Russian ecosystems market and specific features of its performance

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Abstract. Modern Russian ecosystem market involves major players with ecosystems of different scales. The paper assesses the development of competition in the ecosystem market, highlights the features, and defines this market leaders and outsiders. According to research results, the implemented diversification strategies in the Russian market are not effective enough in terms of minimizing losses. Indeed, they allow one's to stabilize revenue growth. However, it might be explained by annual investments in new economic sectors, which have not yet reached stable incom. Those companies are searching for new profitable niches. It will allow them to expand effectively the ecosystem business structure in the future.

Keywords: ecosystem, digital economy, Herfindahl-Hirschman index, competition.

JEL codes: G23, O16, O32

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Introduction

The development of Russian ecosystems is one of the key trend of digital economy. The Digital Economy of the Russian Federation Program aims to "establish at least 10 national leading companies – high-tech enterprises developing end-to-end technologies and managing digital platforms able to operate on the global market; they form a system of "start-ups", research teams, and industry enterprises, ensuring the development of the digital economy".[1] Accordingly, establishing conditions to encourage big business to implement a diversification strategy through an ecosystem approach is the main priority of state regulation of this field.

Modern Russian ecosystem market involves major players with ecosystems of different scales. The companies included in the Ruseco index of ecosystems in Russia are considered as ecosystems. This is a market capitalisation-weighted index including shares of the largest issuing companies on the Moscow Exchange, which can be considered ecosystems or companies providing a wide range of services within a single space. Nowadays, it includes:

PAO Moscow Exchange MICEX-RTS;
PAO Mobilniye TeleSystemy (MTS);
Ozon Holdings PLC;
PAO Rostelecom;
PAO Sberbank
TCS Group Holding PLC ("Tinkoff");
VK Company Limited;
VTB Bank (PAO);
PLLC Yandex N.V.[2]

According to the presented list, the number of ecosystems has almost reached the target values of the Digital Economy of the Russian Federation Program (9 of 10 companies). Additionally, the list of companies diversified according to the ecosystem model is more extensive. Figure 1 shows companies as follows: Magnit (AO Tander) and Wildberries (OOO Wildberries). However, in terms off their economic role, the scale of

[1] *The program "Digital Economy of the Russian Federation": approved by the Decree of the Government of the Russian Federation on July 28, 2017 No. 1632-r. Available at: http://static.government.ru/media/files/9gFM4FHj4PsB79I5v7yLVuPgu4bvR7M0.pdf (accessed: 15.06.2023).*

[2] *Ecosystem Index in Russia (Ruseco). Available at: https://ipei.ranepa.ru/ru/capm-ru/ruseco-index (accessed: 15.06.2023).*

ecosystem connections is considered to be too insignificant to include them in the index.

Main part

The Russian ecosystem market has a number of features. Firstly, it is in a growth phase and is characterised by a de-saturation. In 2022, the ecosystem subscriptions market grew at 24% in financial terms over 2021, and 36% in volume (number of subscribers) over 2021, despite external and internal economic challenges[3].

Secondly, the market has a dynamic competitive situation. However, the structure of services offered by market-leading companies presents areas with fierce competition (see Fig. 1).

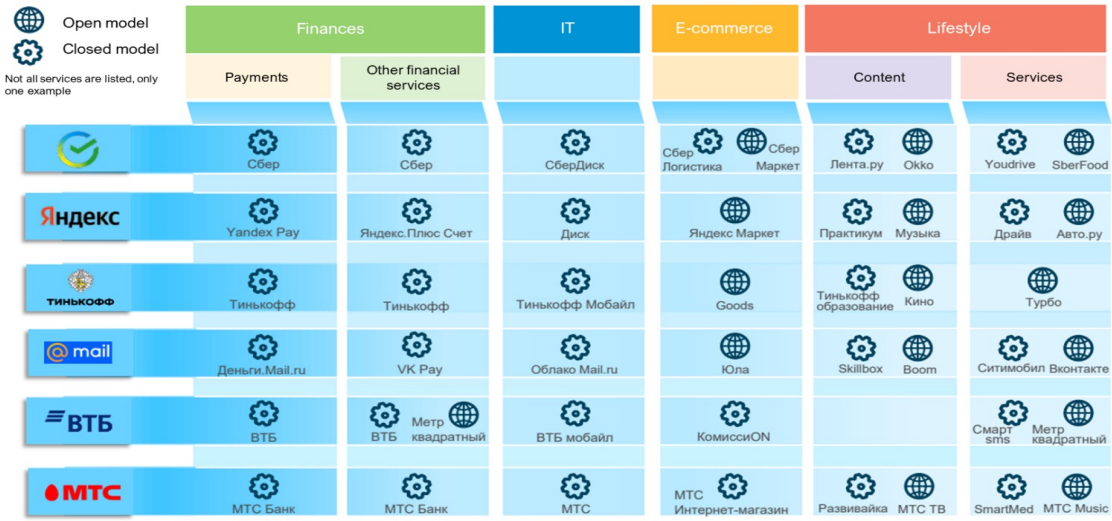

Figure 1. The largest Russian ecosystems

Source: The Bank of Russia, 2021

The market leaders are "Sber", "Yandex", "Tinkoff", "Mail.ru" (after the merger – "VK", since the holding Mail.ru Group changed its name), VTB, MTS. According to the main business, the companies operate in different areas: banking, IT, and telecommunications industry. However, the development of new services made them direct competitors in different areas.

– Finance. This area is traditional for banks. However, IT and telecommunication companies had to invest in the development of payment systems. Indeed, this area is being developed not only by market leaders, but also by smaller players. For instance, Ozon established its own bank and the corresponding debit card payment system.

– IT. Otherwise, banks have already had to explore a new area, developing their own mobile applications and cloud technologies. Moreover, the strategies for the development of players are different. For instance, Tinkoff was originally established as a high-tech company (an online banking model without branches); Sberbank and VTB have to transformed rapidly.

– E-commerce. Some companies (for example, MTS) are developing in terms of e-commerce. They establish online stores with branded goods or marketplaces, provide sellers with the opportunity to sell their goods through the company's servers, etc.

– Lifestyle. This area mainly includes entertainment services. There is no universal policy of companies in forming of a set of services (Figure 1). Companies offer services for listening to music (Yandex, VK), watching movies (Sber, Yandex, Tinkoff, MTS), education, taxi, real estate, etc.

However, increased competition has not negatively affected ecosystem enterprises. The product is significantly differentiated, and various tools are used to retain market share: loyalty programs based on the subscription mechanism. Nevertheless, the ecosystem market is characterized by a dynamic competitive situation: leaders are constantly changing. For example, in 2022, MTS surpassed Sber and took second place among the market leaders (see Fig. 2).

[3] *Experts named the largest Russian ecosystems. Available at: https://iz.ru/1522669/2023-06-02/eksperty-nazvali-krupneishie-rossiiskie-ekosistemy (accessed: 15.06.2023).*

According to Figure 2, Yandex is the absolute market leader followed by Sberbank and MTS. The Yandex diversification model assumes a huge number of products and markets, which can be a factor in the company's success.

To measure market concentration, the Herfindahl-Hirschman Index (HHI) should be determined. It is calculated as the sum of the squares of the market shares of companies in the market. Market share is the sales of the company as a percentage of total sales in the market (Kim, 2018). Since the market share of the smaller players is unknown, we assume their number as 6 (since 9 companies belong to ecosystems, and the shares of three are known). The calculation results are presented in Table 1.

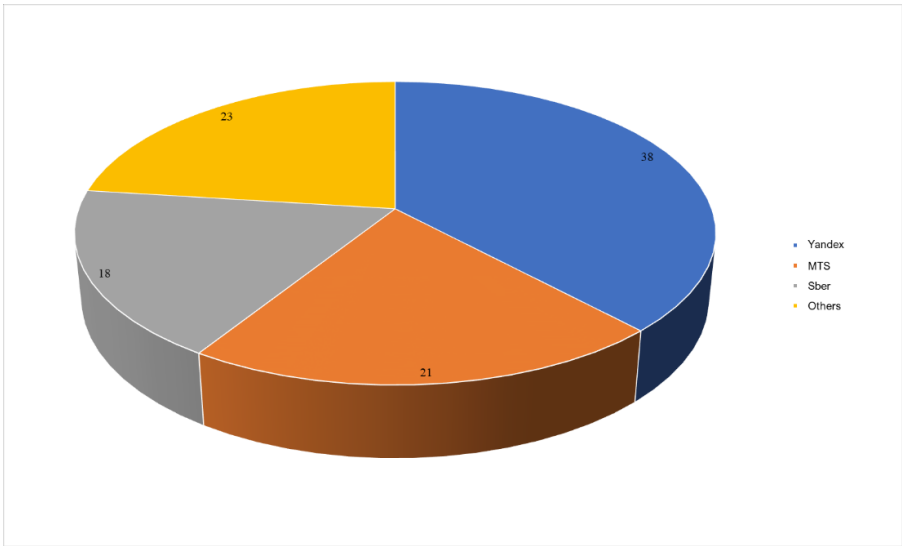

Figure 2. The structure of the Russian ecosystem market in 2022, % of revenue from services
Source: Experts named the largest Russian ecosystems. Available at: https://iz.ru/1522669/2023-06-02/eksperty-nazvali-krupneishie-rossiiskie-ekosistemy

Table 1 – Calculation for finding the value of the Herfindahl-Hirschman index

Company	Market share, %	The square of the market share
Yandex	38.00	1444.00
MTS	21.00	441.00
Sber	18.00	324.00
Others	23 / 6 = 3.83	14.67*6 = 88.01
HHI		2297.01

Source: calculated by the author

The index value is within the range of 1500 < HHI < 2500, which corresponds to a moderate concentration of the market. Therefore, the degree of market power of the leading companies is severely limited, but at the same time mergers and acquisitions can cause anti-competitive challenges and partially monopolised the market.

Another feature of the market is the ecosystem-specific diversification strategy, characterising as follows:
- strong core product;
- complementary products;
- strong technological base providing seamless experience for customers;
- mechanisms uniting products: a common identity, branding, and a common loyalty programme;
- perfect management[4].

Hence, the modern Russian ecosystem market is characterized by the growth and complexity of the ecosystem structure of market leaders.

[4] *How Russian digital ecosystems will develop in 2023. Available at: https://vc.ru/u/1036998-sees-group/630383-kak-budut-razvivatsya-rossiyskie-cifrovye-ekosistemy-v-2023-godu (accessed: 14.06.2023).*

Analysing the performance of Russian ecosystems market leaders, the performance of companies in previous years was affected by unpredictable negative environmental factors, so-called "black swan events": rare events that are difficult to predict and have tangible consequences. In 2020, it was the COVID-19 pandemic; in 2022 – geopolitical events. Consequently, when assessing the companies performance over these periods, it is necessary to take into account the ability of companies to adapt to crises and survive in a difficult economic period rather than profitability growth as an indicator of efficiency. It is inappropriate to study only the earlier years. The most holdings have seriously changed many aspects and areas of activity significantly.

The performance indicators of the six largest companies in the ecosystem market: Yandex, MTS, Sber, VK, VTB, Tinkoff were analysed.

The companies revenue figures are presented in Figure 3. However, not all of the companies represented have made financial statements publicly available: PAO VTB refused to publish financial results. Indeed, in 2022 the bank suffered a significant loss[5].

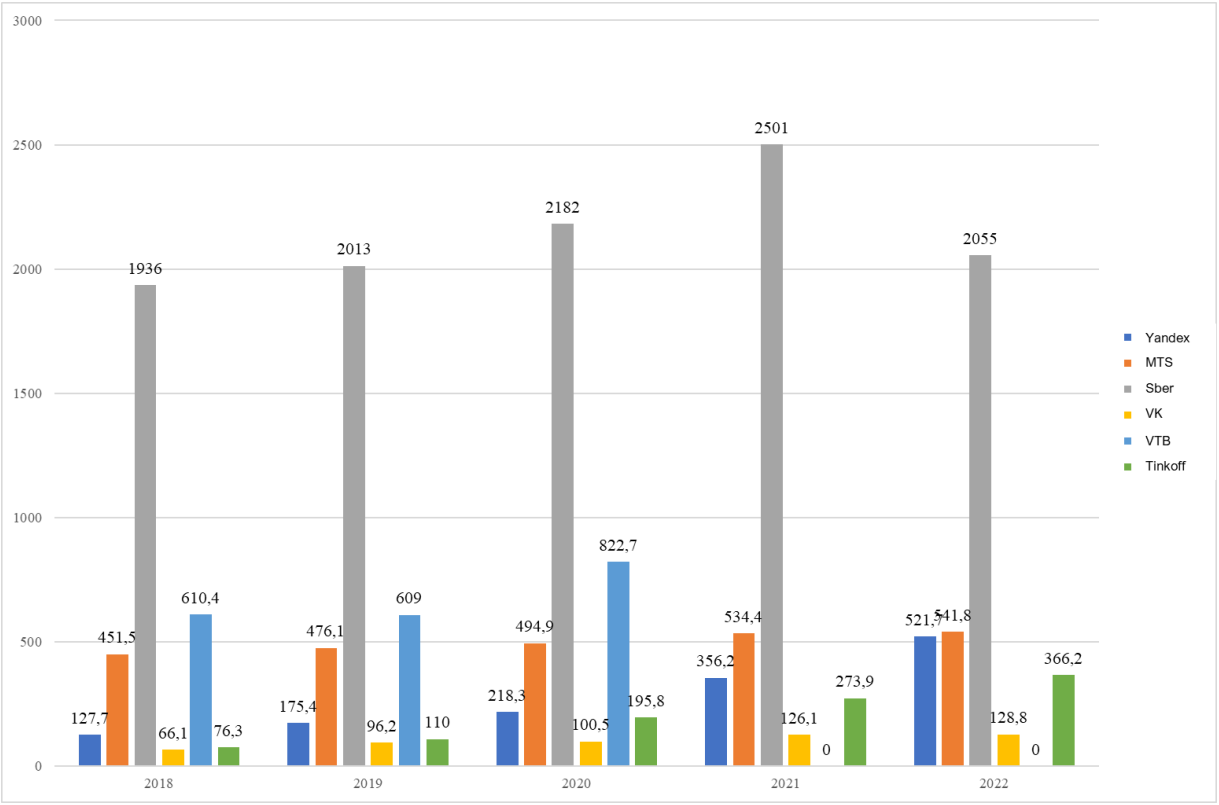

Figure 3. Revenue dynamics of the largest ecosystem companies in Russia in 2018-2022, RUB bn
Source: Fundamental stock analysis. Smart-lab. Available at: https://smart-lab.ru

Analyzing the data presented in Figure 3, we can conclude following:

– Sberbank is the absolute leader in terms of revenue. For example, in 2022, its revenue was 1.32 times higher compared to all other companies combined (excluding VTB). At the same time, its market share in the ecosystem services market is lower than both Yandex and MTS ones. Accordingly, the main (banking) line of business has a greater influence on revenue generation;

– most of the companies demonstrate stable revenue growth. The exceptions are Sber (in 2022, due to crisis and currency dynamics, it experienced a reduction, before that it also grew) and VTB (its revenue in 2021-2022 is unknown).

However, this confirms the thesis concerning the ecosystem market being in a growth phase: even in the crisis period of 2020, revenues were growing.

Meanwhile, the growth rates of the companies revenues are different (see Table 2).

[5] *VTB will not publish financial statements. Available at: https://bcs-express.ru/novosti-i-analitika/vtb-ne-budet-publikovat-finansovuiu-otchetnost (accessed: 15.06.2023).*

Table 2 – Revenue growth rates of the largest ecosystem companies in Russia, 2018-2022, % compared to the previous year

Company	2019	2020	2021	2022	Average annual growth rate
Yandex	137.35	124.46	163.17	146.46	142.17
MTS	105.45	103.95	107.98	101.38	104.66
Sber	103.98	108.40	114.62	82.17	101.50
VK	145.54	104.47	125.47	102.14	118.15
VTB	99.77	135.09	x	x	116.09
Tinkoff	144.17	178.00	139.89	133.70	148.01

Source: composed by the author

All companies, with the exception of VTB and Sberbank, showed an increase in the indicator in 2022 (a decrease in revenue by 17.83%). The largest growth rates are demonstrated by Tinkoff (148.01% on average) and Yandex (142.17% on average). These companies also show the highest growth rates in the difficult period of 2022 – revenue growth – 33.70% and 46.46%, respectively. These results indicate the development of these companies ecosystem completely satisfies the goal of minimising revenue-related risks: negative environmental factors have not caused a decline of this index.

To assess the companies performance, it is reasonable to analyse their asset dynamics (see Fig. 4).

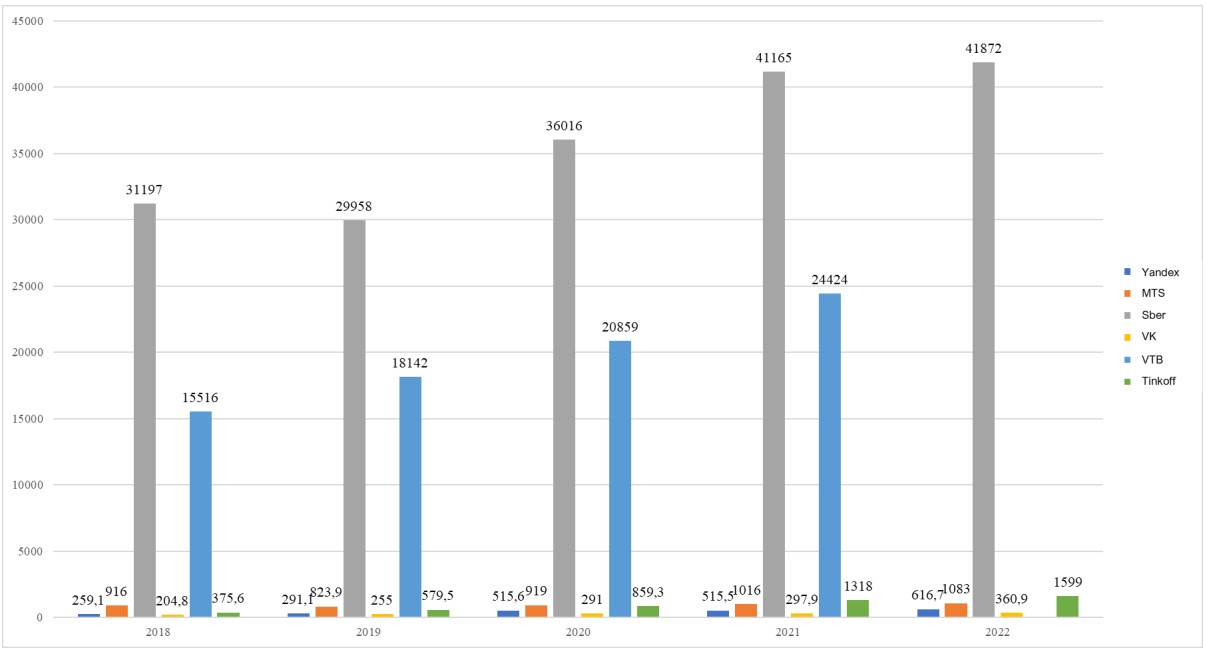

Figure 4. Revenue dynamics of the largest ecosystem companies in Russia, 2018-2022, RUB bn
Source: Fundamental stock analysis. Smart-lab. Available at: https://smart-lab.ru

According to Figure 4, the largest assets have the companies existing for a long time as traditional ones and began the process of digital transformation relatively recently: Sber and VTB have the largest assets; VTB is steadily increasing them (except 2022 with the unknown dynamics). Meanwhile, functioning in one industry (banking system) is not the reason: Tinkoff, also being a bank, shows a low asset value. Actually, we believe the reason for this ratio relates to high digitalisation companies (online banks and internet platforms) generating revenue from intellectual resources. These assets are not completely y accounted for (in terms of real business value) in the formation of intangible assets.

Analyzing the companies net profit (see Fig. 5), we can note its largely corresponding to the dynamics of revenue.

Sber is the leader in terms of revenue and net profit. Moreover, the dynamics is extremely unstable:

the trend of reduction was replaced by growth in 2021 (by 64.37%), and it was followed by a sharp drop in 4.62 times. VTB and Yandex had significant losses in 2021; although the size of Yandex loss was lower one. Since 2020, the operation of VK has been unprofitable. Diversification showed positive results in terms of minimising the risks to net income, which was not always positive. In terms of VK situation the investments in new areas have not yet reached profitability after the company's merger with Mail.ru Group. For other companies it is an issue of insufficient resistance of the diversification strategy to crises.

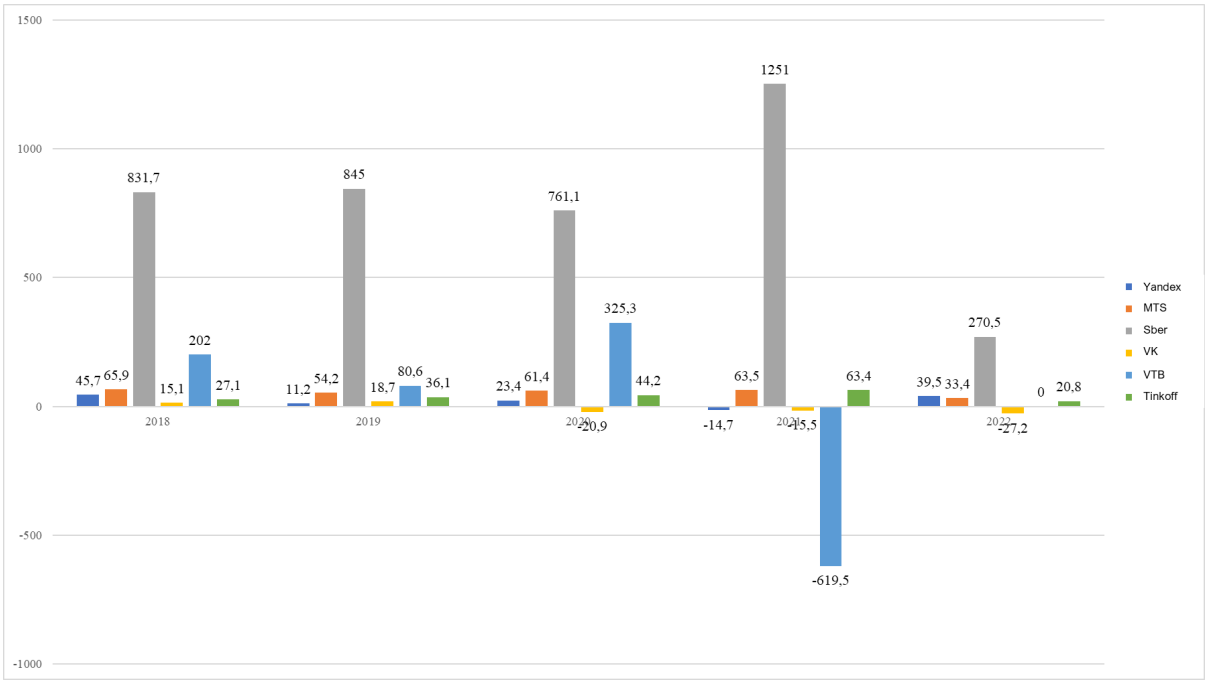

Figure 5. Asset dynamics of Russia's largest ecosystem companies, 2018-2022, RUB bn
Source: Fundamental stock analysis. Smart-lab. Available at: https://smart-lab.ru

The companies differ significantly in terms of scale of operations and market shares. To compare their performance, we should consider relative measures of profitability (total – net profit to revenue – and assets – net profit to asset value).

The dynamics of total profitability is presented in Figure 6.

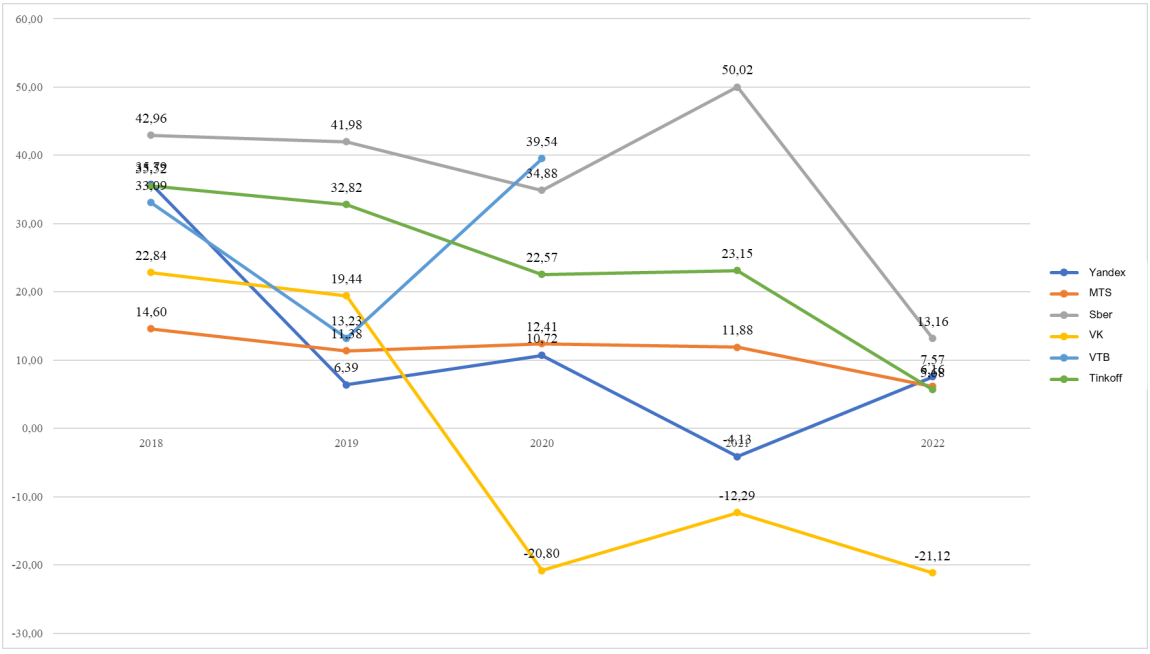

Figure 6. Dynamics of total profitability of Russia's largest ecosystem companies, 2018-2022, %
Source: composed by the author

According to the data in Figure 6, the companies performance is declining: most of the indices of overall profitability show a downward trend. This trend appeared in the pre-crisis period (2019).

The dynamics of return on assets is shown in Figure 7.

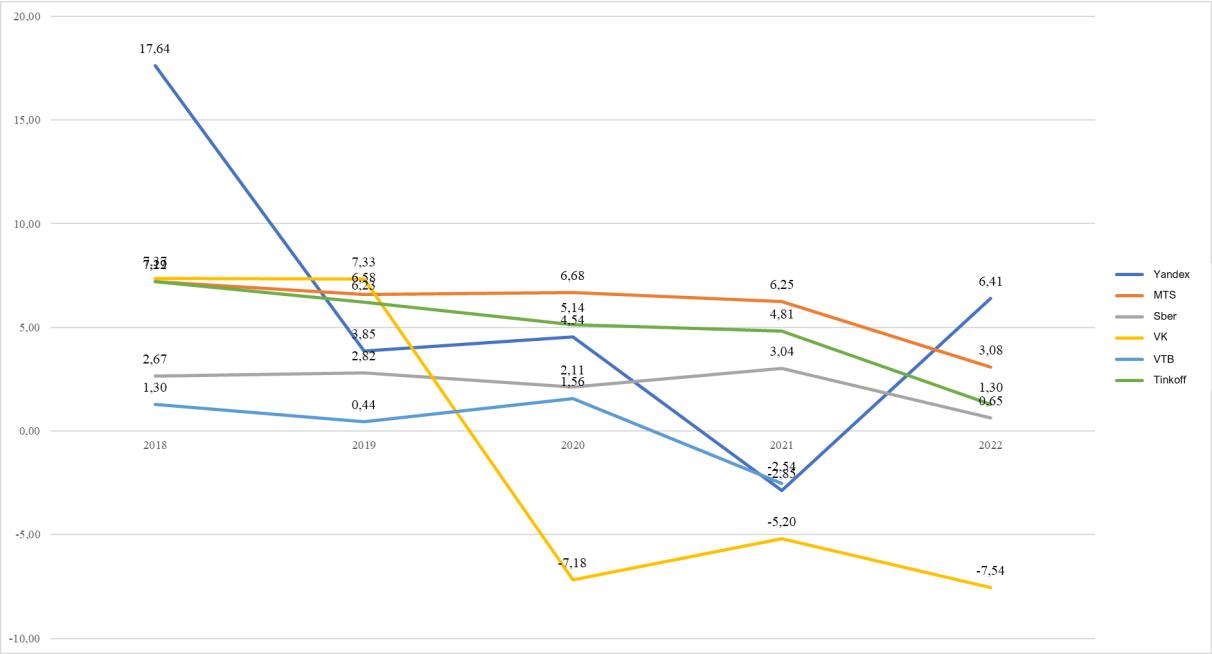

Figure 7. Dynamics of return on assets of Russia's largest ecosystem companies, 2018-2022, %
Source: composed by the author

Regarding return on assets, the situation is similar: the index trends are downward; in 2022, only Yandex showed growth, while the other companies experienced a rapid profitability decline.

Conclusion

Consequently, the diversification strategies implemented are not justified in terms of minimising losses (although they allow ones to stabilise revenue growth). However, it might be explained by annual investments in new economic sectors, which have not yet reached stable incom. Those companies are searching for new profitable niches. It will allow them to effectively expand the ecosystem business structure in the future.

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CONFLICT OF INTEREST

The author declares no conflict of interest.

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