Tax burden as a factor in the sustainability of IT companies: post-COVID dynamics in Russia

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Abstract. The dynamics of the tax burden as a factor in the economic sustainability of Russian IT companies from pre-COVID 2019 to post-COVID 2021, taking into account the scale of their activities is studied herein. In terms of new challenges for companies in the IT sector as a system-forming industry, one of the key areas is to increase sustainability, which contributes to sustainable development in the face of adverse external influences. The purpose of the study is to determine the regions of Russia with the lowest tax burden in the IT sector, as well as the size of IT companies with the lowest tax burden in the specified period. For this purpose, statistical methods are used, in particular, the calculation of average measures of trends in terms of the tax burden of IT companies by region, with consideration to the size of companies. This made it possible to identify best practices and favorable conditions for the development of IT business in terms of tax burden. In parallel, the study shows the importance of the territorial factor of economic sustainability, since IT companies in regions with a favorable tax regime have a low level of tax burden.

1 Introduction

In modern conditions, IT companies are one of the powerhouses of the socio-economic development of any country. Therefore, today it is more important than ever that the state effectively ensures their sustainable functioning, using various tools to support the IT sector, including taxation.

Currently, many sectors of the economy are undergoing digital transformation processes [1]. The continuous development of ICT has led to the emergence of a new digital reality, where new sectors, products and services have been developed as a result of rapid digitalization [2]. Restrictive measures due to the COVID-19 pandemic have updated the importance of digitalization. According to research by Gartner, Inc. IT spending in 2021 increased by 10% compared to 2020 (from 3.9 to 4.2 billion USD). This trend is primarily due to the transition to remote work, distance learning and telemedicine. The importance of

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improving the stability of companies in the IT sector in Russia is complemented not only by the system-forming nature of the industry, but also by additional risk factors in terms of global instability.

Assessing and improving sustainability faces not only the lack of a generally accepted structure of factors and assessment methodology, but also the variety of interpretations of the very concept of sustainability. Most studies interpret sustainability within environmentalism in three terms: “sustainable development”, “sustainability” and “resilience” [3]. As a general concept, sustainability is associated with reduction of the negative impact on the environment, while resilience focuses on adaptation and recovery from external changes [4]. Defining resilience as “the ability of a system to absorb disturbances and reorganize through change so as to still retain essentially the same functions, structure, identity and feedback”, the authors acknowledge that “the transition to sustainable development must be managed and integrated, based on interdisciplinary scientific approaches” [5].

Currently, the following approaches to the definition of sustainability are distinguished [6]: engineering, ecosystem and social. In this study, the authors would especially like to pay attention to the management approach, which consists in highlighting the key subsystems that determine the viability of the entire management system. These subsystems are evaluated by the corresponding partial indicators, from which an integral indicator is formed. There are many examples of such indicators in the scientific literature. For example, the Total Resilience Index as an additive function of all Resilience Indexes: company profit, company income, product value, company workforce [7]. In this approach, the obvious emphasis is placed on the economic and personnel aspects of sustainability. Another example is the Sustainable Maturity Index, which takes into account five areas: corporate sustainability, economic capital, natural capital, human capital and social capital [8]. Sometimes articles simply highlight indicators of sustainability, such as “workplace safety, diversity, inclusion, customer satisfaction, etc.” [9].

In general, there are two related approaches to the concept of sustainability. Primarily, as the ability to develop sustainably in the face of adverse external influences. Secondly, as a balance of the main subsystems that determine its viability. These subsystems define the main directions of sustainability, among which economic, social, environmental, personnel, innovation and many others can be cited as an example. In the face of new challenges, the structure of sustainability factors can be supplemented by the sustainability of supplies of equipment and components, and other factors.

Many sustainability factors are vital for IT companies. Personnel stability means the provision of key positions with high-level specialists, innovative sustainability opens up the possibility of developing own projects and solutions based on modern technological capabilities, other types of sustainability are no less relevant. However, in terms of modern challenges, surveys of managers show their increased attention to economic sustainability, which primarily includes the tax component. Despite different approaches, the key indicators in the structure of economic sustainability are the level of profit and its growth rate. Therefore, priority measures include tax support measures for the IT sector related to the reduction of the tax burden and, as a result, keeping the indicator of net profit dynamics within the stability limits.

In Russia, tax incentives for IT companies have been provided since the 2010s. The need to cope with the consequences of COVID-19 has led to a discussion about the direction of post-COVID tax policy [10-12] and the choice of tax industries to support [13-15], while the assessment of the effectiveness of such support is not always unambiguous [16]. From a formal point of view, in 2021 the volume of tax incentives for the IT sector in Russia has increased significantly and includes: a reduction in the corporate income tax rate (from 20% to 3% in 2021, and to 0% until 2022-2024), a reduction in the
rate of insurance premiums to 7.6% of remuneration (until 2021, the amount of insurance
premiums for IT companies was 14% at a standard rate of 30%). In order to avail of the
listed tax benefits, a company must meet a number of requirements. It should be pointed out
that, primarily, tax preferences can be established both at the federal and regional levels
(primarily in special economic zones and similar territories); secondly, there is a specificity
of tax benefits depending on the size of the business: something is available only for the
largest companies, and something exclusively for small businesses. Therefore, it is
extremely important to study both the regional cut of the tax burden and the scale of the
activity of an economic entity, in including IT companies.

The purpose of the article is, primarily, to identify regions with the lowest tax burden on
the IT sector in order to replicate their successful experience in tax incentives for these
companies, and secondly, to identify the most typical sizes of IT companies with the lowest
tax burden to form benchmarks to scale the business in this area. Two hypotheses were
formulated:

Hypothesis 1. The minimum tax burden for IT companies is most often found in regions
where there are special economic zones and similar territories with tax preferences.

Hypothesis 2. The minimum tax burden in more regions is typical for small enterprises
than for medium and large ones.

2 Materials and methods

Data from the Tax Calculator of the Federal Tax Service of Russia is used herein as the data
source for a detailed analysis of the tax burden.

The analyzed indicator is “total burden (including MET and excises)”, estimated as a
percentage of the amount of revenue. The indicator is calculated for organizations applying
the general taxation system. The study period is 2019 and 2021.

The study is focused on a sample of data on companies engaged in “information
technology activities” (OKVED2 (RNCE2) class 63).

When describing the results, the scale of the companies’ activities was characterized
based on the amount of sales proceeds. There are 6 groups of companies:

- Group 1: Microbusiness1 (sales revenue is up to 30 million rubles)
- Group 2: Microbusiness2 (sales revenue range from 30 to 120 million rubles)
- Group 3: Small business1 (sales revenue range from 120 to 500 million rubles)
- Group 4: Small business 2 (sales revenue is from 500 to 800 million rubles)
- Group 5: Medium business (sales revenue range from 800 to 2000 million rubles)
- Group 6: Large business (sales revenue is over 2,000 million rubles)

Not all regions provide data for each of the 6 groups of companies. The lack of data on
the tax burden for a group of companies may indicate the absence of relevant types of
activities of an appropriate scale in the region.

Based on the purpose of the study, three consecutive stages of analysis were assumed.
The first stage is a comparison of the level of tax burden in Russia as a whole for
companies in the IT industry and for other types of activities.

The second stage is the calculation of the tax burden of IT companies by region,
including the average value from the indicators for companies by scale. At the same time,
the missing data were not taken into account when calculating the average. Thus, the
specifics of the development of the IT sector in the territory were taken into account. The
distribution of the values of the average tax burden by regions is considered.

The third stage is descriptive statistics on the distribution of tax burden values of IT
companies across six groups of companies based on their size in the regions in 2019 and
2021. Identification of regions with the lowest tax burden (less than 5%) and
systematization of the data obtained.
3 Results

According to the Federal Tax Service of Russia, the industry average tax burden on activities in the field of information and communications decreased in 2021 (in 2019 it amounted to 17.2%, while in 2021 – 14.7% of revenue), which may indicate an increase in economic sustainability of IT companies. However, in Russia as a whole, the total tax burden for all types of activities in 2019 was 11.2%, and in 2021 – 10.4%. That is, the level of tax burden in the IT sector is above average. The given data show that at the state level, when declaring the priority in the current conditions of activities in the field of information technology, their tax support is still insufficient, which does not contribute to ensuring their sustainability.

The distribution of the tax burden by regions for activities in the field of information technology (average value for different company sizes) is shown in fig. 1. In most regions, the average tax burden on IT companies ranges from 5% to 15% of revenue.

![Fig. 1. Distribution of Russian regions by the size of the tax burden in the field of information technology. Compiled by the authors.](image)

If, on average, the tax burden across Russian regions decreased in the post-COVID period (from 12.49% in 2019 to 11.84% in 2021), then this trend is not stable in individual regions.

The data presented in fig. 2 and 3 confirm the first hypothesis. Tax preferences allow companies to achieve a minimum burden, up to zero, not so much due to the fact that they work in the IT sector, but because they are located in special economic zones: Kamchatka region, Sakhalin region, Altai region, Kaliningrad region, etc. Currently, state support of business by tax methods and methods is aimed more at supporting certain regions, and not the IT industry.
Fig. 2. Regions with the minimum tax burden for IT companies in 2019. Compiled by the authors.

- Microbusiness1
  - Magadan Region (0.29), Ryazan Region (0.37), Jewish Autonomous Region (0.51), Kostroma Region (1.9), Sakhalin Region (2.05), Primorsky Territory (2.93), Sevastopol (4.04)
  - Vologda region (0.35), Yaroslavl region (0.51), Republic of Khakassia (0.53), Voronezh region (0.55), Volgograd region (1.42), Oryol region (1.53), Sevastopol (1.63), Kemerovo region - Kuzbas (1.75), Republic of Dagestan (1.88), Krasnoyarsk region (3.14), St. Petersburg city (3.73), Saratov region (3.83), Belgorod Region (4.04), Udmurt Republic (4.81), Vladimir Region (4.84)
  - Penza Region (0.15), Republic of Mari El (0.44), Voronezh Region (0.85), Leningrad Region (1.15), Chuvash Republic (1.24), Krasnodar Territory (2.66), Novosibirsk Region (3.2), Jewish Autonomous Region (4.15), Saratov Region (4.58)
  - Chuvash Republic (0.01), Omsk region (4.88)

- Small business
  - Sverdlovsk Region (0.53), Primorsky Territory (4.53)

- Medium business
  - Novosibirsk region (2.21), Moscow region (2.66)

- Large business

- Average in scale
  - Magadan region (0.29), Voronezh region (2.20), Jewish Autonomous Region (2.33), Sevastopol (2.84)

Fig. 3. Regions with a minimum tax burden for IT companies in 2021. Compiled by the authors.

- Microbusiness1
  - Jewish Autonomous Region (0), Kurgan Region (0), Republic of Khakassia (0), Republic of Dagestan (0), Magadan Region (0), Kamchatka Territory (0), Oryol Region (0.69), Tula Region (0.88), Kostroma region (2.27), Astrakhan region (2.57), Republic of North Ossetia-Alania (3.55), Sakhalin region (3.76), Krasnoyarsk region (3.8)
  - Smolensk Region (0.09), Chechen Republic (0.17), Krasnoyarsk Territory (0.2), Altai Territory (0.24), Tyumen Region (0.39), Karachay-Cherkess Republic (0.43), Voronezh Region (0.57), Lipetsk Region (0.62), Vologda Region (0.66), Astrakhan Region (0.91), Tambov Region (1.81), Leningrad Region (1.9), Republic of Bashkortostan (2.54), Chuvash Republic (2.72), Rostov region (3.43), Sakhalin region (3.48), Republic of Dagestan (4.6), Bryansk region (4.77)

- Microbusiness2

- Small business1
  - Lipetsk region (0.04), Kaliningrad region (0.08), Republic of Khakassia (0.16), Oryol region (0.67), Voronezh region (1.02), Novosibirsk region (3.39), Smolensk region (4.45), Orenburg region (4.71)

- Small business2

- Medium business
  - Republic of Karelia (0.02), Ivanovo region (1.25), Kaluga region (4.0)

- Large business
  - Republic of Karelia (0.0), Stavropol Territory (0.43), Irkutsk Region (0.55)

- Average in scale
  - Irkutsk region (0.18), Tyumen region (3.99), Moscow city (4.98)

  - Magadan Region (0), Kamchatka Territory (0), Republic of Khakassia (0.08), Oryol Region (0.68), Astrakhan Region (1.74), Krasnoyarsk Territory (2.00), Republic of Dagestan (2.32), Voronezh Region (3.12), Republic of North Ossetia-Alania (3.55), Lipetsk Region (4.62), Chechen Republic (4.85)
The second hypothesis is also confirmed by the data represented in Fig. 2 and 3, as shown in Table 2.

Table 2. The number of regions in which the tax burden for IT is less than 5%.

<table>
<thead>
<tr>
<th>Number of regions where the tax burden is less than 5%</th>
<th>2019</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbusiness1 (revenue up to 30 million rubles)</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Microbusiness2 (revenue ranges from 30 to 120 million rubles)</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Small business1 (revenue ranges from 120 to 500 million rubles)</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Small business2 (revenue ranges from 500 to 800 million rubles)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Medium business (revenue ranges from 800 to 2000 million rubles)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Large business (over 2,000 million rubles)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Average in scale</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Compiled by the authors

Data presented in Table 2 show that in the largest number of regions the tax burden is less than 5% for microbusiness2 and microbusiness1. A small number of regions where the tax burden is less than 5% for companies with revenues from 500 to 800 million rubles does not indicate the fallacy of the hypothesis, but the conventionality of classifying a business of this scale as small.

The study revealed that the most typical scale of IT enterprises that demonstrate the minimum tax burden is from 30 to 120 million rubles of revenue. Such a scale is optimal for organizing a business in this area, allowing both the use of tax preferences established by the current tax legislation and the search for resources for organizing effective tax planning.

4 Discussion

In previous studies, the authors showed the relationship between the level of digitalization and the tax potential of Russian regions [17, 18]. This study confirms and develops the findings, once again proving the importance of the tax component for making decisions on the location of an IT business of one size or another in the Russian regions in order to ensure the sustainability of these companies.

5 Conclusion

The conducted research testifies to the importance of taking into account the territory where IT companies operate in order to assess tax conditions and their dynamics. Thus, in the structure of stability factors for IT companies in Russia, the territorial factor associated with the functioning in a region with a favorable tax regime can be considered. It is of interest to generalize the experience of supporting the IT sector in the Voronezh region and the Chuvash Republic as in regions where there are no special economic zones and similar territorial entities with significant tax preferences, that is, in which there is a low tax burden precisely due to the fact that these are IT companies.

An analysis of the variation in values by region within the framework of various scales of IT companies’ activities will allow us to expand the characteristics of the typical company format in terms of tax conditions, and extending the time period of the study to 2022 will make it possible to assess the stability of the identified trends.
References

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