

It's Time to Exit? Determinants of New Firms Survival in Russian Manufacturing Industry

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ABSTRACT

The current situation in the Russian economy actualizes the problem of the successful survival of young companies. The article analyzes the impact of the initial regional and sectoral conditions on the prospects for the survival of companies in the Russian manufacturing industry. Against the background of the trend of reducing the number of liquidated companies per 1,000 operating companies since 2019, in the observed six-year period 2017-2022, high variability between groups of manufacturing industries in absolute values and dynamics of liquidations was revealed. For a formed sample of more than 27 thousand companies registered in 2017 in various manufacturing sectors calculated nonparametric Kaplan-Mayer risk functions for a six-year period, reflecting the impact of the time factor on the prospects of survival. A pattern has been revealed: sectors with a lower proportion of surviving companies are characterized by both a shift in liquidation peaks to earlier periods and higher risk values. Estimates in the Cox regression showed a multidirectional and significant impact on the survival of institutional, competitive, financial and consumer factors, but did not confirm the influence of the parameters of regional labor markets. The conclusion is formulated that, despite the implemented measures of state policy, the current uncertainty in the field of lending, high consumer inflation, unsolved problems of import substitution in practical terms, can increase the risks to the survival of new companies.

Keywords: Industry Dynamics of Firms, Demographics of Organizations, Liquidation of Companies, Industrial Concentration, Business Climate, Financing, Regional Economy

JEL: L16, M13, R12.

Introduction

The processes of formation of new entrepreneurship and its subsequent successful growth are a popular subject of foreign research in the field of economic policy and industrial organization. They emphasize the importance of fast-growing young firms for structural changes in the economy, economic growth and its quality, employment, development of competition, formation of new markets and product niches, etc. In recent decades, researchers have recorded trends in both the annual growth in the number of companies registered around the world, and greater accessibility and simplification of procedures for organizing a new business (even in traditional sectors with high entry barriers). However, despite these trends, still only a part of young firms are able to overcome the initial stages of their life cycle, and permanent risks of liquidation become their faithful companion [1-3].

The dynamics of liquidations and survival of companies is an important indicator of organizational demography: there is a consensus in the research community about its significance for assessing the conditions of entrepreneurship in different countries [3,4]. Countries with a higher level of development also demonstrate a higher ratio between established and early entrepreneurs [5]. A high level of company survival has a positive impact on production, regional labor markets, and the state of competition [6-9]. The ability of new firms to survive in the first years of operation is highlighted as an internal criterion of success [3].

The object of this study is the manufacturing industry, an important structural element of the Russian economy: it is the first sector in terms of share in GDP, the second in terms of the number of employees and the volume of deductions to the country's tax system. Increasing the survival rate of Russian industrial companies is an important condition for solving the priority tasks of import substitution, maintaining industrial potential, and economic development of the country. At the same time, over the past 15 years, this sector has been recording a trend towards an increase in the number of liquidations and a decrease

in the number of new enterprises created. Since 2016, the liquidation rate has consistently exceeded the birth rate [10,11], although this trend has been partly smoothed out in recent years by government support measures for the economy during the pandemic and post-pandemic periods. The current economic and foreign policy situation may have a negative impact on the survival rate of companies in a number of manufacturing industries in the future.

Unfortunately, this problem is currently very poorly represented in the domestic scientific literature, and this article to some extent eliminates this gap.

The survival of new companies is determined by both their specific individual characteristics and a wide pool of objective industry and regional conditions. The latter, in turn, are closely linked to measures of state industrial, antitrust, monetary policy, as well as with programs for the support and development of entrepreneurship. The results of this study can be used to improve regulatory instruments within the framework of these areas of state policy.

The first paragraph reveals the conceptual basis of the study; the second contains an empirical analysis of the processes of company exit, an econometric assessment of the impact of individual conditions on the duration of the functioning of young companies, and a discussion of the results; general conclusions are formulated in the conclusion.

Conceptual Basis of The Study

The conditions for the successful survival of new firms, as well as various factors that activate the risks of their liquidation at the early stages of the life cycle, are studied at the intersection of a number of areas of scientific thought.

Thus, from the standpoint of organizational theory (evolutionary approach to the analysis of firm dynamics), the survival of firms is determined by active processes of selection and learning in a competitive environment with an asymmetric distribution of limited resources [1]. The intensity of market interactions between firms and developed competition act as a mechanism of natural selection, influencing the ability to survive. In a certain sense, these processes are consonant with the Darwinian struggle for existence, in our case - young inexperienced firms, in the field of strong, large and experienced companies. Within the framework of modern organizational ecology, significant attention is paid to the balance of birth and death rates of firms, which depend largely on the capacity of market niches. In line with the ecological approach, various problems of life cycles of companies are being actively developed today, including one of the most controversial ones - the problem of survival [12]. In particular, potential threats to their existence at the early stages of the life cycle The concept of “the liability of newness” generalizes. According to it, new firms, compared to more experienced ones, fail more often, the risks of liquidation are maximum at the time of the company’s foundation, but gradually decrease with age. In terms of production and economic parameters, young firms are usually smaller than long-standing ones, which makes them more vulnerable to environmental volatility, and they require rapid growth to achieve optimal productivity [2,13].

The resource-based approach to survival analysis focuses the attention of researchers on the role of production factors as a source of competitive advantages [14]. According to this approach, the risks of liquidation of new firms are due to the scarcity of initial resources [4]. The priority task of a budding entrepreneur is to attract the optimal volume of production factors and, on this basis, to obtain competitive advantages that neutralize the risks of natural selection and increase the probability of survival [1].

In the field of industrial organization theory, the paradigm of entry barriers is known, which is of interest in the context of analyzing the problems of survival of new firms in the sense that barriers prevent the achievement of target parameters of activity and, accordingly, long-term survival. In particular, one of such barriers is the industry effect of economies of scale. Most new firms operate, as a rule, on a non-optimal scale of production, and industries with high values of minimum efficient output are characterized by high risks of liquidation and low survival rates of new firms [13,15]. In turn, the level of optimal output indirectly influences the parameters of industry concentration, high values of which favor collusion among large operators, increase the likelihood of aggressive responses by incumbent firms to the entry of newcomers [16], and influence a wide range of intra-firm processes (pricing, advertising costs, investment efficiency, incentives for innovation, etc.), thereby determining the dynamics of company density in a market niche [12].

The studies of firm dynamics, including the problems of survival, have also been developed within the institutional approach, including in relation to the Russian economic model. There are works by foreign and Russian authors that substantiate the potential influence of institutional conditions on both the birth and subsequent survival of new firms.

Survival processes are also actively discussed in line with the Schumpeterian concept of creative destruction, in which new firms play a key role by introducing innovations and competing with experienced companies using traditional technologies and business processes. When an innovative firm is competitive, it displaces existing operators. Also in this context, the question is raised about the risks of liquidation of new firms in technologically turbulent industries, where innovations are the dominant form of competition. A number of empirical evidences are provided of the presence of advantages for newcomers in such industries due to their greater flexibility, allowing them to successfully gain a foothold and grow in promising and dynamically developing market niches. In general, researchers agree that more technologically advanced and innovative firms have lower risks of exiting the market: active research and development, the introduction of innovations contribute to the development of internal company competencies, the creation of specific assets that become the basis for “positional” (due to market selection) and “adaptive” (due to rapid changes in business processes) advantages [1]. The positive effects of innovation can also manifest themselves in non-core areas of activity.

Within the framework of the theory and methods of regional economics, the influence of spatial differences on the survival processes of new firms is studied, the special role of territorial

factors at the initial stages of the life cycle of companies, their priority over intra-firm factors is substantiated [17]. It is noted that the survival of firms is associated with the context of regional diversity [18], and understanding spatial differences is extremely important for entrepreneurship support policy, its adaptation to the specifics of the local business environment, especially for peripheral territories [19], since the entrepreneurial risks faced by new firms vary significantly in different locations [4]. The central idea of theoretical and empirical studies reflecting the influence of regional specifics on survival is the presence of various externalities - external effects (mainly positive) - arising as a result of the territorial proximity of firms and the transformation of the spatial environment. It is noted that organizing a business in a region with the "right" type of economic environment (for example, from the standpoint of consumer demand and supply of production factors) allows you to effectively overcome initial obligations [4].

The results of earlier studies, the characteristics of the potential influence of individual factors and conditions on the risks to the survival of companies, as well as an econometric assessment of such an impact on the data of the Russian manufacturing industry are presented in more detail in the next section.

Analysis of the Dynamics of Exit and Survival

This section presents the results of an empirical study of inter-industry differences in the dynamics of liquidation (exit) of companies in the manufacturing industry, as well as the results of an econometric assessment of the impact of various factors on the duration of operation (survival) of a sample of firms registered in 2017 in various OKVED-2 groups of the manufacturing sector. The analysis is based on data from the Federal State Statistics Service (hereinafter referred to as the FSSS), the Bank of Russia (hereinafter referred to as the Central Bank of the Russian Federation), the SPARK-Interfax information base, the Expert RA Rating Agency, and the Public Organization of Small and Medium-Sized Entrepreneurship Opora Rossii.

Table 1 and Figure 1 show the values of the company liquidation coefficient in the context of the main OKVED-2 sections for the six-year period 2017-2022 for the Russian economy as a whole. Relatively similar trends are noticeable across all types of economic activity: an increase in values (except for the agricultural, mining, public administration and education sectors) in the 2017-2019 interval, and a decrease by 2022 relative to 2019.

Table 1: Liquidation rates of companies in individual sections of OKVED-2 in the Russian Federation in 2017-2022.

| OKVED sections | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Average for the period |
|----------------|---|------|------|------|------|------|------|------------------------|
| A | Agriculture, forestry, hunting, fishing and fish farming | 111 | 100 | 106 | 103 | 87 | 70 | 96.2 |
| B | Mining | 116 | 112 | 114 | 95 | 84 | 69 | 98.3 |
| C | Manufacturing industries | 132 | 134 | 144 | 130 | 107 | 83 | 121.8 |
| D | Provision of electricity, gas and steam; air conditioning | 112 | 105 | 115 | 97 | 83 | 75 | 97.7 |
| E | Water supply; water disposal, waste collection and disposal, pollution control activities | 119 | 113 | 125 | 122 | 92 | 80 | 108.3 |
| F | Construction | 147 | 163 | 208 | 197 | 165 | 140 | 169.9 |
| G | Wholesale and retail trade; repair of motor vehicles and motorcycles | 180 | 222 | 248 | 214 | 171 | 129 | 193.9 |
| H | Transportation and storage | 131 | 145 | 182 | 156 | 122 | 93 | 138.2 |
| I | Activities of hotels and catering establishments | 132 | 146 | 146 | 145 | 128 | 102 | 133.1 |
| J | Activities in the field of information and communication | 113 | 138 | 156 | 137 | 116 | 86 | 124.2 |
| K | Financial and insurance activities | 156 | 184 | 187 | 141 | 122 | 102 | 148.6 |
| L | Real estate operations | 81 | 84 | 85 | 73 | 65 | 54 | 73.9 |
| M | Professional scientific and technical activities | 116 | 140 | 160 | 145 | 122 | 95 | 129.7 |
| N | Administrative activities and related additional services | 123 | 148 | 176 | 171 | 143 | 114 | 145.8 |
| O | Public administration , military security; social security | 38 | 37 | 37 | 45 | 54 | 39 | 41.7 |
| P | Education | 48 | 47 | 46 | 37 | 41 | 39 | 42.9 |
| Q | Activities in the field of health and social services | 58 | 60 | 61 | 56 | 54 | 45 | 55.8 |
| R | Activities in the field of culture, sports, organization of leisure and entertainment | 99 | 107 | 99 | 88 | 78 | 68 | 89.6 |
| S | Provision of other types of services | 81 | 91 | 87 | 80 | 73 | 64 | 79.2 |
| T | Activities of households as employers | 125 | 230 | 246 | 225 | 150 | 121 | 182.7 |

Source: Based on FSGS data: <https://www.fedstat.ru/indicator/57780>

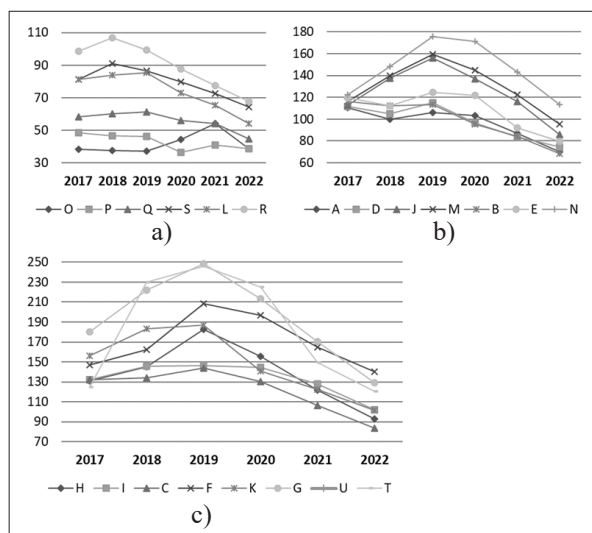


Figure 1: Dynamics of company liquidation rates for individual sections of OKVED-2 in the Russian Federation in 2017-2022

Note: The designations of the curves correspond to the first column of Table 1.

Source: Constructed according to FSGS data: <https://www.fedstat.ru/indicator/57780>

It should be noted here that the observed growth of this indicator in the 2017-2019 interval (up to 2018 in certain sectors) represents the final (and slowing) segment of a long trend formed since 2008, characterized by both an increase in the absolute number of exits and a decrease in the number of operating companies in most sectors. This trend was largely determined by a series of crises and local recessions in the Russian economy over the past 15 years, associated with both external causes (for example, the global financial crisis, international sanctions, etc.) and internal ones (a reduction in the share of the working population, technological backwardness of a number of industries, low productivity), which had a negative impact on the country's economic growth and the development of the business climate during this period.

In turn, the downward trend in most sectors in the liquidation ratio values (as well as their absolute indicators) starting in 2020, according to the authors, was due to the following circumstances. Despite the impact of the pandemic crisis, which significantly determined the economic dynamics, during the same period, unprecedented measures of state support for the economy were recorded, including a deferral of tax and social payments, suspension of inspections of SMEs, the introduction of a moratorium on initiating bankruptcy cases of enterprises at the request of creditors, a deferral of re-registration of permits, preferential lending programs for maintaining employment, etc. These measures contributed to a decrease in the absolute number of company liquidations in most sectors, the annual rate of which (decrease) began to outpace the rate of reduction in the average annual number of operating companies, which also affected the decrease in the liquidation ratio values. In turn, the dynamics of the operating number of companies was largely determined by the continuing decline in the number of newly registered firms.

At the same time, the lowest average value in the considered time interval was recorded in the traditionally least dynamic sectors: activities related to public administration, military security and social security (41.7), health care and social services (55.8), as well as in education (42.9), and the highest - in construction (170.0), activities of households as employers (182.7), wholesale and retail trade, repair of motor vehicles (194.0).

In the construction sector, high values of the liquidation ratio could be a consequence of the ongoing processes of market consolidation and the "washing out" of small and medium-sized companies in recent years. In addition, this industry has been experiencing a permanent increase in prices for production factors (labor costs, building materials and equipment, etc.), which could negatively affect the financial stability of companies and the number of bankruptcies. At the same time, such trends in the construction industry could be partly offset by government support for the sector, including programs for the comprehensive development of the territories of the Russian Federation, preferential mortgages, etc.

As for the trade sector, it has traditionally been one of the most dynamic in terms of the number of registered and liquidated companies, as well as the average annual number of operating firms. This sector has always recorded the largest number of entrepreneurial failures, primarily due to high competition. A certain impact in the analyzed period was also exerted by the decline in real disposable income of the population, as well as the factor of the Covid-19 pandemic, the accompanying quarantine restrictions and the general reduction in demand.

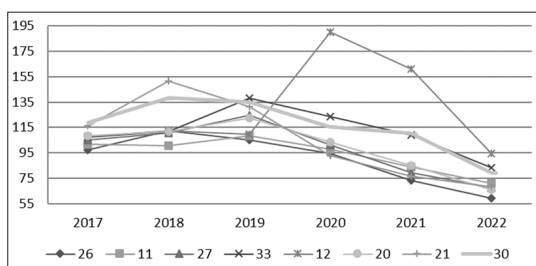
An almost two-fold difference in the average for the period in the number of liquidated organizations per 1,000 operating ones is noticeable. At the same time, other types of activity presented in the graphs were characterized by liquidation rates close to the average for the economy (approximately 110-150). In most types of activity, the peak of company liquidations occurred in 2019, after which a trend of a decrease in the number of exits per 1,000 operating companies was formed.

As for the manufacturing industry itself, despite the comparative similarity of the average dynamics of its liquidation coefficient with other sections of economic activity (Figure 1 and 2, Tables 1 and 2), there is also noticeable variability in individual groups of this sector. Thus, in some of them, peak values are recorded in 2018 (for example, in the pharmaceutical industry and the production of petroleum products), in others - in 2020 (in the production of tobacco products), but in most sectors the peak also falls on 2019. At the same time, in the production of rubber and plastic products, as well as machinery and equipment, a monotonous decrease in the coefficient values was already recorded at the beginning of the observed period.

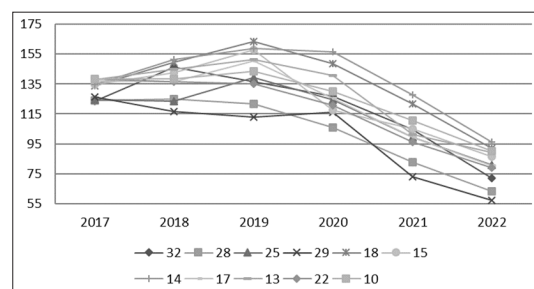
Table 2: Liquidation rates of companies by groups of the OKVED-2 manufacturing industry section in the Russian Federation in 2017-2022.

| OKVED group code | Name of OKVED group | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Average for the period |
|------------------|--|------|------|------|------|------|------|------------------------|
| 10 | Food production | 139 | 138 | 144 | 130 | 111 | 90 | 125.33 |
| 11 | Beverage production | 102 | 101 | 109 | 98 | 84 | 71 | 94.17 |
| 12 | Production of tobacco products | 108 | 112 | 110 | 190 | 161 | 95 | 129.33 |
| 13 | Textile manufacturing | 138 | 145 | 151 | 141 | 101 | 89 | 127.50 |
| 14 | Clothing manufacturing | 135 | 151 | 159 | 156 | 128 | 96 | 137.50 |
| 15 | Production of leather and leather goods | 135 | 143 | 158 | 117 | 105 | 87 | 124.17 |
| 16 | Wood processing | 179 | 164 | 179 | 171 | 142 | 105 | 156.67 |
| 17 | Production of paper and paper products | 137 | 136 | 150 | 126 | 100 | 80 | 121.50 |
| 18 | Printing activities and copying of information carriers | 134 | 150 | 164 | 149 | 122 | 92 | 135.17 |
| 19 | Production of coke and petroleum products | 187 | 206 | 180 | 175 | 136 | 119 | 167.17 |
| 20 | Production of chemicals and chemical products | 108 | 112 | 122 | 103 | 85 | 66 | 99.33 |
| 21 | Production of medicines and materials used for medical and veterinary purposes | 116 | 152 | 131 | 93 | 77 | 68 | 106.17 |
| 22 | Manufacture of rubber and plastic products | 138 | 137 | 135 | 121 | 96 | 79 | 117.67 |
| 23 | Manufacture of other non-metallic mineral products | 142 | 138 | 152 | 135 | 115 | 90 | 128.67 |
| 24 | Metallurgical production | 146 | 135 | 140 | 123 | 94 | 72 | 118.33 |
| 25 | Manufacture of finished metal products, except machinery and equipment | 124 | 123 | 139 | 125 | 100 | 81 | 115.33 |
| 26 | Production of computers, electronic and optical products | 97 | 112 | 105 | 95 | 73 | 60 | 90.33 |
| 27 | Production of electrical equipment | 105 | 111 | 125 | 101 | 79 | 68 | 98.17 |
| 28 | Manufacture of machinery and equipment not included in other groups | 124 | 125 | 122 | 106 | 83 | 63 | 103.83 |
| 29 | Production of motor vehicles, trailers and semi-trailers | 127 | 117 | 113 | 116 | 73 | 57 | 100,50 |
| 30 | Manufacture of other transport vehicles and equipment | 119 | 138 | 135 | 116 | 110 | 79 | 116.17 |
| 31 | Furniture production | 150 | 154 | 174 | 166 | 134 | 100 | 146.33 |
| 32 | Production of other finished products | 124 | 146 | 137 | 127 | 105 | 72 | 118.50 |
| 33 | Repair and installation of machinery and equipment | 107 | 112 | 138 | 124 | 109 | 84 | 112.33 |

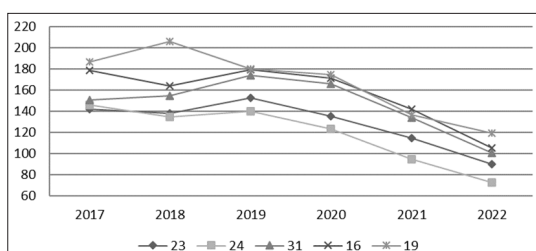
Source: Compiled based on FSGS data: <https://www.fedstat.ru/indicator/57780>



a)



c)



b)

Figure 2: Dynamics of company liquidation rates by groups of the OKVED-2 manufacturing industry section in the Russian Federation in 2017-2022

Source: Based on FSGS data: <https://www.fedstat.ru/indicator/57780>

Such inter-industry differences in the level and dynamics of liquidations in the Russian manufacturing sector deserve a separate special study. It should be noted that the analysis of foreign publications related to the study of liquidation processes or successful survival of companies does not allow us to confidently speak about universal patterns in the parameters of exit from comparable sectors, in the nature and vector of influence of certain regional and industry conditions, etc.

The results obtained differ significantly in the context of production spheres and territorial-administrative units, and the conclusions formulated for heterogeneous objects observed in certain periods are often contradictory. For example, according to the study: [20], data on the US industry show a negative relationship between the rates of production growth and the values of gross output, but data on Portugal lead to the opposite conclusions.

Some authors associate inter-industry differences in the dynamics of liquidations with the innovative and technological level of various sectors of industry, others - with economies of scale and the level of minimum efficient output, also demonstrating opposite conclusions about the nature of such influence. At the same time, according to: Renski, 2011, differences in the level of liquidation are usually more pronounced than in the level of their birth rate, which suggests greater sensitivity of the former to specific industry conditions.

The data in Table 2 demonstrate the lowest average value of the company liquidation coefficient in the analyzed six-year period in such OKVED-2 groups as the production of computers, electronic and optical products (90.3) and beverage production (94.7), and the highest - in woodworking (156.6) and the production of coke and petroleum products (167.1). At the same time, in each group of the manufacturing sector in recent years, there has been a general decrease in the exit rates of companies per 1 thousand operating ones, which corresponds to the all-Russian trend on average for all sectors of the Russian economy.

For a more qualitative and accurate study of the processes of liquidation and survival of companies, a sample of companies (over 27 thousand) registered during 2017 in various sectors of the manufacturing industry was formed. The data contain information on the liquidation of companies in the sample during the subsequent observation period or on their survival as of January 1, 2022. The description of the initial sample, its distribution by OKVED-2 groups and data on liquidations are presented in Appendix 1. The variable under study is the time interval (in months) from the moment of official registration of a company until the moment of its liquidation or termination of observations (January 1, 2022).

Methodology

Econometric analysis was carried out in the SPSS Statistics program using procedures for nonparametric estimation of survival functions and Kaplan-Meier risks (Kaplan-Meier estimate), reflecting the influence of the time factor, as well as a semiparametric model of proportional hazards - Cox regression (Cox regression), demonstrating the influence of other factors.

The value of the survival function S_t for each observed moment t_i reflects the probability (P) of the companies continuing to operate beyond this point:

$$S_t = P(t > t_i) \quad (1)$$

where t is a random moment in time of the company's liquidation. Thus, the function S_t , estimated for different industries, will show for a representative company that operated in a given industry up to the moment t_i , the probability of surviving a given moment in time.

Estimate in formula form:

$$s_t = \prod_{t > t_i}^T \left(\frac{N_{ii} - D_{ii}}{N_{ii}} \right) = \prod_{t \geq t_i}^T \left(1 - \frac{N_{ii} - D_{ii}}{N_{ii}} \right) \quad (2)$$

where T is the total observation period for the sample, N_{ii} - the total number of companies operating at time t_i , D_{ii} - the number of companies liquidated at time t_i . The probability of survival of a representative company from the initial moment of observations to time t_i is calculated in the brackets of the equation, and the product of the probabilities calculated for each t_i reflects their cumulative function for all observations over the total period T .

At the initial moment of time, the value $S_t = 1$, which then decreases, starting from the moment of the first case of liquidation in the sample.

Then the probability of liquidation (risk function assessment) at each moment of time t :

$$h_t = 1 - S_t \quad (3)$$

The Kaplan-Meier procedure allows one to generate and graphically display the cumulative survival function (or cumulative hazard function) for each point in time.

When forecasting and assessing various outcomes (events) with respect to time (time intervals or time points), Cox regression is also used with the inclusion of a number of independent variables (covariates). The application of the method is based on the assumptions of the independence of all explanatory variables, their linear influence on the risk of liquidation, and the proportionality of such risks for any two objects at any point in time. In the regression, the risk of liquidation (h) on the time interval of observations (T) for the i -th company is expressed as:

$$h_i(T) = h_0(T) \exp(\beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_n X_{in}) \quad (4)$$

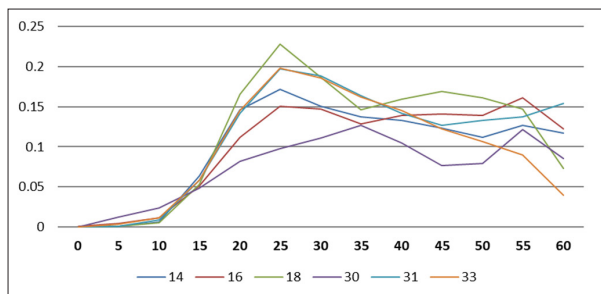
where $h_0(T)$ is an arbitrary uncertain base risk, the same for all companies with zero values of covariates (independent variables do not affect the outcome), a nonparametric component of the function that characterizes only the influence of the time factor on the risk of liquidation;

X - values of covariates (independent variables) that influence risk regardless of the time factor;

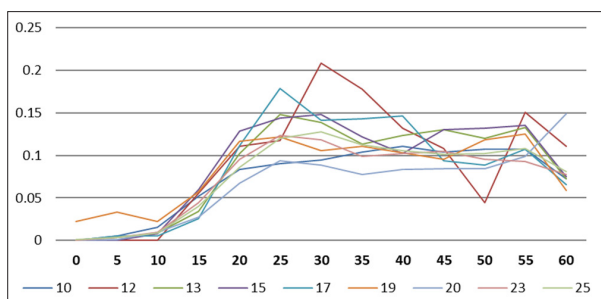
β - regression coefficients reflecting the vector and strength of influence of each covariate on the risk of liquidation: when the value of X changes by one unit (with the values of other

variables remaining unchanged), the risk of liquidation changes by $\exp(\beta)$ times. When $\exp(\beta) > 1$, an increase in the values of X will increase the risk of liquidation, when $\exp(\beta) < 1$, it will increase the potential operating time.

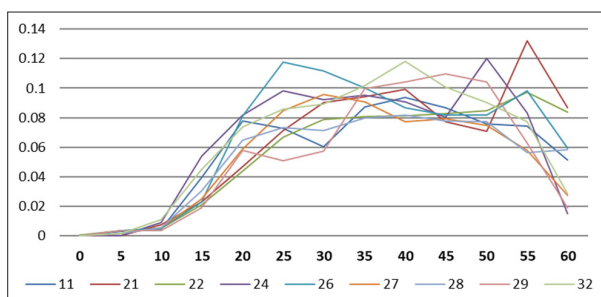
This approach is implemented in the works: Cauchie Vaillant 2016; Helmers Rogers 2010, etc and Backman, Kohlhase, Cole Sokolyk, Disney et al. [18,21-24].



Cohort A



Cohort B



Cohort C

Figure 3: Basic risk functions (Kaplan-Meier estimate) of sample companies by OKVED groups (10 - 33)

Source: Calculated and constructed based on Spark-Interfax data.

Figure 3 shows the nonparametric functions of the base risk for each group of the manufacturing industry. The graphs are grouped into cohorts (A, B, C) based on the criterion of relative comparability of the share of surviving companies in the sample at the end of the observed period. The ordinate axis shows the values of the base risk, and the abscissa axis shows the operating time of the companies in months.

The risk functions in all three cases received a U-shaped inverted form, with noticeable differences between the cohorts: in A - with the lowest share of surviving companies in the total number

of OKVED-2 registered in this group - the peaks of the risks of exit are shifted to the left (on average by the 26th month of operation), in C - with the highest share of survivors - to the right (on average by the 44th month), in B - with an average share of survivors - closer to the 30th month. It is also noticeable that in cohorts with a lower proportion of survivors, there is a higher average level of liquidation risk (A - 0.12; B - 0.09; C - 0.06).

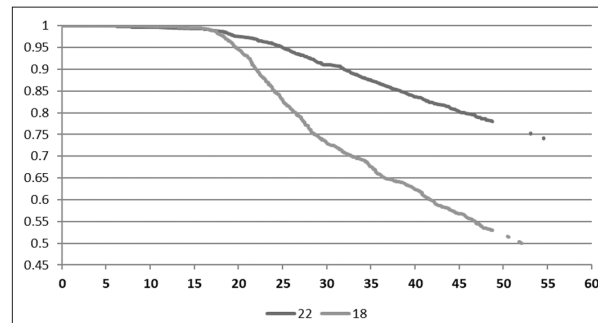


Figure 4: Cumulative survival functions (Kaplan-Meier estimate) in OKVED groups 22 and 18

Source: Calculated and constructed based on SPARK-Interfax data.

Figure 4 shows the cumulative survival curves for cohorts with the highest proportion of surviving firms (OKVED group 22 - production of rubber and plastic products) and the lowest (OKVED group 18 - printing activities). The curves reflect the accumulated proportion of surviving firms at each specific point in time. It is noticeable that in the first case, by the 50th month of the firms' operation, this proportion was more than 75%, while in the second case it was less than 55%. Despite the comparative coincidence of the start of the mass withdrawal of companies (during the first 1.5 years, only isolated cases of liquidation are recorded and the curves are parallel to the abscissa axis), differences in the rate of decrease of both functions and their volatility are noticeable. A sharper angle of decline of the function in group 18 indicates that the companies in this group had higher potential risks of earlier liquidation than the companies in group 22.

To construct a semiparametric Cox regression, the following assumptions were made regarding the potential influence of individual factors on the liquidation risks of new companies:

- A). The structure of product markets and competition parameters: In conditions of a more perfect structure of product markets, low barriers and developed competition, inefficient firms are quickly forced out of the market [9,25], which affects the liquidation rates of firms, primarily young ones [7]. At the same time, highly concentrated markets, where leaders have significant market power, are a comfortable environment for the operation of inefficient firms [25]. In the scientific literature related to the analysis of survival mechanisms, a wide range of indicators are used to assess the intensity of competition: the level of concentration [9,25-28], the number of operating companies [13,29], gross entry (absolute registration values) of new firms [17,25,30,31], the number of new firms registered in neighboring regions [16], the values of the birth rate of firms [32,33], as well as the net entry rate [28].

Thus, researchers note that industries with higher entry rates are usually characterized by higher risks for young firms [16,27,29,33], a low probability of long-term survival [25,9,27,34]. At the same time, regions with a high level of gross entry may have comfortable conditions for entrepreneurship, forming the basis for the development of human capital, which, in turn, affects the quality of new businesses and the likelihood of their survival [4]. Thus, it is possible to state certain differences in the positions of researchers.

If we talk about industry concentration, its effects on survival risks will differ in the cases of small newcomers and large experienced firms. Thus, high concentration, characterized by high values of classical indicators (HHI, CR_n), may also imply the presence of relatively high profitability, as well as favorable conditions for collusion between the largest firms. These circumstances can positively affect the price level, profitability and, accordingly, survival. The action of barriers in conditions of high concentration allows companies of non-optimal scale to function for a long time, which include most newcomers. At the same time, the presence of concentrated sectors of market power among key operators: their aggressive reaction to the entry of newcomers can increase the risks for the survival of the latter.

To assess the impact of this factor, the model includes the birth rate of companies (K_enter) and concentration (CR10) by OKVED-2 groups of the manufacturing industry.

- B) Institutional conditions and business climate: Researchers note that there should be a positive relationship between the ability of companies to successfully operate in the market and institutional conditions (the quality of institutions). In particular, a well-designed and high-quality institutional environment reduces the transaction and current costs of companies, allowing them to break even faster [4], encourages firms to innovate and increases their profitability, which is of particular importance for developing countries [8].

The business climate and entrepreneurial environment depend on regulatory impact - a wide range of administrative decisions and instruments that both determine the general conditions of activity and limit it. Such decisions traditionally include control and inspection activities in relation to business entities, restrictive regulations, the volume of reporting provided to supervisory authorities, etc. Administrative impact is also one of the important components of the investment attractiveness of a region, which, in turn, also characterizes its business environment. According to the author: Falck, government regulation traditionally puts more pressure on small businesses than on large ones [17]. At the same time, in their study of business activity, the authors: Somov, Tolmachev, refer to the variability of the entrepreneurial climate in Russian regions, which has determined negative trends in the demography of Russian entrepreneurship [35].

To analyze the influence of the business climate factor and institutional conditions, the indices of the level of administrative pressure (Adm_barr) and investment potential (Ip), entrepreneurial confidence of small enterprises in the context of OKVED-2 groups of the manufacturing industry (I_entconf), and the rank value (the first rank corresponds to the highest level) of institutional potential (r_instp) were used by region.

- C) Production and economic efficiency: According to a number of researchers, high survival rates and subsequent growth of new firms may be due to relatively (of existing firms) high productivity, economic and production efficiency. This may be indirectly evidenced by high profitability, which provides the financial resources necessary for the creation and development of specific assets of the firm (for example, advanced developments, consumer loyalty, etc.), which contribute to survival. According to the authors: Falck, 2007; Lopez-Garcia, Puente, 2006, both subjective decisions of entrepreneurs to continue the business and objective risks of liquidation are associated with profitability [17,27]. However, in the work: Audretsch, 1991, it is noted that increased profitability allows new and suboptimal firms to survive only in the short term, but not in the long term. It should also be taken into account that high profitability is usually formed in risky activities, where the probability of failure is significant, and highly profitable firms themselves are potential targets for acquisition by other industry operators [2].

The variables characterizing the influence of these factors include the industrial production index (I_prod) and the share of unprofitable organizations (Slos) in the regional context.

- D) Innovative activity of companies. Its positive role is emphasized by many researchers: at the early stages of the life cycle, it creates the basis for adaptation to future shocks, including through the development of successful niche strategies [1], forms specific assets that are difficult for competitors to copy, and which contribute to survival [14]. At the same time, attention is drawn to the fact that a highly innovative environment in the industry makes entry more risky, and the vector of its influence on the risks of liquidation can be positive [13]. It is also noted that the impact of innovation on business survival in a particular location is not determined a priori, and studies based on specific narrow industries and data sets do not allow generalizations and extrapolation of results to other areas [13].

Among the indicators characterizing the level of innovation activity, the indicator is often used in foreign studies the amount of R&D expenses. These include a wide range of costs: from material costs for research and development and wages to contributions to specialized funds for innovation activities and the acquisition of intellectual property rights to inventions.

To take into account the innovation activity factor, the model includes R&D expenses in the region's manufacturing industry per operating enterprise (R&D).

- E) Financing: A number of studies of firm survival processes emphasize the special role of financial factors that determine subsequent success, primarily at the start of entrepreneurial activity [14,32,36]. The author: Karlsson et al., rightly notes that financing is a classic problem of entrepreneurship: since new firms are usually created on a scale smaller than the minimum efficient industry output, they have a high risk of rapid bankruptcy, and external financing is necessary to achieve an efficient level of production [4]. However, despite the assumption of widespread availability of financing for promising and potentially profitable projects, empirical studies demonstrate significant spatial differences in such availability.

In this context, particular attention is paid to bank lending by researchers, the views on the potential effects of which differ. Thus, according to Pellegrini, Muccigrosso, 2017 [37], the imperfection of the credit market entails a high percentage of failures of new firms: the latter can rely mainly on their personal start-up capital and revenue from current operations. However, the authors: Fotopoulos, Louri, 2000, refer to evidence that firms with a high share of borrowed funds have worsening survival prospects [38]. A high burden of servicing credit debt forms overdue debt, the inability to repay which is a typical economic cause of bankruptcy and mortality of companies [10,32]. However, the authors: Guariglia et al., 2016, while empirically confirming a similar thesis, note at the same time that this applies, first of all, to young and non-exporting firms dependent on banks [36].

In order to take into account financing aspects, the model includes the volume of issued bank loans (A_d) and the amount of overdue debt on them (A_h) per region and per operating manufacturing enterprise.

- E) Parameters of demand and labor markets: The survival prospects of newly created firms may depend on regional demand: its high growth rates, being an indirect sign of the growth of economic well-being of the population, help to increase motivation to start a business, reduce barriers to entry due to the formation of new market niches, and improve the economic prospects of new firms. In regions with sufficient demand, it is easier to find clients [7]. Newly created firms are dependent on local demand, since they usually do not have sufficient resources to serve remote markets and carry out export operations [4]. The amount of available demand also determines the extent to which newly created firms are able to use economies of scale. In conditions of too low demand (including for the goods of

a specific firm), it is extremely difficult for a new firm to survive due to the burden of fixed entry costs, the inability to recoup them and receive sufficient profit for successful development. In turn, the conditions of regional demand affect the dynamics of investment, total employment and productivity, which also indirectly determines the conditions of survival.

An important characteristic of the regional economic environment is the state of local labor markets, which not only influences the total number of potential entrepreneurs (competition factor), but also characterizes the environment in which new enterprises are created and operate [39]. Labor market parameters can influence aggregate demand, and a decrease in the latter during periods of rising unemployment increases the risk of firm liquidation [7]. In turn, employment growth can be considered as an indicator of the overall economic strength of the region, which determines the chances of survival [13].

The labor supply in regional markets is differentiated by the educational level of the active population [40,41]. More educated individuals have better opportunities to absorb and use information, implement new ideas and introduce advanced technologies, so the availability of skilled and educated labor is crucial for new firms in terms of their productivity growth and the likelihood of subsequent survival [4,42].

To assess the impact of the above regional factors, the model includes the consumer confidence index (I_consconf), the deficit of cash income per household (Def), the growth rate of average monthly nominal accrued wages (Waga), the growth rate of the share of people with higher education (Edu), and the unemployment rate (Unemp_r).

Table 3: Model Evaluation Results

| Covariates | Coefficients (β) for different model specifications | | | | | | Statistics for specification 6 | | | | |
|------------|---|-----------|-----------|-----------|------------|------------|--------------------------------|------------|---------|---------------------------------------|-------------|
| | | | | | | | St. osh. | Test Valda | Exp (β) | Confidence interval (95%) for Exp (β) | |
| | 1 | 2 | 3 | 4 | 5 | 6 | | | | Lower limit | Upper limit |
| K_enter | 0,001*** | 0,001*** | 0,001*** | 0,001*** | 0,001*** | 0,001*** | 0,000 | 41,411 | 1,001 | 1,001 | 1,001 |
| CR10 | 0,000 | -0,001** | -0,001** | -0,001** | -0,001** | -0,001** | 0,000 | 6,725 | 0,999 | 0,998 | 1,000 |
| Adm_barr | - | 0,123*** | 0,109*** | 0,089** | 0,107*** | 0,138*** | 0,031 | 19,861 | 1,148 | 1,080 | 1,220 |
| I_entconf | - | -0,008*** | -0,009*** | -0,009** | -0,002 | 0,005* | 0,003 | 3,747 | 1,005 | 1,000 | 1,011 |
| r_instp | - | -0,001 | -0,001 | -0,000 | -0,001 | -0,003** | 0,001 | 5,546 | 0,997 | 0,994 | 0,999 |
| Ip | - | 0,056*** | 0,054*** | 0,052*** | 0,055*** | 0,048*** | 0,009 | 31,389 | 1,049 | 1,032 | 1,067 |
| I_prod | - | - | -0,017*** | -0,025*** | -0,022*** | -0,020*** | 0,004 | 31,015 | 0,980 | 0,974 | 0,987 |
| Slos | - | - | -0,003 | -0,005 | 0,002 | 0,008** | 0,003 | 5,290 | 1,008 | 1,001 | 1,014 |
| R&D | - | - | - | 0,02e-2** | 0,03e-2*** | 0,03e-2*** | 0,000 | 22,986 | 1,000 | 1,000 | 1,000 |
| A_d | - | - | - | - | -0,004*** | -0,005*** | 0,001 | 58,413 | 0,995 | 0,993 | 0,996 |
| A_h | - | - | - | - | -0,129*** | -0,168*** | 0,026 | 42,492 | 0,845 | 0,804 | 0,889 |
| I_consconf | - | - | - | - | - | -0,012** | 0,006 | 4,217 | 0,988 | 0,977 | 0,999 |
| Def | - | - | - | - | - | 0,04e-3*** | 0,000 | 38,950 | 1,000 | 1,000 | 1,000 |
| Waga | - | - | - | - | - | -0,025** | 0,010 | 6,609 | 0,976 | 0,958 | 0,994 |

| | | | | | | | | | | | |
|---------------------|----------|---------------|---------------|---------------|---------------|---------------|-------|--------|-------|-------|-------|
| Edu | - | - | - | - | - | 0,021** | 0,007 | 10,296 | 1,021 | 1,008 | 1,035 |
| Unemp_r | - | - | - | - | - | -0,022 | 0.015 | 2,124 | 0.979 | 0.951 | 1,007 |
| -2 Log-likelihood | 204961,4 | 200562,1 | 200514,2 | 184219.6 | 184154.7 | 184074,3 | - | - | - | - | - |
| Chi-square | 56.5 | 868.2 | 910.2 | 857.6 | 911.7 | 988.6 | - | - | - | - | - |
| Significance models | 5.4e-13 | 1 , 26th - 90 | 3 , 65 e-1 06 | 8 , 53 e-1 79 | 1 , 79 e-1 88 | 3 , 01 e-2 00 | - | - | - | - | - |
| N | 27129 | 26599 | 26599 | 24285 | 24285 | 24285 | - | - | - | - | - |

Descriptive statistics of the variables included in the model, as well as data sources, are provided in Appendix 2, and the matrix of paired correlations is given in Appendix 3.

The results of model evaluation (Table 3) showed the following.

The value of Exp (β) for the variable K_enter was 1.001, which allows us to conclude that the level of entry of new companies has a negative (although not very significant in the economic sense) effect on survival: the higher it is, the greater the risks for the subsequent survival of a representative company in the sample. In our case, the risks of potential liquidation under the influence of this factor increase by 0.1% with its increase by 1%. An obvious reason for such a dependence can be the increased competition, including for production resources and sales markets. Such a vector of influence (negative for the survival of companies and positive for the growth of the risks of their liquidation) is consistent with the results of the study by the authors: Jensen et al., 2008, which showed that industries with a high level of gross entry are also characterized by a significant exit of firms, primarily young ones [27]. The author of Falck, 2007 comes to a similar conclusion [13]. At the same time, stable values of the coefficient (β) are noticeable in all specifications of the model.

The value of Exp (β) for the CR10 variable equal to 0.999, contrary to the assumptions voiced above, demonstrated that with an increase in this indicator by 1%, the risks of liquidation of new companies decreased by 0.1%. At the same time, a low economic influence of this factor is also recorded. In this context, it is appropriate to cite the opinion of the authors: Geroski et al., 2010, who noted that the results of studies on the relationship between survival and concentration parameters seem unconvincing, and the mechanism of the influence of concentration on survival is very complex [21]. Also, the data of the authors: Mata, Portugal, 1994, showed that expectations of aggressive retaliatory actions did not restrain the entry of new firms, and the concentration variable also turned out to be insignificant for their liquidation indicators [16].

Indicators characterizing the parameters of the regional business climate demonstrated the following impact on the survival of companies in the sample:

A 1% increase in the administrative pressure indicator in the region (Adm_barr) increased the risks of liquidation by 14.8%. This vector of influence is intuitively understandable and consistent with the provisions of economic theory and the results of empirical observations. Indeed, administrative barriers are often listed among the most significant of the negative conditions for the growth and development of firms, and potential measures to reduce them are traditionally reflected in the relevant state

programs to support young entrepreneurship. This factor turned out to be one of the most significant in the economic sense in the entire set of covariates studied in the model.

Contrary to expectations, the indices of entrepreneurial confidence ($I_entconf$) and regional investment potential (I_p) had a negative impact on the probability of survival of start-up companies. Their increase by 1% increased the risks of liquidation by an average of 0.5% and 4.9%, respectively. A similar impact was demonstrated by institutional conditions (r_instp). The lower the place occupied by the region in the ranking by institutional conditions (a higher rank value corresponded to worse conditions), the lower the risks of liquidation. This impact can be explained as follows. On the one hand, a high level of entrepreneurial confidence, high investment and institutional potential of the regions potentially indicate a comfortable business climate, which, according to theoretical assumptions, should improve the survival prospects of young firms. However, on the other hand, this positive (from the standpoint of survival) effect can be offset by a negative one, caused by a high level of entry of new firms and an aggressive competitive environment: a favorable business environment attracts many operators. And there is empirical confirmation of this explanation.

Thus, Moscow, occupying first place in the base year of 2017 in terms of the investment potential index (14.87), institutional potential (first highest rank), the birth rate (entry) of companies per 1,000 operating companies (127.2), and sixth place in the entrepreneurial confidence index (5.0), was among the top ten regions in terms of the highest liquidation rate per 1,000 operating companies (136.9).

In turn, the Chukotka Autonomous Okrug, a region with one of the lowest levels of socio-economic development in the country, was among the top five regions in the same period with the worst parameters of investment (0.28) and institutional potential (84th place), entrepreneurial confidence (-16), and among the top five regions in terms of the lowest liquidation rate per 1,000 operating companies (70.1). At the same time, the birth rate of companies (88.6) exceeded the exit rates in this district, which was a rather atypical trend for Russia.

As for the pool of production and economic indicators, their influence in the model was manifested as follows. Regions with a higher level of industrial production growth (I_prod) were characterized by a lower level of liquidation risks of new companies, and with a higher share of unprofitable organizations ($Slos$), respectively, a higher level of such risks. Such results were generally predictable. At the same time, it is difficult to confidently link industrial growth in regions with high

productivity and survival of new firms at this stage; this aspect requires special research. However, our estimates are consistent with the results of other works, in particular, the authors: Burke et al., 2008, who claim that production growth can lead to an increase in industry prices above long-term average costs, increasing the margin, which, in turn, has a positive effect on profitability and survival rates [25]. And, on the contrary, an increase in losses at companies logically characterizes a deterioration in the market prospects of the latter, influencing the decisions of entrepreneurs to continue their activities.

The influence of the factor of innovative activity of companies in the manufacturing industry (R&D), although it turned out to be statistically significant, appears to be of little economic significance. Nevertheless, the estimates show a certain positive connection between the growth of such activity (in the form of R&D costs) and the increase in the risks of liquidation of new companies, which may be due to the difficulties of survival in a more difficult for competition highly innovative environment. Thus, according to: Renski, 2011, in industries with high capital intensity, intensity of research and development, both difficult entry conditions and fairly low survival rates of new firms are usually recorded. This result is consistent with the position of the authors: Fritsch et al., 2010 [13]. Also in the work: Brixy, Grotz, 2007, an interesting observation is made: high R&D activity, which is negatively associated with the survival of companies, is a typical feature of agglomeration areas, in which competition between young firms is stronger than in rural areas [7].

The estimates obtained by adding financial factors to the model are interesting. In particular, in regions with large volumes of issued bank loans per one operating enterprise in the manufacturing industry (A_d), lower risks of liquidation were noted in the sample of companies under consideration. And this result was intuitively predictable, confirming the previously voiced thesis about the importance of a developed banking infrastructure and accessible financing for the survival of new firms. It is also consistent with the results of other studies.

However, contrary to expectations, in regions with a high level of overdue debt of the manufacturing industry on loans (A_h), lower risks of company liquidation were revealed: an increase in overdue debt by 1% led to a decrease in such risks, on average, by 15.5%. Also, along with the indicators of administrative pressure in the regions, this factor turned out to be one of the most significant in the model. It should be noted here that overdue payments on loans allow companies to maintain a reserve of working capital in the short term. With a short-term overdue debt, banks usually do not carry out active measures to collect it, therefore, the company's retention of debt can be important in the context of financial stability. And this assessment is consistent with the result of the study: Lopez-Garcia, Puente, 2006, which showed that the presence of debt up to a certain level can have a positive and significant effect on the prospects for survival. However, it is important to consider both the amount of overdue debt and its share in the total loan volume and the duration of non-fulfillment of obligations to banks. In addition, in recent years, various schemes for restructuring overdue debts, paying them off with a significant discount, extending payment terms, etc. have become widespread in the Russian credit sector.

As for the indicators potentially characterizing the state of demand, there was a positive impact on reducing the risks of liquidation of the level of consumer confidence (I_{consconf}) and the growth of the average monthly nominal accrued wage ($Waga$), but a negative impact of the deficit of cash income per household (Def). These results are quite expected and explainable: higher consumer confidence is usually associated with more favorable parameters of regional demand and greater purchasing activity of the population. An increase in the total income of the population and a reduction in its deficit provide the corresponding economic prerequisites for the growth and differentiation of consumption. In turn, the diversity and positive dynamics of demand create a favorable business environment with a large number of potential niches comfortable for the survival and successful growth of young firms.

Model estimates show that in regions with higher growth rates of the share of people with higher education in the total number of employees, the risks of company liquidation increased. This conclusion contradicts the results of individual studies that have revealed a positive role for the prospects for the survival of companies of the educational level of the employed. However, it can be explained by the fact that the latter also acts as a factor in the growth of labor costs: wage requirements are usually higher for more educated people, who, moreover, more often find employment in areas other than manufacturing. For example, strong positive correlations were found between: a) the share of educated people and the average nominal wage (two-sided Pearson = 0.9), b) the share of educated people and the shortage of highly skilled workers (0.82), c) the latter and the average nominal wage (0.72).

Finally, the model did not show a statistically significant effect of the unemployment rate ($Unemp_r$) on the liquidation risks of the sample companies. This result is partly consistent with the findings of the study: Brixy, Grotz, 2007, which revealed weak links between regional unemployment and survival, while contradicting the findings of a number of other foreign authors, which can be explained to a certain extent by the low average unemployment rate in the country as a whole (less than 5% in 2017) [7]. This aspect deserves separate study.

In the further development of this study, it is of interest to take into account other covariates that are potentially significant for the risks of liquidation of manufacturing companies: the structure of the regional economy, the population size and level of urbanization, the level of diversification, the state of the infrastructure, the effects of agglomeration and business cycles, etc. Some of them are not considered in the model due to the lack of adequate statistics at this stage or the emerging problem of multicollinearity. It can be assumed that in alternative specifications certain changes in the estimates of the influence of previously studied factors will also be observed.

Conclusion

The results of the study allow us to formulate the following conclusions:

In most types of economic activity in Russia in the period 2017-2019, trends of growth in the number of company liquidations were recorded, and after that (by 2022) - a decrease. Similar trends were identified in most industries (OKVED-2 groups) of

the manufacturing industry. At the same time, there was a strong intersectoral differentiation of the values of the liquidation coefficient normalized per 1 thousand companies, which is explained by both specific internal industry conditions and exogenous economic factors.

Estimates of the obtained U-shaped inverted functions of the base risk showed inter-industry differences in the average peak values of company exits, as well as their shift to earlier/late points in time: industries (OKVED-2 groups) with a higher level of company survival in a six-year interval are characterized by both later peaks of liquidations and a lower level of risks.

The formed sample of companies registered in 2017 in various groups of the manufacturing industry and observed in this study until 2022 made it possible to assess the influence of a number of industry and regional factors operating in the base year of 2017 on the risks of subsequent liquidation. In total, such an influence turned out to be significant, but multidirectional. In particular, the greatest negative contribution to the survival prospects of the sampled companies was made by the conditions of the business climate in the regions - administrative pressure and investment potential, and the positive one - by financial conditions and the state of regional consumer demand. In addition to them, the multidirectional influence was manifested in terms of competitive environment conditions, production and economic efficiency of companies, and innovative activity. At the same time, contrary to assumptions, the influence of local market parameters turned out to be statistically insignificant. The results obtained in a separate part both agree with and contradict the conclusions of a number of foreign researchers working in this area, which can be explained by both differences in the methodology used and in the objects under study and periods of the business cycle.

The current economic situation, determined to a large extent by the low exchange rate of the ruble, export trade restrictions (as a result of sanctions pressure) against the background of high imports of finished products (including within the framework of parallel imports), dependence on foreign production resources complicates the functioning and subsequent survival of young companies in many sectors of the manufacturing industry.

The further development of the situation with the dynamics of the key rate of the Bank of Russia (15% as of November 2023) remains uncertain, which already today has a negative impact on the availability of borrowed funds and the terms of lending to companies (primarily SMEs), especially for long-term investment purposes. It can be assumed that the negative consequences of the high cost of borrowed funds may manifest themselves most clearly as early as 2024. Consumer demand is also under strong pressure against the backdrop of rising inflation today, which may continue to shift towards cheaper (compared to Russian) consumer products. Both of these factors, according to the results obtained in the study, will increase the risks for the survival of domestic companies. At the same time, the prospects for import substitution programs, which could potentially give impetus to production growth in a wide range of industries, remain uncertain in practical terms (despite certain support measures announced by the state).

At the same time, among the positive trends in government regulation that could potentially improve the survival prospects of new companies in the manufacturing industry, it is worth highlighting the extension of preferential lending programs for SMEs, subsidies for the development of manufacturing enterprises in the regions of the Russian Federation, and a moratorium on business inspections (reduction of administrative pressure).

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