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# INFORMATION CONTENT OF THE RUSSIAN SERVICES SURVEYS

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The paper explores the information content of surveys of the Russian services sector using the surveys' results since 2012Q1 to 2018Q4. To summarise entrepreneurial opinions in a one-dimensional index the indicators of confidence and business climate are calculated. To examine the reaction of GDP to impulses in the business climate indicator and to forecast GDP growth by the end of 2019, the Vector Autoregression Model was used.

The results of services surveys provide reliable information on the economic sentiment that is essential to measure recession and recovery development of the sector. Since 2013, the survey's results demonstrate a stable five-year trend of 'pessimism accumulation' in the indicators dynamics. The slight increase in entrepreneurial optimism in 2016-2018 did not result in moving confidence to a positive zone. The business climate indicator (BCI) performs better than the traditional confidence indicator in terms of synchronous correlations with GDP growth. A longer observation period needs to draw conclusions about the BCI cyclic properties; however, it can be used now to analyze the development of the Russian services sector.

Keywords: services surveys, confidence indicator, business climate indicator, Russia


JEL classification: C81, C82, L89

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## 1 Introduction

Over the past 15 years, the Russian services sector has been a driver of the economic growth. The services contribution to the national economy has reached about a half of the Gross Domestic Product (GDP). It resulted in the premature de-industrialization at the background of rather low and unstable incomes of economic agents, especially among non-resource-based exporters and households (Kitrar et al 2017; Kitrar, 2017).

The protracted nature of such development and the lack of structural reforms have become crucial for the Russian economy, especially since 2012. The adequate reforms could encourage a sustainable intensive growth, help to surmount the series of recurring crises and stagnations, to break the country's dependence on commodity prices. In our opinion, large-scale early de-industrialization coupled with the absence of noticeable sectoral structural changes hinder the economy from overcoming inefficient allocation of production factors, presence of non-competitive markets, innovations shortage, corruption, and strong dependence on the world commodity markets (Upadhyaya et al 2016).

Despite the fact that services became a dominant sector of the Russian economy, there was a lack of the essential statistical information on its development, including early response and performance indicators, as well as information on sectoral limitations. Additionally, traditional hard statistics are often revised, especially when the national economic classifications were changed.

We understand that the current official economic dynamics is not sufficient for cyclical analysis and short-term forecasting of economic variables: it became especially clear during the deep recession of 2008-2009. Limited reliable information on economic sentiment to measure recessionary events was a strong incentive to launch business tendency surveys (BTS) of services organizations, both to analyze the sector development and to construct an integrated indicator to evaluate the overall economic dynamics. We carried out two pilot surveys in 2010-2011, and then the regular survey was included in the BTS Program of the Federal State Statistics Service (Rosstat)[5].

Since 2012, Rosstat has been monitoring quarterly about 6 000 services organizations according to the methodology developed at the Higher School of Economics (HSE). The survey methodology is harmonized as much as possible with the European counterparts, in particular, with the European Commission (EC) guidelines (EC, 2017; OECD, 2003). We update the survey

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[5] The Russian BTS program was launched in the early 1990s; methodology was developed according to the Joint Harmonised EU Programme of Business and Consumer Surveys under the Tasic program (Technical assistance to the Commonwealth of Independent States). Invaluable support to developing the Russian BTS system was provided by the Statistics Directorate of Organization for Economic Cooperation and Development (OECD) and Ronny Nilsson personally; Directorate-General for Economic and Financial Affairs of the European Commission; the ifo-Institute and Dr. Gernot Nerb personally.

program using scientific research results and practical recommendations of leading institutions in the field of BTS: the National Bureau of Economic Research, the Centre for International Research on Economic Tendency Surveys, the ifo Institute, the Swiss Economic Institute, the Austrian Institute of Economic Research, as well as the joint OECD and EC projects on conducting harmonized surveys. We are guided by the intention to provide both national cross-sectoral comparisons of the surveys results and comparisons with the information counterparts of other countries. Open and transparent data is the main objective of all business tendency surveys in Russia (Kitrar et al 2015). By now, the Russian BTS cover about 31 000 industrial, construction, trade, and service firms; 22 0000 of which as well as 5 000 consumers are included in calculating of the Economic Sentiment Indicator (HSE ESI) that summarizes the main results of business and consumer surveys. The total contribution of these sectors to the national GDP is about 70%; therefore, HSE ESI is considered to track the evolution of overall economic activity in Russia (Lipkind et al 2018).

In recent decades, the tertiary sector has become increasingly more important in most economies. The share of services in the world GDP has increased from 53% in 1970 to 67.5% in 2016, while the share of industry has declined from 37 to 28% over the same period[6]. However, the manufacturing industry, which is a recognized driver of business cycles, is in the focus of most economic research but the role of services in business cycles analyses is still discussed by researchers.

Moore (1987) found that the growth of the services industry tended to make recessions shorter and less severe. He also recognized the importance of having more and better economic information on services. Layton and Moore (1989) noted, that despite its obvious importance, the service sector is somewhat underrepresented in composite economic indicators because of its milder fluctuations during business cycles. However, both services and goods clearly display cyclical downturns in growth; therefore, it is important to be able to measure the current state of growth in the service sector and to forecast its likely movements in the future.

As a whole, there is a consensus that the manufacturing remains a 'cycle-maker', while the service sector is less sensitive to cyclical fluctuations mainly due to its heterogeneity and for some other reasons. For instance, services are difficult to store and, therefore their consumption is more stable; services are less capital-intensive and so less volatile (Lee 1996).

However, some studies point out that new technology development leads to the convergence of manufacturing and services: new technologies made it possible to store services,

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[6] Authors' calculations based on UNCTADstat database;
http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=95.

for example, software, while the manufacturing industry tends to increase output of 'just-in-time production' (Wyskoff 1996).

Within the services sector, transportation is recognized as an early indicator for economic activity; consequently, many studies are devoted to cyclical patterns of this sector. Lahiri (2010) defines the classical business cycle and growth cycle chronologies for the transportation and emphasize the importance of transport indicators for monitoring cyclic movements in the total economy. The latest research results (Bello & Astolfi 2018) reveal that adding freight and passenger transportation indicators to the Composite Leading indicator (CLI) improves CLI ability to forecast the peaks and troughs of the Chinese growth cycle.

Obtaining full, reliable and timely 'hard' statistics on services is not a trivial task; the results of business tendency surveys are able to fill the gap. The harmonized European BTS of services sector was launched in 1997. The services confidenceindicator reflects quite well the sectoral development trend, although it has coincident or even lagging nature. For this reason, services indicators are used very rarely as components of the CLIs. Among 39 countries, which construct CLIs, only nine include indicators based on services survey (demand and employment expectations) in their composition (OECD 2018). However, coincident or slightly lagging survey-based indicators are ahead of the release of quantitative information (for example, services value added) since the latter is published with considerable delay and revised later.

The study by Button and Erkel-Rousse (2003) showed that the results of services BTS are very useful in assessing the intensity of cyclical fluctuations. In addition, the French case has revealed a leading nature of survey-based indicators 'expected demand' and 'expected operating profit'. The growing importance of the tertiary sector has been taken into account by the Ifo Institute in its business cycle surveys (Blau 2007, Goldrian at al 2002).

Thus, the results of services BTS in various countries provide essential information on fluctuations in economic activity that can be very useful in studying business cycles in a contemporary economy.

In this paper, we explore the capability of the Russian services surveys to track national sectoral and overall economic development. We aggregate the surveys results in a traditional confidence indicator according with the EC recommendations (EC 2017) and in an alternative business climate indicator (BCI), which is calculated based on the Russian surveys results for the first time. Due to the BCI composition (selecting a larger number of components) and calculation procedure (extracting a 'common factor'), it is expected to perform better compared to the confidence indicator in terms of tracking reference quantitative statistics. To confirm this assumption, we calculate the cross correlations coefficients between these two surveys-based indicators and GDP growth. Then we evaluate the Vector Autoregression (VAR) Model to

examine closer the relationship between BCI and GDP growth, including the efficiency of transfer of the impulse (shock) in the BCI dynamics to the change in GDP growth, the strength and direction of the shock impact, as well as the GDP adjusting duration.

## 2 Data description and methodology

The study is based on the result of regular Russian services BTS for the period since 2012Q1 to 2018Q4. Therefore, we have quite long series for their seasonal adjustment and some economic analysis, but it is not sufficient to identify their cyclical profiles.

The survey is carried out quarterly, covers about 6 000 organizations providing commercial services (except micro organizations), and includes 15 kinds of economic activities[7] according to the Russian Classification of Economic Activities (OKVED), which is compatible with the Statistical Classification of Economic Activities in the European Communities (NACE Rev. 2)[8]. The survey questionnaire and the list of surveyed economic activities are shown in Appendix.

Multivariate stratified sampling with random or mechanical selection of observation units in stratum is used; the fixed panel of companies is updated at regular intervals. Stratification is required due to the structural heterogeneity of the Russian economy; stratification criteria are kinds of activity, firm size (the number of employees) and regions. The target universe is obtained from the Statistical Business Register; the sample is representative at the level of aggregate economic activities and regions. The average response rate is about 90% because of participation in statistical surveys in Russia is compulsory for organizations and non-response practically depends on sample rotation only.

To eliminate seasonal pattern in time series of balances, the seasonal decomposition procedure is applied; we use SPSS software with the Autoregressive Integrated Moving Average (ARIMA) module.

To summarize perceptions and expectations in a one-dimensional sectoral index, we calculate the services confidence indicators in accordance with the EC recommendations (EC 2017) as the simple arithmetic average of the seasonal adjusted balances (in percentage points) of the positive and negative assessments:

- − Business situation changes over the past quarter;
- − Demand for services changes over the past quarter;
- − Demand for services expectations over the next quarter.

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[7] Freight transportation was surveyed since 2017 only; the time series are too short for seasonal adjustment and therefore not included in this paper.
[8] Until 2017, the 'old' OKVED version was compatible with the NACE Rev. 1.1.

To extract the information common for a set of survey time series that is supposed to move contemporaneously with overall sectoral activity, since 2018, we have started to construct the business climate indicator (BCI) according to the factor analyses fundamentals (principal component method). The algorithm and the set of BCI components are harmonised with European recommendations (EC 2018, 2017, 2000). The set of input series is also confirmed by statistically significant cross-correlation relationship with the reference statistics dynamics, and includes five balances (seasonal adjusted):

- Business situation changes over the past quarter;
- Demand for services changes over the past quarter;
- Demand for services expectations over the next quarter;
- Firm's total employment changes over the past quarter;
- Firm's total employment expectations over the next quarter.

According to the EC guidelines (EC 2017), the Gross Value Added (GVA) in services at constant prices should be chosen as reference statistics for survey-based indicators in services. However, it is impossible because of Russian statistics now in a (long) process of transition to a new classifier of economic activities. For this reason, GDP growth only is available as a comparable time series for a rather long period (since 2012), while the information on quarterly services GVA is available since 2017. On the other hand, services account for about half of the Russian GDP; this allows us to try using GDP growth as a reference quantitative statistics for services indicators.

To examine the relationship between services BCI and reference quantitative statistics, as well as for short-term GDP forecasting, we used the unrestricted bivariate Vector Autoregression Model (VAR); the time series are tested preliminarily for stationarity by the Augmented Dickey-Fuller (ADF) test. The VAR results were interpreted using the impulse response function (IRF).

## 3 Results

Consider the information capabilities of the services BTS based on their results accumulated by 2018Q4.

### 3.1 Recent development in the Russian service sector

The survey's results show a stable more than five-year trend of 'pessimism accumulation' in the main indicators dynamics since 2013. They reflect the weak and volatile demand for services, the deterioration in production and financial performance of services organizations and, generally speaking, the unfavorable business climate in this sector of the economy.

The movement of the main composite survey-based indicator – a seasonally adjusted *confidence indicator* – is clearly downward, with a slight improvement in 2016-2018. However, the increase in entrepreneurial optimism did not result in moving confidence to a positive zone. The indicator values are still consistently below (see Fig. 1). In the second half of 2018, the 'past' confidence components declined again and expectations only continued to improve.
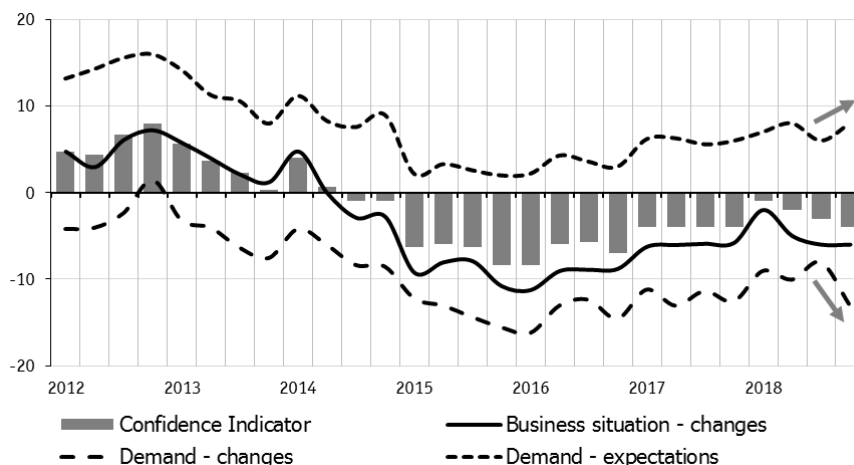


**Fig. 1 Services confidence indicator and its components; balances, %**

The short-term respondents' expectations in 2017-2018 suggested that the services sector is about to overcome a prolonged recession. However, to implement expectations, at least two conditions must be fulfilled – macroeconomic stability and recovering consumer demand; the latter, unfortunately, was not met. The survey covers mainly organizations that provide Business-to-Consumer services; therefore, the development of these organizations depends strongly on household incomes. However, in 2017, real disposable incomes of the population continued to fall (amounted to 98.8% against the previous year); poor consumer activity was the main reason for the flat path of the services confidence in 2017. In 2018, the real income started to grow but the growth rate is still insufficient to revive demand for services.

Top managers of insurance companies demonstrate the most optimistic sentiments – the confidence indicator for this segment is positive during the entire observation period[9]. The most unfavorable business climate is observed in real estate activity, repair of personal goods, and pawnshop services (see Fig. 2).

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[9] According to EC guidelines, insurance as a kind of financial services should not be aggregated with the rest of the services sector because of the idiosyncratic pattern in terms of business cycle behaviour; in this matter, the Russian practice differs from the European recommendations.
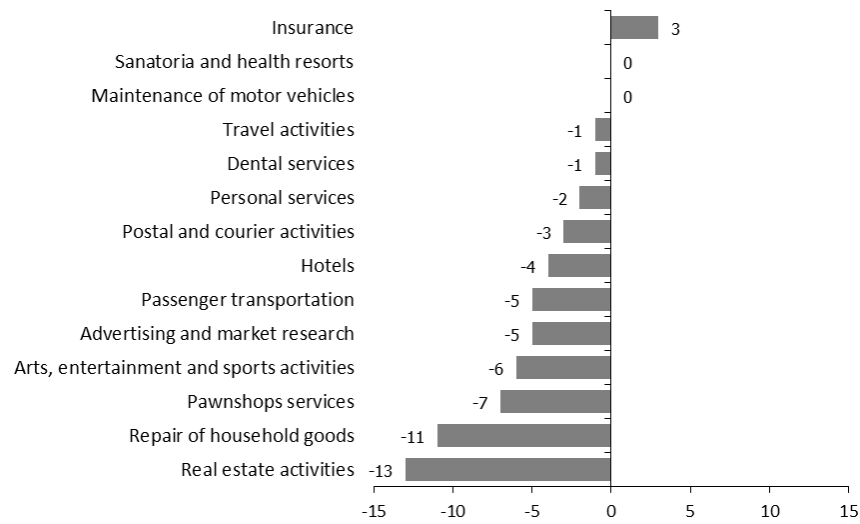
**Fig. 2 Confidence indicator among various kinds of activities, 2018 Q4; balances, %**

The *demand* for services recovers slowly and unstably showing a bumpy movement in the last two years; as a result, in the end of 2018, it only slightly exceeds the lowest value in the crisis. (see Fig. 3).
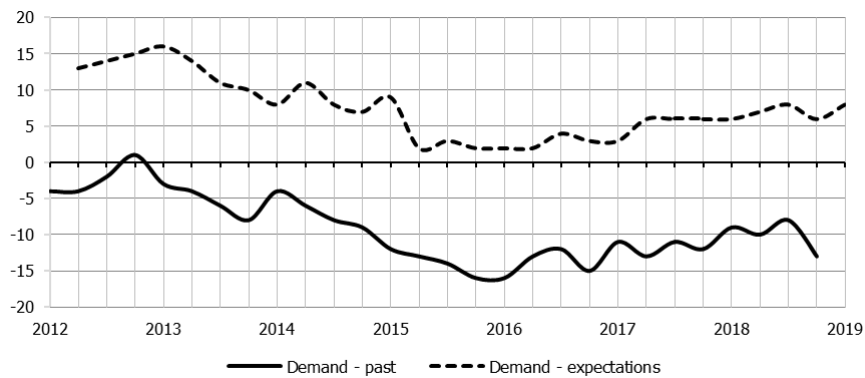


**Fig. 3 Demand for services, past changes and expectations; balances, %**

The demand for almost all observed services decreases, excepting insurance where the balance of the past demand estimates is positive. On the contrary, we see the most intense negative trend in advertising and market research, real estate activity, and pawnshop activity.

The shortage of effective demand is a key factor limiting business; 48% of respondents note its negative impact in 2018Q4. In some sectors, this problem is highlighted by more than 60% of entrepreneurs.
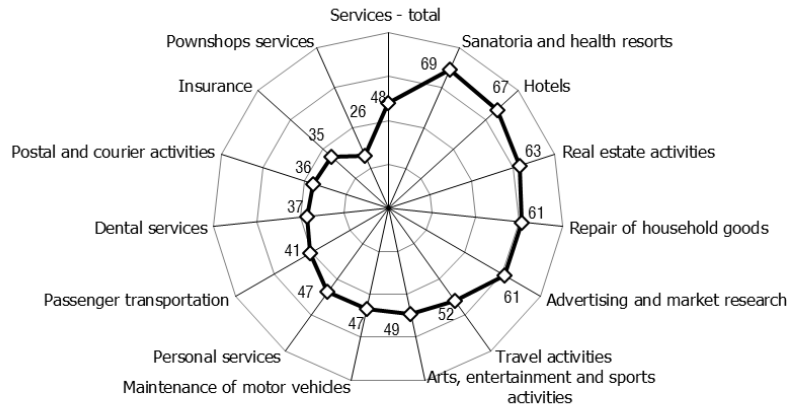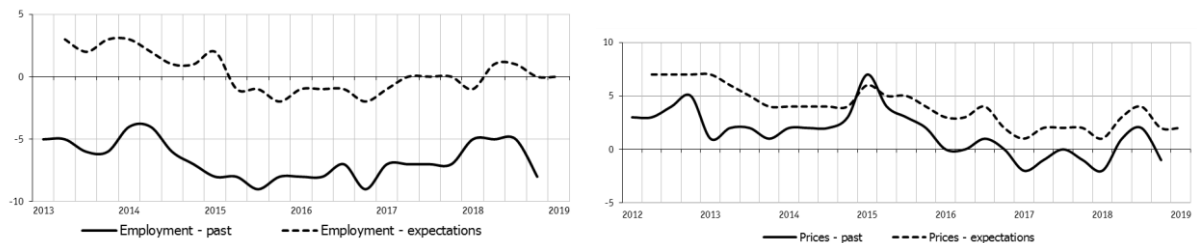
**Fig. 4 Limiting factor 'Insufficient demand'; 2018 Q4; %**

The *employment* changes in services are always negative (see Fig. 5, left graph). This does not imply the process of continuous employees' dismissal in real services business – at least, the official statistics does not confirm this – but it is rather a matter of the Russian entrepreneurs' mentality. The services provide jobs and incomes for a large part of the Russian population, especially in small cities where there are not enough industrial and construction organizations. However, the zero balance of short-term entrepreneurs' expectations at the end of 2018 indicates a probable reduction in the number of employees in most service organizations at the beginning of 2019.



Note: the employment question was included in the survey in 2013.

**Fig. 5 Employment and selling prices; past changes and expectations; balances, %**

The survey results in the last three years demonstrate, on average, *selling price* stability. About 85% of respondents noted the unchanged prices and the balance of positive and negative assessments is close to zero (Fig. 5, right graph). The price spike in 2015Q1 was determined by unfavorable economic and political events at the end of 2014 followed by a 'sanction war', fall in global commodity prices, the high currency and stock markets volatility and, finally, – the sharp currency depreciation and inflation increase.

However, a significant number of entrepreneurs (more than 20%) considers the current selling prices to be clearly underestimated relative to their 'normal' (acceptable for the current business situation) level; among them, in particular, about half of top managers of passenger

transport companies. Thus, the low inflation in services is mainly due to the inability to raise prices in conditions of weak effective demand.

Among the *limiting factors*, insufficient demand for services exerts the greatest pressure on business as almost half (48%) of respondent consider; although, it is by 4 points lower than in the beginning of 2016 (Fig. 6). The financial constraint and high taxation level are the other two main problems of services organizations.
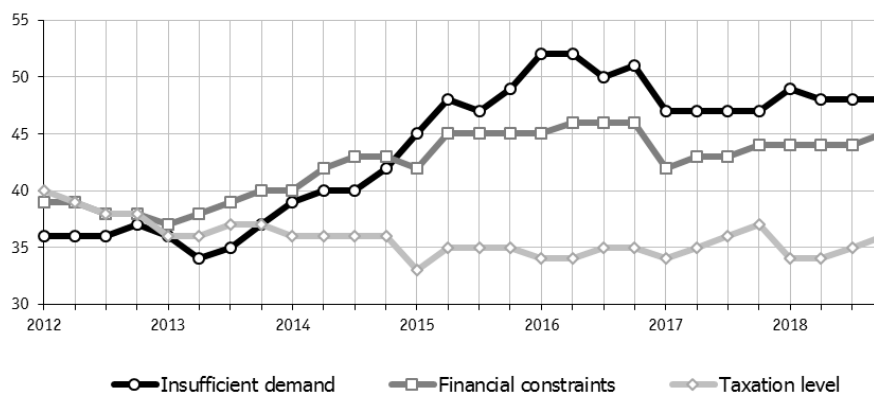


**Fig. 6 Main limiting factors, 2012-2018Q4, %**

The negative impact of unfair competition and qualified personnel shortage are marked less often. Most of respondents do not consider a lack of space and/or equipment, inadequate legislation and corruption as significant problems (Fig. 7).
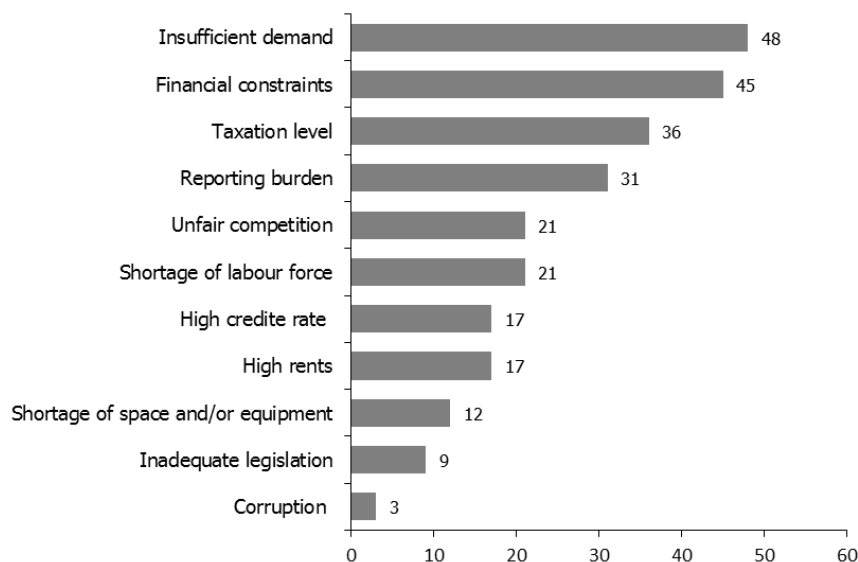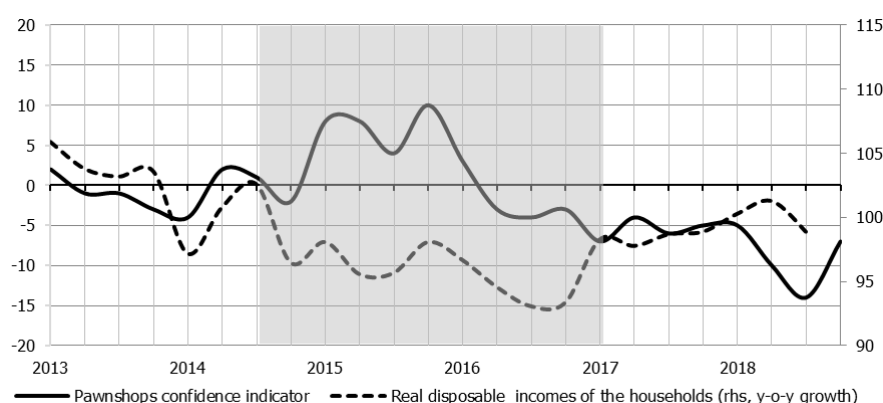


**Fig. 7 Limiting factors, 2018 Q4, %**

The limiting factor *"corruption"* is not included in the questionnaires of regular industry, construction and trade BTS due to their harmonization with the European counterparts. However, the problem of corruption in Russia is of particular interest, so this question is added to the services questionnaire. Aggregate entrepreneurial opinions seem, at first glance, encouraging: this factor is noted quarterly by 3-4% of respondents only. However,

these results contradict our knowledge about Russian business. Possibly (and highly likely), this phenomenon is explained by the fact that some (or many) business owners consider corruption as a traditional and integral part of any businesses; they include corruption costs in production costs and, therefore, do not regard them as a major problem.

According to a retrospective of the BTS results, the dynamics of pawnshop activity is usually opposite to the dynamics of household incomes (see Fig. 8). Therefore, we could use the so-called *'Pawnshop Indicator'* (actually, the confidence indicator in this segment) as an auxiliary tool for identifying possible changes in the dynamics of real disposable income of households.



Source: Real disposable incomes of households – Rosstat database; Confidence indicators – authors' calculations.

**Fig. 8 'Pawnshop Indicator' and real disposable income of households; 2013-2018Q2, %**

Pawnshops were the main beneficiaries of the recent crisis, which became an incentive for this business development. The pawnshops allow the population with low income, without a credit history and sureties, to receive cash loans. These loans are of short-term and high interest, but they help low-income individuals to receive money for living, and small business owners to obtain funds for operating expenses. Pawnshops successfully meet these vital needs, especially in crisis periods, when this kind of service demonstrates an impressive growth of business confidence while all other observed activities decline.

The rapid growth in the pawnshops segment over the period since 2014 Q4 to the middle of 2016 was replaced by the decline in 2016-2018. It suggests that the households' financial situation is gradually improving, and this assumption is confirmed by 'hard' statistics on the real incomes. However, the 'Pawnshops Indicator' dynamics should be interpreted very carefully as it could also mean that the vast part of Russians have reduced their consumption and learned how to survive without pawnshop loans.

*3.2 Business Climate Indicator (BCI)*

The results of applying the principal components (PC) analysis to the five opinion balances in services (business situation changes over the past quarter; demand for services changes over the past and the next quarters; firm's total employment changes over the past and the next quarters) are set out in Tab. 1.
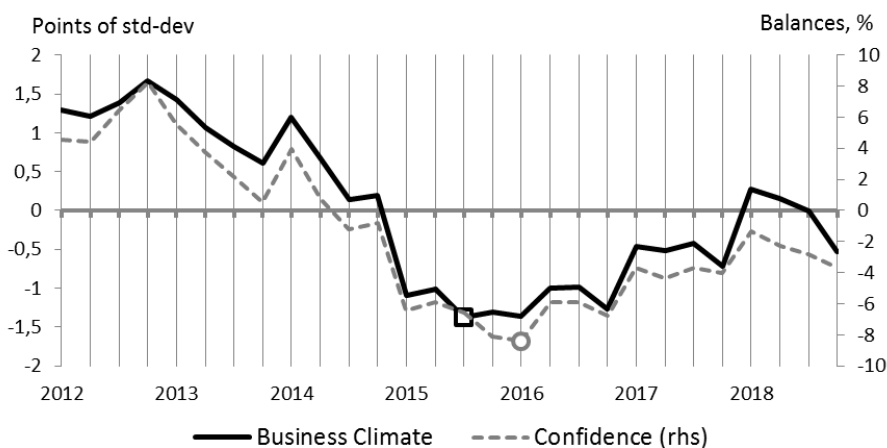
**Table 1 Eigenvalues of the principal factor analysis**

| | Components | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Eigenvalues | 4,512 | 0,288 | 0,132 | 0,042 | 0,026 |

Source: authors' calculations.

The first eigenvalue in Tab. 1 is much larger than the others; therefore, we consider the first common factor sufficient in explaining the main volume of common information in the opinions balances being pooled. The only common factor explains 90.3% of the balances total variance. These results statistically validate the PC method for summarizing survey information.

Fig. 9 shows the dynamics of two survey-based indicators in services – BCI and confidence – from 2012Q1 to 2018Q4. These indicators differ both in the set of components and in the integration method. The confidence indicator is a simple arithmetic mean of three opinions balances while the business climate indicator is a 'common factor' that combines unidirectional information from five opinions balances separated from specific fluctuations.



Source: authors' calculations.

**Fig. 9 Business Climate Indicator and Confidence Indicator in services; 2012-2018**

The direction and amplitude of the two indices dynamics, despite the differences in their composition and calculation methods, are quite close – the synchronous correlation coefficient is 0.987 – except for the period of the deepest recession (2015Q3–2016Q1). Mismatches in the bottom point chronology might be explained by the leading nature of BCI comparing to

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confidence. The cross correlations between the two surveys-based indicators and reference series for the period 2012-2018Q4 support this conclusion (see Tab. 2).

**Table 2 Cross correlations: BCI and confidence indicator with GDP growth**

|   | BCI | Confidence |
|---|---|---|
| 0 | 0.725 | 0.693 |
| 1 | 0.766 | 0.767 |
| 2 | 0.768 | 0.790 |

Source: authors' calculations.

The two survey-based indicators are predictably lagging in relation to the GDP growth dynamics: the highest positive correlations are displayed with the lag (+2) and (+1) while the correlations coefficients with one-quarter lead were noticeably lower. However, BCI performs (slightly) better in terms of synchronous and leading correlations: coefficients are 0.73 with the lag (0) and 0.57 with the lag (-1) for BCI against 0.69 and 0.54, respectively, for the confidence indicator. To draw conclusions about the BCI cyclic properties, we certainly need a longer period of observation; however, it makes sense to use it now as the main composite indicator for analyzing the development of services sector.

*3.3 VAR-modelling, forecasting*

To show the possibilities of further research, we perform VAR modelling and short-term forecasting in spite of the rather short time series of the survey-based and reference indicators. VAR modelling with the impulse response function (IRF) examines the relationship between the services BCI and GDP growth included in the model: the efficiency of transfer of the impulse in the BCI dynamics to the change in GDP growth, including the strength and direction of the shock impact, as well as the GDP adjusting duration[10].

Fig. 10 shows the GDP response to a shock in the services BCI equal to one standard deviation (Cholecky decomposition): the shock in BCI causes a statistically significant positive response of GDP, reaching a peak in the second quarter, after which the effect fades and GDP growth returns to the initial level.

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[10] Preliminary, the input variables (their first differences) were tested for stationarity through the Augmented Dickey-Fuller (ADF) test; the test results confirm stationarity of the time series (available upon request).
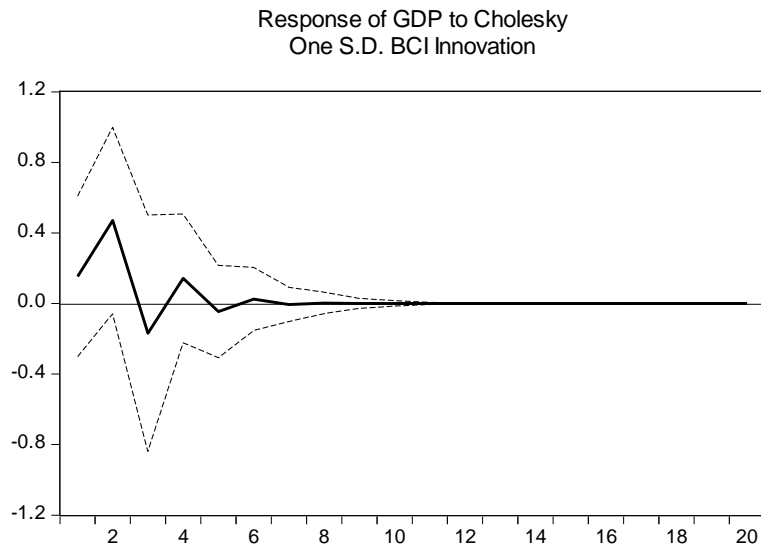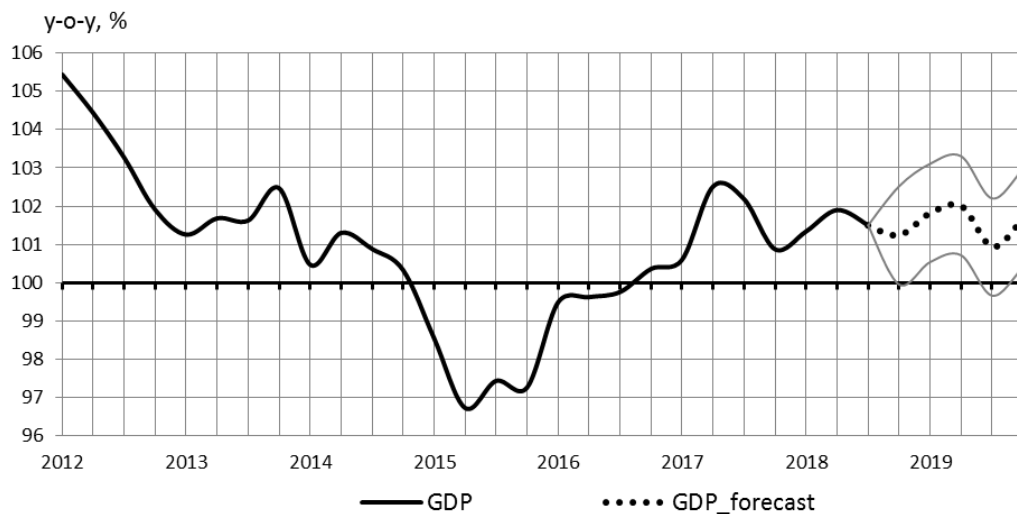
Response of GDP to Cholesky
One S.D. BCI Innovation



**Fig. 10 Impulse response of GDP to a shock in services BCI**

The GDP forecast is constructed using the same bivariate VAR model. The forecast horizon is four quarters, until the end of 2019; the confidence interval is 95%; the upper and lower limits of the confidence interval deviate from the predicted values by ½ of the standard deviation. Forecasting within the VAR framework allows the possibility of taking into account the historical relationships between two (or more) time series; this can improve the forecast performance.



Note: the gray lines indicate the boundaries of the confidence interval.
Source: GDP growth for 2012-2018Q3 – Rosstat revaluation of GDP dynamics at constant price for a given period due to a shift of the base year and implementation of the new classifier of economic activities; GDP forecast for 2019 – authors' calculations.

**Fig. 11 GDP forecasting using a bivariate VAR model (services BCI and GDP time series)**

Forecast results suggest unsteady dynamics of GDP growth: slight slowdown in GDP growth in 2018Q4 and 2019Q3 but growth acceleration in 2019Q1-Q2 and 2019Q4. By the end of 2019, the indicators value is expected to be about 101.7% compared to the corresponding quarter of the previous year.

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## 4 Conclusion remarks

In this paper, we investigate capability of the Russian BTS results to track national sectoral and overall economic development. We aggregate information in a traditional confidence indicator and in an alternative business climate indicator (BCI), which is expected to perform better in terms of tracking reference quantitative statistics. We also evaluate the VAR model to examine more thoroughly the relationship between BCI and GDP growth.

We can conclude that the services BTS results provide reliable information on the economic sentiment and business climate that is essential to measure recession and recovery development of the sector. Since 2013, the survey's results demonstrate a stable five-year trend of 'pessimism accumulation' in the indicators dynamics. Aggregate entrepreneurial assessments reflect the weak and volatile demand for services caused by the protracted decline in households' real disposable incomes. The slight increase in entrepreneurial optimism in 2016-2018 did not result in moving confidence to a positive zone.

Generally, the BTS results are combined in a confidence indicator by calculating a simple arithmetic mean for two or three indicators; in that case, positive or negative changes in a composite indicator may be the result of the increase/decrease in a single balance of opinions only. The probability of transferring the changes in composite indicator to the fluctuations in the reference time series is expected to be higher if the indicator profile is caused by the increase/decrease in a large amount of common survey information, rather than outliers of the individual indicators. This was the main incentive to create an alternative business climate indicator that extracts a 'common factor' in the dynamics of a larger amount of input data, separated from specific changes in individual indicators. Our calculations prove the initial hypothesis: the new BCI tracks the GDP growth better than the traditional confidence indicator in terms of synchronous correlations.

Insufficient length of time series of survey results limits the extraction of cyclic profile of the survey-based composite indicators and their cyclical analysis. Furthermore, the very short series of quarterly services GVA do not allow them to be used as reference series for identifying co-movement of survey-based indicators and quantitative statistics on the services development.

Several topics emerge for future investigation. First, improving the BCI composition in order to enhance its leading properties. Second, defining the services growth cycle chronology and performing cyclical analysis when the time series of survey-based indicators become sufficient long. Now we intend to start using BCI as the main composite indicator for analyzing the development of the services sector.

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**Appendix**

**Table 3 Sampling by various kinds of services activities (2018Q2)**

| Kind of activities according to the national classification | Number of units |
|---|---|
| Passenger land (excepting railway), water and air transport | 1090 |
| Public postal service, courier activities (except national postal activities), telecommunication | 520 |
| Hotels and other accommodations | 540 |
| Insurance | 100 |
| Short-term loans providing by pawnshops | 120 |
| Maintenance and repair of motor vehicles | 430 |
| Repair of housing goods | 140 |
| Personal services | 540 |
| Travel agency and tour operator activities | 230 |
| Sanatoria and health resorts | 300 |
| Dental services | 380 |
| Sport, entertainment, cultural and recreation activities | 700 |
| Advertising and market research activities | 280 |
| Real estate activities | 180 |
| Cargo transportation | 540 |
| **Total** | **6090** |

**Table 4 Questions included in the services survey (the harmonised questions are marked in bold)**

| Questions | Level; current quarter | Tendency; past quarter | Expectations; next quarter |
|---|---|---|---|
| **Demand** | + | + | + |
| Number of contracts (clients) | + | + | + |
| Volume of services | + | + | + |
| **Prices for services** | + | + | + |
| Investment | + | + | + |
| Costs | + | + | + |
| Profit | + | + | + |
| Competitive position on the market | + | + | + |
| **Firm's total employment** | + | + | + |
| **Business situation** | + | + | + |
| **Main factors currently limiting business:** insufficient demand; | | | |
| shortage of space and/or equipment; | | | |
| high taxation level; | | | |
| financial constraints; | | | |
| high cost of renting premises; | + | - | - |
| unfair competition from other organisations in the market; | | | |
| shortage of labour force; | | | |
| high percentage of commercial loan; | | | |
| inadequate legal and regulatory framework; | | | |

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