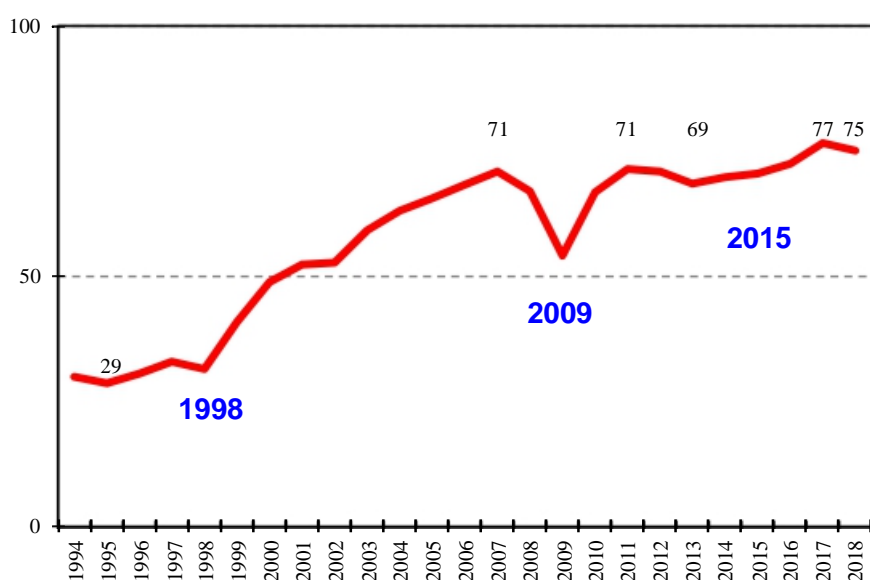


Fig. 13. Industry Adaptability (‘Normality’) Index, 1994–2018, percent

The Industry Adaptability Index for 2015–2016 revealed no crisis-related developments at that period in the Russian industrial sector, at least according to industrial enterprises. Furthermore, enterprises assessed the situation in the industry more positively in the 2015 crisis year than they did in 2014. The Index gained 1 point, hitting an all-time high that was previously recorded only in 2007 and in 2011. Another 1 point was added next year which set yet another all-time record. The first year of recovery from the official crisis of 2015–2016 (or recovery from the 2012–2016 stagnation) contributed to a substantial rise in the Industry Normality Index since 2011. The index already hit the absolute highest of 77 percent in the period of its computation during 1994–2018.

Five out of six initial components used for computing the Adaptability Index exhibited an increase in 2017. Solely estimates of finished goods inventory showed a reduction of “normal” responses by 3 balance points in the wake of the balance growth (“above normal” – “below normal”) to +7 points. However, this combination is more positive than a negative change of inventory and their estimates by industrial enterprises because speaks about the confidence of enterprises’ managers in growing demand on the output. Major contribution in reaching a record level of the Normality Index in 2017 were estimates of available industrial capacities in the industrial sector – the level of normal provision with industrial capacities moved up by around 9 points and hit an all-time high or the entire period of monitoring of this indicator in 1993–2018. This growth occurred both due to the reduction of responses “more than sufficient” and to the decreased responses “insufficient.” However, even this year the industrial sector has failed to get rid of the overhang of surplus capacities – responses “more than sufficient” were as before more than responses “insufficient,” i.e. their balance as positive. Negative balance (shortage of capacities) was registered by surveys only in 2007–2008 (the latest survey with this question was conducted in October 2008, in other words, before the collapse seen in November 2008). However, in 2009 the industrial sector got rid of the shortage of capacities and stays so up to date.

All-time high assessments of normality for the entire period of monitoring were registered in 2017 with three indicators – provision with industrial personnel, stocks of industrial inputs, and financial and economic situation of enterprises. Demand assessments hit solely a local maximum, the record of 2007 was not beaten.

However, the slowdown in positive processes in 2018 pushed down the Industry Adaptability (Normality) Index by means of a negative adjustment of 4 initial indicators, retention of assessment of the fifth one and under the nominal growth of assessments of the sixth indicator.

However, “normal” assessments of finished goods inventory at 2018 year-end hit the absolute highest in all the 27 years since the IEP launched the business survey. Zero balance of other inventory of finished goods estimates is a reflection of the fact that the industrial sector lost hopes for demand revival and on the whole got rid of even the minimal surplus of inventory of finished goods, which it usually maintains in the wake of confidence in the demand growth. Thus, the nominal growth of the share of normal

responses of finished goods inventory is most likely an adverse signal than a positive one in 2018.

Estimates of stock of industrial inputs in 2018 retained the record high level of normality (80 percent) attained by the Russian industrial sector even in 2016 and retaining token growth for the third year. This success is due to the sluggish economic dynamics of the recent years and historically better provision of enterprises with working capital.

However, “normal” provision of capacities in the Russian industrial sector dropped in 2018 by 5 points over the retention of a positive balance, i.e. overhang of excessive capacities. A similar situation was observed for enterprises’ assessments of their manpower but under a zero balance (“over” – “less”) on the whole in industry.

Enterprises’ assessments of their financial and economic situation in 2018 lost 2 points, although this indicator had the lead in the Russian industrial sector in terms of the degree of enterprises’ satisfaction, that is, most of the surveyed enterprises were overall satisfied with their financial and economic situation (“good” or “satisfactory”) (88 percent in 2018, 90 percent in 2017). The Russian industrial sector was always less satisfied with other indicators since 2003. Industry was constantly worst of all satisfied with the demand for its products (except 2007). In 2012–2016 sales volumes were considered normal by 50–52 percent of industrial enterprises – without whatever release of the indicator in 2015–2016. In 2017, satisfaction with sales moved up to 61 percent, and in 2018 nominally decreased to 60 percent (*Fig. 14*).

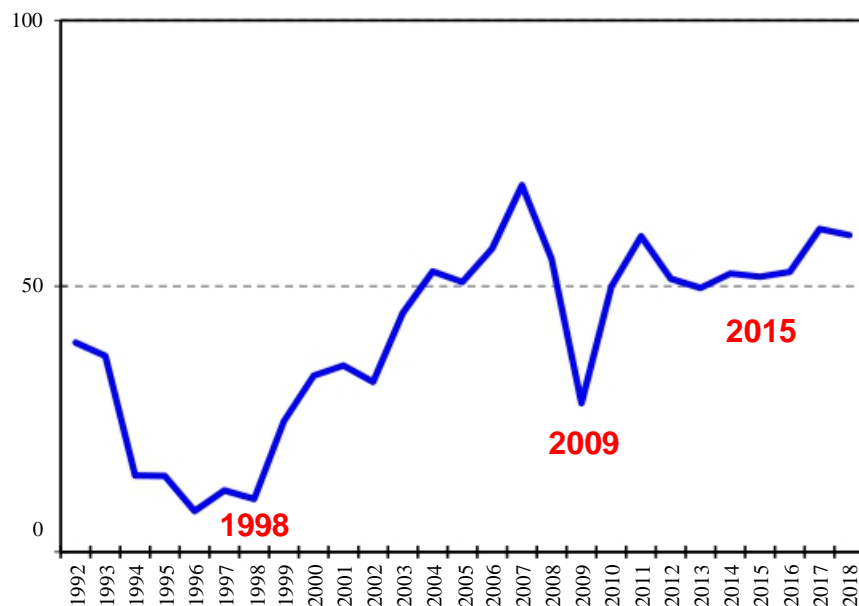


Fig. 14. “Normal” self-assessment of product demand in 1992–2018, percent

In 2018, the slowdown in recovery from the 2012–2016 stagnation affected also other projections (plans) of Russian industrial enterprises. The Industrial Prediction Index¹ lost 3 points for industry’s optimistic expectations after hitting in 2017 a local high, 5 points up (see *Fig. 15*). The Industrial Prediction Index was stable in the period between 2012 and 2016, varying between +3.6 and +5.3 points, which is another evidence that the Russian industrial sector slipped into stagnation after the recovery from the 2008–2009 crisis: there was a gradual loss of optimism in 2011 followed by transition to a stagnation in 2012.

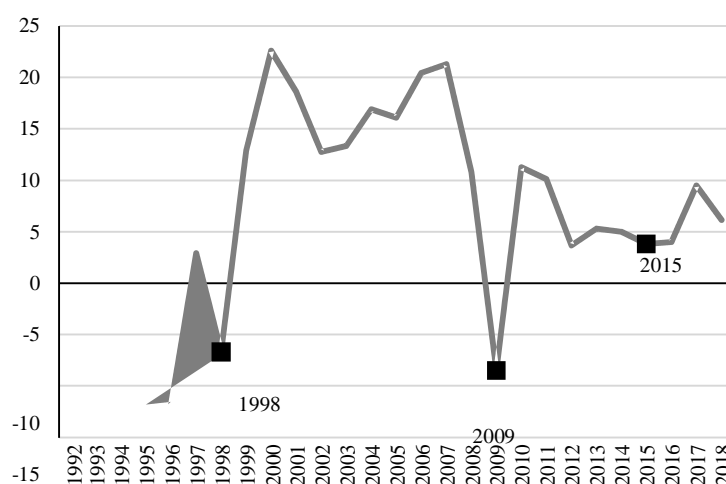


Fig. 15. Industrial Prediction Index 1995-2018, percentage points

The decline in optimism in 2018 was observed through all enterprises’ projections that were used for measuring the composite Industrial Prediction Index. Sales predictions saw most of the decline, sliding 5 points down in 2018. In 2017, the balance of predictions climbed 4 points but dropped again in 2018. Adverse balance of these projections after the crisis of 2008–2009 was registered in 2015 and constituted merely -2 points, which resulted from the pro-crisis-style declarations made by officials and experts. Output projections declined in the first crisis year by less than 1 point, i.e. the industrial sector was not prone to adjust its production program. Only in 2016 – following the change in the official rhetoric – industrial enterprises could provide adequate assessment of the current situation and downgrade their projections by another 5 points to a local minimum (+11 points). However, this decline was opposite to the crisis-style collapse of 2009 when the indicator (according to the annual average data) fell to +1 point after registering +35 points in 2017.

Occupational employment projects in 2015 were far from the crisis-like but more likely to the contrary. Balance of these projections in the first crisis year was less

¹ The Industrial Prediction Index is measured as the arithmetical mean of the balances of three questions included in a survey questionnaire: demand change forecasts, output changes plans, and expected occupational employment changes. The Index can vary from -100 to +100 points.

pessimistic, i.e. industrial sector was less prone to dismiss staff in the crisis 2015 than in the previous non-crisis 2014. This can be explained by the fact that industry at the beginning of the 2015–2016 crisis, which practically did not affect it got the chance to resolve its personnel problems – to do away with the shortage of qualified personnel – in the first place, workers. Industry continued conducting the same personnel policy in 2016 when balance of its occupational employment projections change went up but remained in the red. Industrial enterprises still planned to reduce the number of employees but at a slower pace (with balance -1 point) and minimal for 2012–2016. The Russian industrial sector produced the most pessimistic projects of occupational employment change after the 2008–2009 crisis in 2013 at -5.6 points. In the 2009 crisis year for industry this indicator plummeted from +4 to -19 points.

4.2.2. Uncertainty assessment of 2018

Enterprises' projections collected in the course of business surveys are used for the evaluation of the current economic situation and the years to come. Monthly surveys cover a large number of industrial enterprises and in case of coincident of the majority of enterprises' projections one can draw conclusion that the industry has a similar (and specific one) perception of the current situation and the prospects of its near-term development. When responses of the surveyed enterprises divide equally between three types of projects "increase", "remain unchanged", and decrease" one can speak about a total uncertainty in the economic situation – industry lacks unanimity (specificity). Totally opposite development scenarios seem equally possible for enterprises.

Direct assessment of the uncertainty during the long enough history of the IEP business surveys conducted in 1992-2018 exhibits that the popular thesis of the growing uncertainty in 2018 lacks ground. The Russian industry demonstrated a reduction of uncertainty during 2018. Moreover, in 2018 the level of uncertainty fell to an all-time low according to enterprises' projections regarding the change of three main indicators: demand, output, and occupational employment (*Fig. 16*).

Projections of the changes in occupational employment practically always had the highest degree of uncertainty. They peaked twice in the 21st century: during the 2008-2009 classical crisis years and during non-crisis style 2014. Notably, the latest upsurge of uncertainty was already stemming in 2013, and registered a downward trend in the officially crisis-style 2015. In 2016, the uncertainty of occupational employment projections plummeted to rock-bottom low for that moment.

During 1995–2018, the demand forecasting nearly always was marked by greater uncertainty than occupational employment projections. Uncertainty of these expectations hit an all-time high in the classical crisis year of 2008. It must be said that close (but lower) indices of uncertainty was obtained in 1995–1996 when the Russian industry was in deep and protracted crisis. In the officially recognized crisis year of 2015 uncertainty of demand forecasts remained at the level of the previous non-crisis 2014, which in addition turned out to be an all-time maximum. In the next crisis year of 2016 the uncertainty of these expectations exhibited next minimum, which halted in 2016 and

in 2018 continued its downward trend by breaking the record. In other words, so high degree of uncertainty of demand forecasts as in posted in 2018 was not observed in the Russian industrial sector.

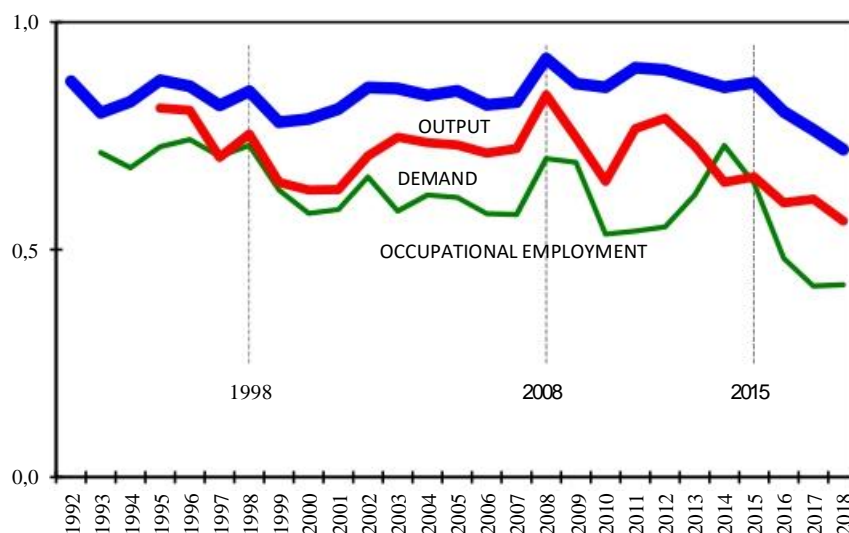


Fig. 16. Annual average assessments of the level of uncertainty of demand, output, and occupational employment forecasts, 1992–2018

Output plans tend have the highest degree of uncertainty (and correspondingly the lowest degree of certainty) of analyzed in the business surveys indicators. However, uncertainty of these expectations has approximately the same historic dynamics as the uncertainty of demand and occupational employment forecasts. Outcome of 2008 turned out to be an all-time high for the entire period of 1992–2018, i.e. both during the deep and protracted crisis of the 90s, and during the officially accepted crisis year of 2015 the Russian industrial sector boasted of more definite output plans than during the shock year of 2008. Years 2016–2018 saw industrial enterprises posting stable and most notable reduction of uncertainty – never during the previous years the industrial sector managed to demonstrate such degree of their output plans consistency, which resulted in hitting an all-time minimum of output plans uncertainty in 2018.

In the analysis of the uncertainty assessment one should bear in mind that uncertainty growth indicates solely the fact that one category of projections is predominant in the responses of enterprises without indicating the economic content of such uncertainty. In other words, technically high degree of certainty can hide predominance of any forecast scenario: growth, stagnation, and decrease. That is why the assessment of uncertainty especially in cases of clear decrease, i.e. in case of certainty increase, should be specified – forecasts of what category of change are predominant in the Russian industry.

This specification of a positive decrease of uncertainty in our case significantly reduces confidence of the first conclusions. Increase of certainty of enterprises projections seen in 2018 was due to concentration of the latter in the category “will not

change.” The share of stagnation projections in 2018 hit an all-time high for all analyzed indicators (*Fig. 17*).

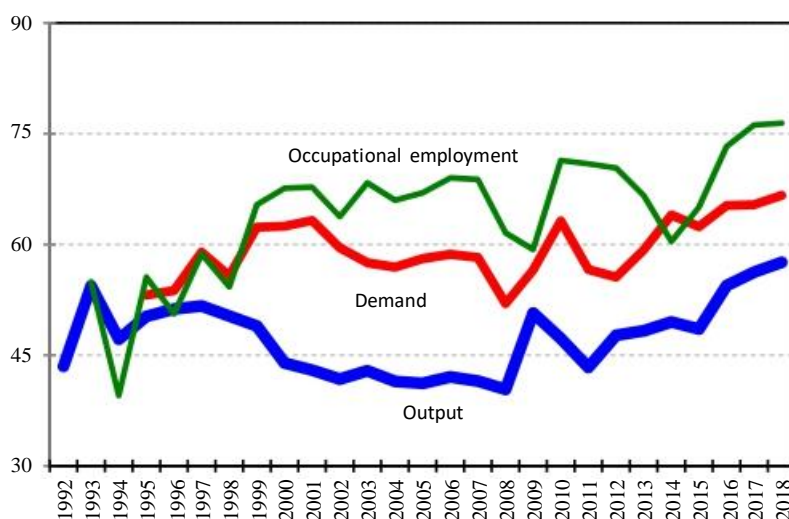


Fig. 17. Russian industry propensity for stagnation (share of stagnation projections), 1992–2018, percent of enterprises

The minimal uncertainty of occupational employment projections was defined by the share of projections “will not change” hitting 76 percent, which was registered by business surveys in 2017 and 2018. This value was an all-time high of this category of projections for all 26 years of its monitoring. Two remaining responses of a potential change in employment were divided by industrial enterprises in approximately equal parts and ensured nearly zero balance projections change.

Expectations of demand retention in 2018 were registered by 67 percent of industrial enterprises 2 points above the results registered in 2016–2017. Increase of stagnation demand forecasts in the Russian industrial sector commenced in 2012, and in 2014 the indicator hit 64 percent exceeding by 1 point the peak of 2010. The crisis year of 2015 practically did not change the share of such demand forecasts, meanwhile in 2008 these forecasts decreased by 6 points, which logically became sales reduction forecasts.

Propensity of the Russian industry to the demand stagnation exhibited significant growth at the year-end 2016 when this indicator hit 54 percent and repeated the 1993 record. In the previous stagnant years of 2012–2015, the share of projections in favor of retaining output consistently stood in the range of 48–50 percent. After 2016, stagnation projections collected merely 4 points but that was sufficient to obtain in 2018 an all-time high for the entire period of over business surveys expectations of output invariance, which stood at 58 percent.

Thus, in the enterprises’ projections of their principal indicators dominate expectations of their invariance (i.e. stagnation or stability depending on the point of view). Although the balance (the share of responses “will grow” minus the share of responses “will decrease”) of other development scenarios in 2018 remained positive. Propensity (readiness) of the Russian industrial sector to growth remained low and what

is the worst turned out to be less than in the previous 2017 across all indicators: demand, output, and occupational employment (*Fig. 18*).

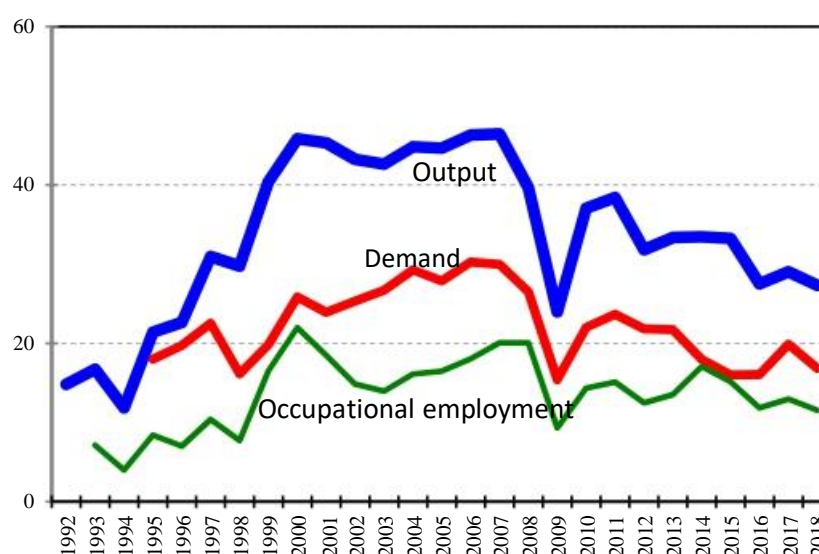


Fig. 18. Propensity of the Russian industry for growth (share of growth projections), 1992–2018, percent of enterprises

The output growth forecasts in 2018 went back to the level seen in 2016 – the second year of the official crisis. This level in addition is the worst seen since termination of the crisis of 2008–2009. Then expectations for the output growth exhibited decrease already according to the business surveys’ results of 2008, although that year solely the last quarter was considered a crisis one. The Russian industrial sector defined major plunge of the hopes for the output growth in 2009 when the share of the output growth projections decreased to 24 percent. Inferior level of projections for the production output growth was registered solely in 1992–1996. In the crisis year 2015 the Russian industrial sector retained propensity for production output at the level seen during the three previous non-crisis years. However, these years fundamentally exhibited less confidence in the production output plans than in 2010–2011 when industry was exiting from the 2008–2009 recession and was expecting a return to pre-crisis years of explosive growth and demand, and output. Stagnation decreased propensity for the industrial output growth first to the average level at 33 percent (in 2012–2015) and then – to 28 percent (in 2016–2018).

Dynamics of expectations for the demand growth after the 2008–2009 crisis has a different but also less optimistic picture. In 2010–2011, expectations for the sales growth launched a recovery growth but failed to achieve the pre-crisis years’ level and even did not hit the level of partially crisis-like year of 2008. Coming stagnation reduced expectation for the sales growth first to 22 percent (2012–2013) and then to 18 percent (2014), and to 16 percent (2015–2016). Attempted exit from the 2012–2016 stagnation in 2017 increased the share of projections for the sales growth to 20 percent, but the negative left by 2018 has decreased the hopes for the demand growth to 17 percent,

which were nearly the worst values for the entire period of monitoring of this indicator in 1995–2018.

4.2.3. Dynamics of main industrial indicators in 2018

In early 2018, main features of the lingering stagnation inherent from 2015–2016 crisis persisted. The January optimism seemed unstable for enterprises and did not result in projections' optimism. At the quarter-end, dynamics of major indicators demonstrated validity of pessimism and forced industry to come to terms with the continuation of stagnation.

In January 2018, the IEP business surveys of Russian industrial enterprises reported a rather high for recent years' demand growth for industrial goods. For the second month in a row, the balance of change remained at a level of +2 points. However, in February growth was slowing down and in March halted. By the way, demand forecasts for Q1 2018 exhibited low level of responses with preservation of positive processes seen in late 2017. Industrial sector learned from the 2015 statements that a rebound from the crisis bottom was to take place soon and failed attempt to rebound from the official crisis, as a result, exhibited reasonable cautiousness in its projections.

This approach justified itself. In 2018 the January surge of output growth rates already in February was replaced by extremely low index value. March data on output dynamics in Russian industrial sector demonstrated similar to February picture – weak growth which requires seasonal adjustment and expert handling of required positive results. In their output projections, Russian industrial sector exhibited in 2018 reasonable care (similar to demand projections). The balance of these plans hit multi-year highs in November 2017 and in January 2018 scaled back to the worst levels of 2017 and remained the same in February-March.

This demand and output dynamics together with their forecast determined in Q1 2018 rather logical and what is more important stable trajectory of estimates of finished goods inventory. In January 2018, amid upbeat demand the balance again was zero and then began gaining “weight” but highly slow and cautiously. In February, it moved up to +2 points, and in March – to +4. Thus, industry pessimistically assesses quick and final recovery from the crisis but preserves minimal surplus of stock of finished goods which speaks about enterprises' readiness to look for a way out of the stalemate of recent years.

Traditional new-year spike of factory-gate prices seen in 2018 turned out to be weaker than in 2017 – +16 points against +22 points registered a year earlier. In February, industrial enterprises in the same traditional way commenced to slow down their price growth – the balance fell to +11 points. However, in March, businesses were forced to raise price more intensively that look uncommon (the January price hike traditionally came to naught in the following months). In this case inflationary expectations experienced by Russian industrial sector were fueled by uncommonly high growth of costs which over three previous quarters exhibited transition from all-time low of +2 points to +27 points.

In early 2018, the Russian industrial sector was well provided with primary resources “amid projections of demand changes”, in other words, possible, although not quick recovery from the slow rolling 2015–2016 crisis. The shortage of qualified staff is felt by solely 11 percent of enterprises – close to the all-time low index after the default of 1998. Currently, only 12 percent of enterprises report excessive workforce, which gives zero balance of staff headcount estimates. However, this is true of the industry as a whole and the entire territory of the country. Due to the fact that labor mobility is very low in Russia certain enterprises in certain regions can suffer from the shortage of headcount. The Russian industrial sector reports less shortage of production capacities and at the same time higher overhang of production capacities surplus. However, again according to assessments of enterprises and “due to projected demand changes.” The shortage of production capacities in 2012–2017 was reported by 6–8 percent of enterprises and in Q1 2018 – 7 percent of enterprises. Sufficient provision with production capacities in 2017 reported 77 percent of enterprises which was an all-time high (1993–2017) of the Index. In Q1 2018, this index hit 73 percent with 20 percent surplus of production capacities registered in the Russian industrial sector. Thus, downbeat of investment plans has not resulted in a shortage of production capacities in the wake of prolonged recovery from the recession of 2012–2016.

In this context businesses exhibited high satisfaction with their investment plans. The investment volumes registered in Q4 2017 and Q1 2018 were seen as normal by the major part of the Russian industrial sector – 63 percent of enterprises. This is best result since 2011. Nevertheless, industrial enterprises were ready to revive their investment activity. In December-February the balance of the investment plans moved up by 16 points after a local minimum of November 2017 and again hit post-crisis maximum. However, in March the investment plans stopped gaining optimism and shed 3 points remaining nevertheless in steady “plus.”

In Q2 2018, the situation in Russian industrial sector did not undergo any significant changes. Most of Russian enterprises continued to register persistently low demand, which enabled them to confidently control their finished product inventory and maintain their output growth rate at minimum. In Q2 2018, growth in selling prices hit its three-year high, although it should be said that in June prices experienced a sharp drop.

According to the business surveys carried out by the Gaidar Institute, in Q2 2018 the demand for industrial goods did not undergo any radical changes. The change pace of the index according to traditionally somewhat understated assessments of the enterprises remained in the negative hovering around zero. Thus, product sales indicated neither a crisis-style collapse nor a decisive exit from the current lengthy stagnation. Demand forecasts were hovering around zero, thus promising no breakthroughs in the summer months of 2018.

However, such a situation had become something very familiar for the industry – so much so that 60 percent of enterprises have described their current sales volumes as normal. Dissatisfaction with the volume of demand has returned to its previous, relatively low level.

In Q2 2018, industrial enterprises were able to confidently control their finished goods inventory. The share of ‘within the norm’ assessments amounted on average to 71 percent, which exceeds the average result of 2017 (69 percent). At the same time, the balance of the other assessments (‘above the norm’ and ‘below the norm’) has been hovering around zero since the beginning of the year. However, this apparently positive result had a negative connotation, because industrial enterprises lack any hopes that sales would increase in the near future. As indicated by the entire history of our surveys, the small excess stockpiles accumulated by industrial enterprises represent a clear sign of their positive expectations.

Viewed against the background of a zero-balance of assessments concerning their finished goods inventory, the modest, but at the same time non-crisis-like demand parameters indeed enabled industrial enterprises to maintain in Q2 2018, their production output at marginally positive growth rates. Output plans have stabilized since March at a level of optimism that should be viewed as reasonable at a time of lengthy stagnation. These plans clearly indicate that industrial enterprises are determined to overcome the current torpidity.

Over the course of Q2 2018, the pricing policy of Russian enterprises underwent a number of serious changes. In April, industrial enterprises registered the most intense price growth since February 2017 and even higher one than in January 2018. However, as early as March 2018, enterprises announced that, contrary to tradition, they were not going to hamper price growth after the similarly traditional jump of prices in January due to vigorous costs growth. The April rise in this index was also provoked by a considerable weakening of the ruble's exchange rate. In May, the growth rate of producer selling prices jumped once again. As a result, over the course of the period from March through May 2018, the balance (pace of growth) increased by 11 points, thus hitting its three-year high. However, in June 2018 the situation sharply changed – the balance of actual changes in prices literally collapsed by 15 points, thus rolling back all the growth registered in March – May.

Over the course of Q2 2018, the level of occupational employment in Russian industrial sector also experienced some significant changes. In April, industrial enterprises continued personnel recruitment in the aftermath of the habitual surge in the rate of dismissals at the beginning of a calendar year. The ongoing rise in the number of personnel had been registered for the second month in a row, although, according to the recruitment plans of enterprises, it was expected either to come to a halt or to considerably decelerate in the next few months. The same conclusions were also drawn from the relatively lackluster forecasts of demand and output, and from the fact that industrial enterprises had achieved a record-high level of personnel sufficiency ‘in connection with the expected changes in demand’. At the beginning of Q2, this level of personnel sufficiency was registered by 85 percent of enterprises, more than at any time since 1996. In May, as it had been expected by enterprises, the number of industrial workers abruptly declined. However, bearing in mind that industrial enterprises registered maximum personnel sufficiency (for the entire period of observations), and

that their forecasts of demand and output were notably restrained, this circumstance should not result in an upsurge in personnel shortage in Russian industrial sector.

In the crisis conditions of 2015-2016 followed by a lengthy stagnation of 2012–2016, most of Russian industrial enterprises managed to pay their workers ‘within the norm’ wages. Moreover, during the reputedly crisis year 2015, the level of ‘normalcy’ of industrial wages (68 percent) was higher than that recorded in the non-crisis year 2014 (66 percent). In 2009, a really crisis year for Russian industrial sector, only 42 percent of enterprises considered the wages paid by them to be ‘within the norm’. And in H1 2018, as much as 80 percent of enterprises believed that their workers’ wages were ‘within the norm’.

Early in the third quarter, the Russian industrial sector experienced the biggest decline in demand for its goods in recent years. Initial balance of the sales changes literally collapsed to the level which is commonly registered in January when the whole country is on national holidays. Seasonally adjusted data show a slump to multi-year lows. In August-September the indicator went up by 8 balance points but remained in the red – demand according to traditionally downgraded assessments continued falling however not at the same pace as before. However, producers remembering previous failed attempts of complete and final exit from the crisis of 2015–2016 took the July sales decline in good spirit and 60 percent of enterprises said that they were satisfied with their sales volumes. Demand projections showed that sales would rather decline than see any buoyancy in the short term. Since April 2018, sales have consistently been at their lowest since mid-2016. The last time Russian industrial enterprises exhibited such downbeat sentiments about sales was in April 2015.

Adverse changes in the demand dynamics did not force enterprises to reassess their finished goods inventory in July. Moreover, the balance of assessment hovered around negative zero neighborhood when 74 percent enterprises said they had a normal level of finished goods inventory. In addition, the August-September period saw a slow increase in answers about a surplus of finished goods inventory–balance moved up (deteriorated) to +5 points. The surplus, however, was modest, suggests that industrial enterprises kept their finished goods inventory well under control.

Moreover, at the beginning of Q3 negative balance of the assessment of the finished goods inventory even amid the negative estimates of the demand dynamics allowed the Russian industry to retain the output from sharp adjustment. The balance of changes in the production went through adverse changes, which were not so drastic as the balance of changes in sales. The August adverse decline in the demand dynamics let the industry to adjust the real output dynamics for the better after the exceptionally bad result registered in the previous month. However, the pace of growth of real changes in production output remained negative: according to enterprises’ estimates output continued contracting although not at the same pace as was seen in July. In September, industry despite a weak demand took a risk to cross over from a nominal output reduction to its nominal growth. At the same time, the enterprises’ output plans fell at the end of Q3 to an 8-months low which still remained positive, i.e. the Russian

industrial sector's expectations for the output growth exceeded its expectations for the output decrease even amid around zero demand and finished goods surplus inventory forecasts.

Faced with weak demand, the Russian industrial sector had to switch in August to absolute cuts in prices at the factory gate. Usually, business surveys registered their minimum growth or cut in June when industry "put out" price hike seen at the turn of the year. However, in 2018 business surveys registered the highest growth not in January but in May when the balance of real changes literally surged to +22 points becoming a 40-months maximum. However, already in August the indicator plummeted to -3 points.

The situation with availability of credits for Russian industrial enterprises was stable in Q3 2018, with 66–69 percent enterprises saying their credit availability was normal. The overwhelming majority of borrowers said they had sufficient resources to service their outstanding loans. Furthermore, fundraising plans showed a more stable level in the period of 2017–2018 against 2015–2016 – at year-end 2017 there was no optimism and the demand reduction for loans seen in mid-2018 did not look so dramatic.

In Q4, the Russian industry was getting ready to face the VAT increase and correspondingly both to an increase in prices on its products and to purchased inputs, machinery and equipment. Growth of demand indicators let enterprises to exhibit positive output dynamics amid, however, control over finished goods inventory. Price forecasts also demonstrated definite growth will be already negative at the turn of 2019.

In October–December, demand indicators exhibited positive dynamics. Real changes in sales continued recovery after the July crash and added 5 points over the quarter. Demand forecasts moved up 6 points and hit maximum values during the year. The balance of assessments of finished goods inventory remained around zero amid definitive predominance (minimum 70 percent) of "normal" responses. This demonstrated enterprises' positive control over their stocks and minimal hopes for a sustainable demand growth even amid positive demand and output dynamics projected at the end of the year. In December, industrial enterprises reported sharp positive changes in the output dynamics. Both balances (actual and anticipated) following seasonal adjustment demonstrated growth by 15 points, which moved December values to maximum of the current year. However, the December surge of demand and output will be solely short-term front foot response of the enterprises to the planned by the authorities increased cost of products due to VAT increase.

Sure enough, enterprises' price forecasts in the wake of VAT growth, traditional January price hike and potential ruble devaluation demonstrated in December 2018 surge comparable with the result seen in December 2014. Then balance of inflationary expectations surged to +37 points and at present to +34 percent and outdid all interim maximums. Fast growth of products costs was another factor for the price growth forecasts. According to enterprises assessments, in Q3 and Q4 of the current year costs growth rates stood at +22 points. As a result, in 2018 industry faced the highest growth of product costs after 2015: +24 points against +14 seen in 2017, and +21 points in 2016. ~~Product costs grew at a pace (balance) +34 points in 2015.~~