

Особенности управления денежными потоками девелоперских компаний в России и повышение их эффективности в условиях кризиса

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Аннотация

Актуальность и новизна проблемы: COVID-19 — это уникальное событие. Однако это, безусловно, оно может произойти и в будущем, в этом случае фирмы должны подготовиться сейчас, чтобы обезопасить себя в будущем. Кроме того, для моделирования финансовых результатов компании использовались реальные данные о клиентах, которые отражают текущее положение компании на рынке. Целью является оценка денежных потоков девелоперов X и Y, а также последующая подготовка ПДДС модели с целью наложения банковских продуктов, которые смогут “снизить” долговую нагрузку рассматриваемых компаний. В первой главе изложены теоретико-методологические основы девелоперского бизнеса. Глава включает в себя экономическое понятие девелопмента, модель развития девелоперского бизнеса, а также базовые основы введения зданий в эксплуатацию. Вторая глава посвящена изучению рынка девелопмента в России. В ней дается характеристика трех секторов индустрии: коммерческая недвижимость, складская недвижимость и торговые площади. Следовательно, ухудшение показателей в индустрии привело к снижению денежного потока конкретного девелопера. В третьей главе излагаются расчеты, которые демонстрируют возможности Банка косвенно управлять денежными потоками компании

девелопера: реструктуризация долга, рефинансирование в рамках Постановления Правительства №1764, кредитование в рамках программы №1764. А также приведены рекомендации для бенефициаров по оздоровлению бизнеса в целом. В заключении обобщается проделанная работа.

Ключевые слова: финансовые результаты, компании, рынок, экономическая зависимость, учет, эффективность, улучшение показателей

Features of cash flow management of development companies in Russia and effectiveness improvement in the context of crisis

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Abstract

Relevance and novelty of the problem: COVID-19 is a unique event. However, this can certainly happen in the future, in which case firms should prepare now to protect themselves in the future. In addition, real customer data was used to model the company's financial results, which reflect the company's current market position. The purpose is to assess the net cash flows of the developer X and Y, as well as the subsequent preparation of the cash-flow model in order to apply banking products that can "reduce" the debt burden of the companies under consideration. The chapter includes the economic concept of development, the development business development model, as well as the

basic basics of putting buildings into operation. The second chapter is devoted to the study of the development market in Russia. It describes three sectors of the industry: commercial real estate, warehouse real estate, and retail space. Consequently, the deterioration of performance in the industry has led to a decrease in the cash flow of a particular developer. The third chapter presents calculations that demonstrate the Bank's ability to indirectly manage the developer's cash flows: debt restructuring, refinancing under Government Resolution No. 1764, and lending under Program No. 1764. It also provides recommendations for beneficiaries on improving the business as a whole. In conclusion, the work done is summarized.

Keywords: financial results, companies, market, economic evaluation, performance evaluation, performance improvement

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Chapter 1. The specifics of cash flows in the real estate business

1.1.Economic essence of real estate

Understanding the economic essence of real estate is the key to a successful study of real estate development, which should be based on the discipline "Real Estate Economics". Within the framework of the work, it is essential to have several thematic blocks: the economic concept of real estate (land plot and its improvements); the concept and types of value that a real estate object can have; the concept of the real estate market as a mechanism that ensures the transformation of value into price and, accordingly, the possibility of market turnover of the property; external factors affecting the development of the residential and commercial real estate market.

Presumably, the following economic definition of real estate can be universal and concise: real estate is a form, physical embodiment, and reflection of various types of human activity (business and personal activity), fixed in a certain place.

People can develop this definition by emphasizing that real estate is a means of satisfying needs, a place of concentration of certain economic interests of people. In a certain sense, the created property is the material embodiment of a compromise between the needs of people to benefit from a particular location and the limited resources available to them.

The study of the real estate market examines the factors that determine its development, reveals the influence of the state, economic, regional, financial (including tax) and monetary policy on it. Many foreign authors of works on the economics of real estate devote the whole sections are devoted to the macroeconomic aspects of the functioning of markets and state regulation in banking, financial (fiscal), economic, social and regional aspects. For example, the British researcher Ernie Jowsey in his work "The Real Estate Economy" reveals in detail the features of the functioning of the world financial markets and their impact on the real estate sector; devotes several chapters to the issues of state regulation of the real estate market (state policy for the development of regions, financial and monetary policy, forms of direct state participation in the development of urban areas)¹. No less attention is paid to the macroeconomic significance of the real estate sector by Dennis McKenzie, Richard Betts, and Carol Jensen, authors of " Fundamentals of Real Estate Economics." They reveal the issues of macroeconomic efficiency; the nature of financial and economic cycles; the role of the state in the development of residential and commercial real estate².

Real estate development as a field of knowledge about real estate includes at least three areas:

1. real estate development as an economic concept;
2. real estate development as a type of business activity;

¹ Jowsey E. Real Estate Economics. Palgrave Macmillan, 2011.

² McKenzie D.J., Betts R.M., Jensen C.A.Essentials of Real Estate Economics. 6th ed. Cengage Learning, 2011.

3. real estate development as a management process

Effective real estate development cannot exist outside the context of state development policy urban areas, reflecting the desire of the state and local governments to ensure effective real estate development of business activity and resources in a particular territory, which should be materialized in the creation of real estate objects in this territory.

Because of this, scientists are convinced that the time is coming for a systematic integrated knowledge in the field of real estate and the development of an economic concept for the development of Russian legislation in the field of real estate and urban development. Thus, the economy and real estate development, as a sphere of scientific knowledge, are designed to contribute to solving problems of national importance, the most important of which are the creation of a comfortable environment for human life and activity and the effective territorial development of our country.

1.2. The real estate development models

The model of real estate development sets a theoretical schematic concept of the practice of real estate development which can be universally described and presented in the form of a convenient scheme. This does not mean that the creation of a model is a huge achievement, because with the universality and applicability immediately there are difficulties, because real estate development differs for individual segments the real estate market (residential, commercial, industrial, hotel, destination, etc.). In addition, real estate development is not in the estate, but as a specific state of transition or transformation of forms of property in another state that implies a corresponding change in potential or the real value, for example, by changing the type of permitted use of land or any other transformation of the property.

It is also interesting that most of these transformations may not be visible to the naked eye. For example, a land plot that has passed to a new owner; a plot in the process of approving changes or changing the permitted use may seem to be not involved in the development process, static. Add to this the fact that individual legal or project transformations and approvals can take years, during which the rights holders change, and the land plot changes hands like a baton, without undergoing any changes.

It is not surprising that when studying the models of the development process, it becomes noticeable how the phenomenon under study acquires the imprint of the scientific specialization of a particular author, which, in turn, creates theoretical limitations set by the direction of the author's research and the level of his interaction with practitioners.

It should be noted that only a few practitioners and representatives of the business and financial sector are engaged in research in the field of real estate development. This does not mean that deep research in the field of real estate development has not been conducted, but there is an obvious lack of integrated conceptual models developed by specialists from the business sector.

Perhaps this is since this discipline is taught recently, in higher education there are not so many departments and faculties of real estate and development. The latter, however, is a topic for a separate study and is not considered in detail by us.

Real estate development has been studied and described by scientists in different ways and almost everywhere through the prism of their own discipline and specialization. For example, economists tend to adapt the fundamental economic laws based on the theory of supply and demand to the field of development. At the same time, economists move away from the market of traditional goods and focus on the uniqueness of the land plot, developing the field of land relations economics³. A special view of development can be offered by political economy, which studies the political nature of the interaction of agents, structures and institutions through the prism of the distribution and creation of public goods⁴. Political economic theories often proceed from the postulates of Marxism and rely on the phenomena of oppression and alienation inherent in the capitalist structure, which is considered as objective and dominant over individuals through the concentration of capital and the desire for surplus value⁵.

The integrated approach is usually followed by representatives of practice-oriented disciplines, such as urban planning or economic geography. These authors proceed from a comprehensive view of the development process, some of them (P. Healy, T. Gore and D. Nicholson, M. Ball) are still considered the most prominent researchers in this field. As part of the commercial approach to real estate development, as expected, research is conducted using statistical and econometric analysis, key quantitative indicators that allow you to evaluate the financial result of the development process. The quantitative indicators used in this process — cost, rental rate, price, supply, demand, profit, internal rate of return, etc. — came from classical economic theory, financial modeling, and investment analysis⁶.

The scientific literature is dominated by the approach that real estate development is understood as an integrated linear process that begins with the selection and acquisition of a land plot and ends with the construction and sale of the object, its lease or independent use. Such a wide range of views and concepts confirms the complex nature of this discipline, which is revealed at different levels, including cultural, ethnographic, behavioral, etc., and any of them can contribute to transformation of the land plot, and thus become a catalyst for the development process. Immersion in the nature of real estate development involves the study of many factors, the culture and sometimes even the ethnography of the key participants in this process. The result is the embodiment of a particular variant of the development of the land plot (see figure 1). The scheme can sometimes

³ Harvey D. The Urbanisation of Capital. Oxford: Blackwells; Baltimore, MA: John Hopkins Uni Press, 1985.. – P. 63.

⁴ Say J.B. A treatise on political economy: or, The production distribution, and consumption of wealth, 1880.- P.112.

⁵ Harvey D. The Urbanisation of Capital. Oxford: Blackwells; Baltimore, MA: John Hopkins Uni Press, 1985. – P.48.

⁶ Fraser W.D. Principles of Property Investment and Pricing. London: Macmillan, 1984. – P. 56.

replace hundreds of words, so the author dared to offer his own model of the development process⁷.

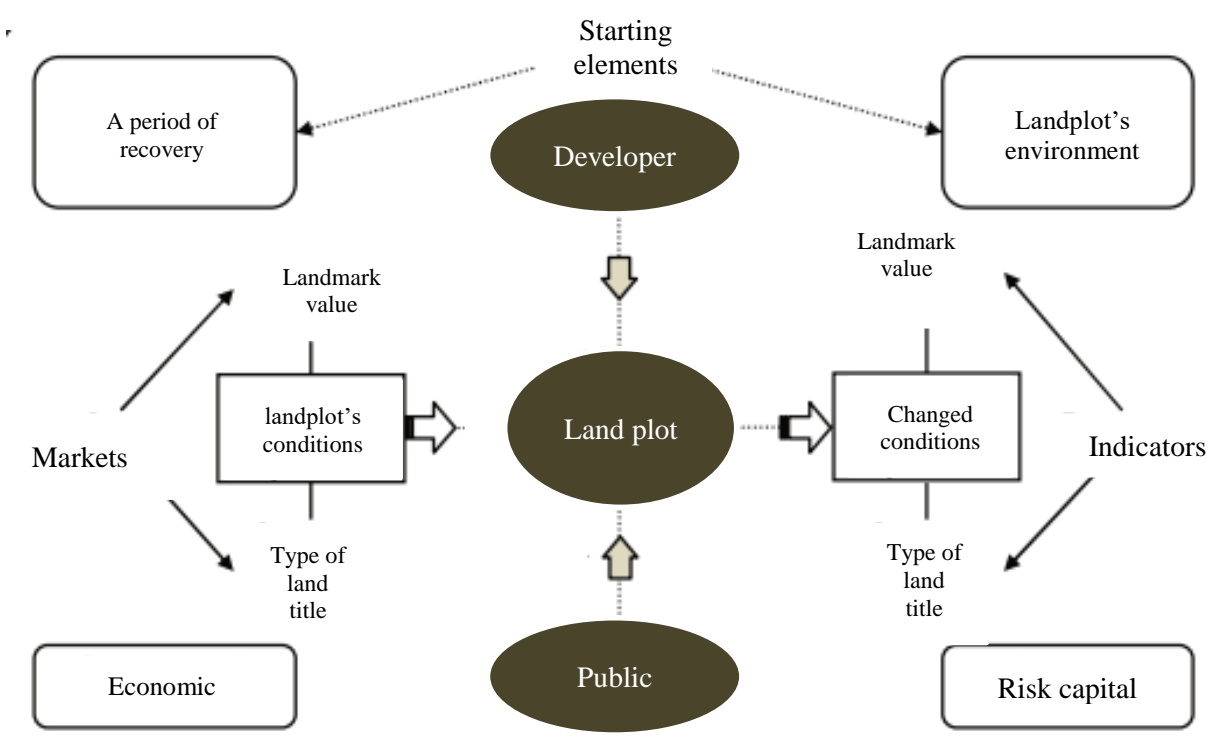


Figure 1. Three elements of land plot's transformation⁸

From picture 1., there are three basic elements of the development process can be noticed: land plots, participants in the development process and social manifestations.

Each element is defined by its own rules and patterns. The developer searches for areas in the city that are potentially attractive for development, based on certain criteria, decides or rejects the project, or postpones the decision and continues the study. The nature of the developer's activities deserves further detailed description, considering the types of financial risks and various behavioral strategies.

Collective manifestations refer to the static historical interests of local authorities and the public that bring an urban vision into the site development plan, considering the political context. Unfortunately, these interests are they often come into conflict with the changing interests of developers.

Development requires understanding that a land plot is an economic resource and at the same time a set of rights in relation to it. The attractiveness of the land plot is also influenced by environmental factors. As a result, the value of the land plot is formed, which immediately makes it attractive to the developer.

⁷ Drane J. A View From The Ground: Implications for the literature on the 'models of the development process' based on a model of praxis and an associated mapping study: paper presented at AESOP 26th Annual Congress. Ankara: Middle East Technical University, 2012.

⁸ Forms W. H. The place of social structure in the determinants of land use //Social Forces, 1954.

In relation to the land plot with the formed value, transactions (real and derivative) begin to occur, and this implies that the developer owns the apparatus of valuation activities.

At first glance, the selected three elements of the model function according to their own laws, but as soon as they intersect, there is an opportunity for development and transformation of the land plot.

The building commissioning established on the land plot is presumably the most vital job of the whole project because that is in many cases the break-even point for cash flow generation.

Since January 1, 2017, amendments to the Urban Planning Code of the Russian Federation have entered into force, which are of a systemic nature and are a reform of urban planning legislation. The rules concerning the issuance of permits for the commissioning of facilities were supplemented with a new basis for refusing to issue such permits. In the sense of all six grounds for refusal to issue a permit to put an object into operation can be divided into two groups:

The basis for the formation and filling in the actual indicators of the permit for the commissioning of the object is the technical plan of the object, without which the permit for the commissioning of the object is invalid. According to Part 8 of Article 24 of Federal Law No. 218-FZ of July 13, 2015 "On State Registration of Real Estate".⁹

Thus, developer business is a tough issue to undertake that includes economic essence of the real estate, different development models and the last but not least – commissioning of the facility that allows to finally receive cash-flow.

⁹ 1 Part 7 of Article 52 of the Town-Planning Code of the Russian Federation No. 190-FZ of December 29, 2004 (as amended on December 19, 2016; with amendments and additions, intro. effective from 1 January 2017).

Chapter 2. Analysis of developers' market in Russia and methodology of the cash-flow assessment

1.1. Office real estate sector overview during the COVID-19 crisis

The past year has brought a significant change in the life of office employees - they have a new option to work from home or other comfortable places (cafes, coworking, etc.). Now, for employees, it is more important not the geographical location of the office, but the location in terms of the associated infrastructure. More and more often developers declare the objects of premium quality planned for construction located outside the city center.

However, the success of potential tenants will be enjoyed only by those of them, where, despite the territorial remoteness, employees will feel the same atmosphere and will be able to receive the same services as in the center of the metropolis (see figure 2). Thus, the center will continue to attract tenants with its atmosphere and a wide range of infrastructure facilities, and those business clusters that can recreate this feeling will be able to expand their pool of tenants.

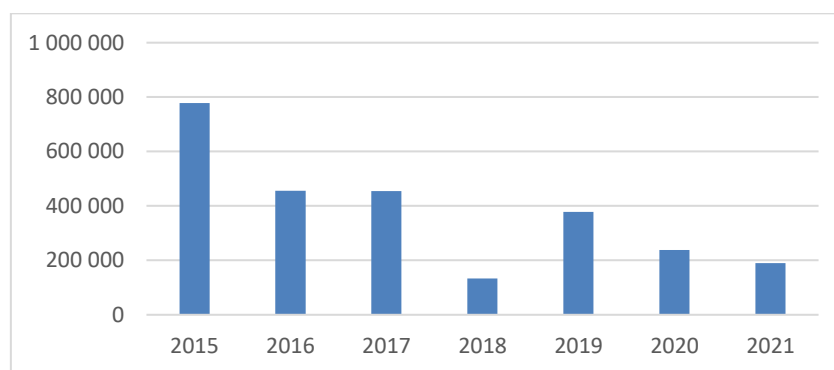


Figure 2. Office real estate construction per year in Moscow region, sq.m.

Despite the fact that 2020 in Moscow region was an extraordinary year, and construction work was frozen for several weeks, the indicator of new construction is close to the pre-crisis level and exceeds the pessimistic forecast of the middle of the year by 22%. In new construction in 2020, class A areas prevail –they make up 74% of the annual value. The new facilities are located in the traditionally most popular areas of the capital –Moscow City (IFC Neva Towers), Leningradsky Corridor (VTB Arena Park) and the Center (Smolensky Passage II). According to our forecasts, 2021 will continue to "slow down" the market, which will result in a noticeable decrease in new construction (-20% of the value of 2020).

The volume of transactions concluded in the fourth quarter formed 28% of the annual value and reached the level of the beginning of the year. It is worth noting that traditionally the end of the year is characterized by the highest demand and exceeds the indicators of 1-3 quarters, while at the beginning of the year there is less activity. However, in 2020, demand in the 2-3 quarter showed a decline, and the indicator of the last three months returned to the level of the first quarter. This dynamic is a consequence of the lockdown, most of which occurred in the second quarter, and the

economic consequences of the pandemic.¹⁰

The current economic realities, the interest of companies in optimizing their costs and maintaining the remote work mode are the key prerequisites for stagnating demand.

On the other hand, the flexible workspaces segment continues to evolve, transforming business models and customer interaction formats. Flexible workspaces have several advantages:

- Short-term contract.
- No additional investment in refurbishment or renovation.
- Flexible areas assume the presence of several companies in one area, consequently, the networking is always a plus for a firm.
- flexibility in terms of how many workstations are needed.

Table 1. Largest deals in the flexible areas segment in Russia¹¹

Name	Space, sq.m	Lessee/Tenant
WeWork Acrus 3	3 457	Citymobil
S.O.K Federation Tower	3 400	OZON
Space 1 Arbat	3 180	FSK
Workki Neo Geo	2 584	Gazpromneft

The flexible office segment showed an increase of 29% compared to 2019 and accounted for 1.3% of the total office space supply (see table 1). In 2019, the market for flexible workspaces grew by 53%. The slowdown in growth in 2020 is due to a general decline in tenant activity in the market. Operator portfolios are being transformed. So, it was in 2020 that the first deal was concluded built-to-suit. Many market players began to adhere to this format of interaction with customers or conduct business according to the operating model. From quarter to quarter, companies demonstrate stable demand for flexible offices. 10% of new lease transactions concluded with the participation of the largest consultants are transactions in flexible offices. In 2019, the indicator was at the same level. In 2021, the demand for flexible workspaces will remain at the same level, it is believed. One of the key trends in the market, which is particularly evident with the introduction of remote work mode, is the development of flexible offices in residential areas.

¹⁰ Cushman & Wakefield. – URL: <https://www.cwrussia.ru/>

¹¹ Cushman & Wkefield. – URL: <https://www.cwrussia.ru/>

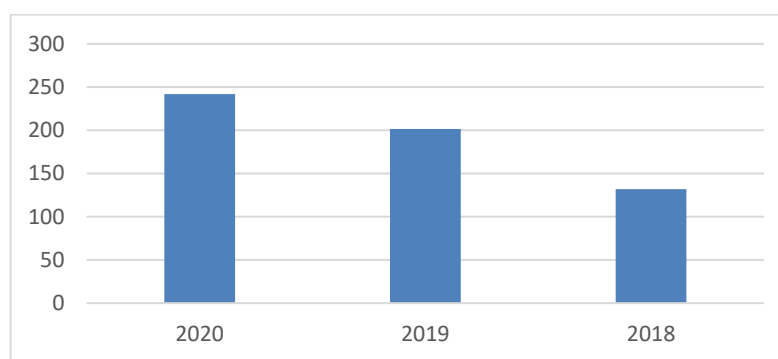


Figure 3. Flexible Workspace market size in Moscow, th. sq. m.¹²

The vacancy rate was slightly adjusted by the end of 2020. The vacancy growth was more noticeable in Class A than in Class B facilities. Such dynamics are associated with the optimization of the area that began in 2020 (see figure 3). In cases where the tenant did not have the opportunity to quickly reduce the occupied space or make a choice in favor of a more profitable option (most often this applies to tenants of premium buildings due to the strict terms of contracts), organizations decided to offer part of the office to sublease. It is worth noting that the increased supply of subleases will not have a strong impact on the value of the vacancy in the long term (3-5 years), as the terms of the contracts will gradually come to an end, and companies will have the opportunity to either abandon part of the space or move naturally without bringing the sublease space to the market (see figure 4).

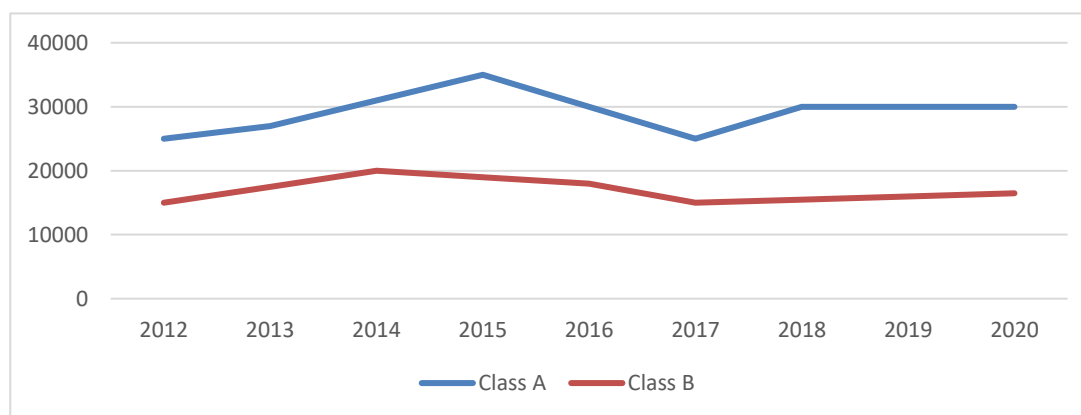


Figure 4. Rental rates office real estate, RUB¹³

In Q4 2020, the weighted average ruble equivalent of the Class A rental rate was RUB 29,802 per sq. m per year (\$395 per sq. m. m per year). The weighted average ruble equivalent of rates on lease transactions in class B – 17,368 rubles. per sq. m. m per year (\$227 per sq. m. m per year).

In 2021, a slight downward correction in rental rates is possible. In 2022, rates will begin to gradually recover.¹⁴

¹² Cushman & Wekefield. – URL: <https://www.cwrussia.ru/>

¹³ Colliers International. – URL: <https://www.colliers.com/ru-ru>

¹⁴ Colliers International. – URL: <https://www.colliers.com/ru-ru>

1.2. Analysis of the Shopping Mall segment during the lockdown

The retail real estate market was able to adapt to the changed conditions – in 2020, we did not see mass closures and departures from the market, in most cases, owners and retailers managed to renegotiate the terms of lease agreements. It is likely that after the end of the New Year sales period and the end of the discounts on rent, retailers will make decisions about business optimization. Scientists expect that the rotation of tenants and the growth of the share of available space in shopping centers will occur in the first half of 2021. Thus, the situation for shopping mall is yet not favorable.

In regions where the availability of shopping centers is below 100 sq. m. m per 1000 inhabitants, the average number of infections is 1659 people per 100 000 thousand inhabitants. More affluent regions, where there are 100-200 square meters per 1000 inhabitants. m of retail space, the number of infections was 27% lower. Super-agglomerations stand apart (Moscow and St. Petersburg with the surrounding areas) with their ultra-high density.

It is believed that the development of modern urban culture in the Russian regions, on the one hand, creates a demand for format trade and an appropriate lifestyle, and on the other provides natural social distancing.

The opposite of urban culture is the archaic communal way of life. In regions where there is no format trade, the infection rate is 70% higher than in those where it is present in the initial stage and twice as high as in regions with developed format trade.¹⁵

To overcome this issue and make people go in the store again, retailers are looking for opportunities to attract customers: create new brands (X5 has opened a chain of discounters "Chizhik", "Dodo Pizza" has launched the brand "Doner42"), are testing new formats ("Vkusvill" launches a catering service) and are entering into collaborations (in Vladivostok, the first co-location of "McDonald's" and "Sber" has opened-a single space that unites a catering company and a bank branch with a common waiting area and coworking). The focus of operators continues to shift to smaller formats in order to be closer to the consumer. So, for example, "Magnit" has started testing stores in the format of kiosks, the network "Anderson" plans to open cafes of a small area in residential areas,

IKEA continues to develop its urban format –in December, a hypermarket with an area of 11 thousand square meters was opened in the shopping center "Europolis". In 2020, 16 international brands entered the Russian market. This is 30% less than last year, but the very fact of the arrival of new operators means that activity in the market remains.

In connection with the pandemic, the number of postponements of the opening of shopping centers to later periods has increased. However, most of the postponements occurred in regional cities,

¹⁵ JLL. URL: <https://www.jll.ru/>

with Moscow being less affected. In the regions, at the end of the year, 40% less retail space was launched than predicted at the beginning of 2020, while in Moscow the deviation was only 18%.

In 2021, the market will maintain its balance. After an extensive leap in development in 2020, online operators will focus on optimizing business processes (see table 2). A high proportion of speculative construction will satisfy the expansion needs of those companies that have not yet managed to do so.

Table 2. Regional Indicators of the warehouse real estate¹⁶

Indicator	1H2018	1H2019	1H2020
Total supply, mln. sq. m	7 224	8 580	9 086
Commissioning, th. Sq. m	52	199	354
Rental price, RUB, sq. m.	3 500	3 550	3 750
Selling price, RUB, sq. m.	35 000	40 000	40 000

Supply:

The supply of warehouse complexes in the regions of Russia in 1H 2020 reached 9,068. 7 thousand m². The regional market was replenished with 354 thousand m² of high-quality warehouse space, which is almost 2 times higher than in the same period of the previous year. The high volume of input is associated with a high demand for speculative warehouse space and a low level of vacant premises. Voronezh (72 thousand m²), Novosibirsk (68 thousand m²) and Kazan (55 thousand m²) are among the leaders in terms of new warehouse space.

The supply structure was dominated by speculative areas, which accounted for more than 77% of the total the total volume of new construction. Most of the speculative complexes were put into operation with lease agreements for 40-60% of the area. The warehouse market of the regions showed record growth due to the increased demand of offline and online retailers for high-quality warehouse infrastructure in the regions of Russia and the shortage of vacant Class A facilities.

Demand for warehouses showed record growth. The total volume of transactions amounted to 564 thousand m², which is more than 4.5 times higher than in previous years. The bulk of the demand came from large retailers and online retailers (a total of 73%). Large transactions were concluded with the participation of both local and federal players. In the structure of demand, lease and sale transactions were divided approximately equally. Despite the fact that built-to-suit and built-to-rent are the most common options for customers who need large amounts of warehouse space, their share in 1H 2020 was 23%. The dominance of speculative sales transactions is explained by the interest of local players in Class B production and warehouse complexes that fit the specifics of their business activities. The average volume of the lease transaction was 18,700 m², while the sale

¹⁶ Colliers International. <https://www.colliers.com/ru-ru>

transaction was 47,150 m2.

The vacancy rate in the market was 3.4%, an increase of 1.2 percentage points compared to the end of 2019. In absolute terms, the vacancy rate was just over 300 thousand m2. The highest vacancy rate is recorded in Samara, where about 13% of the total supply is available. A high vacancy rate was recorded in Krasnodar (9.5%) and Bryansk (8.4%) (see figure 6). The growth in the volume of available funds is primarily due to the high level of new supply and demand for purchase and sale transactions. It should be noted that there is still a shortage of free warehouse supply in the regional markets.

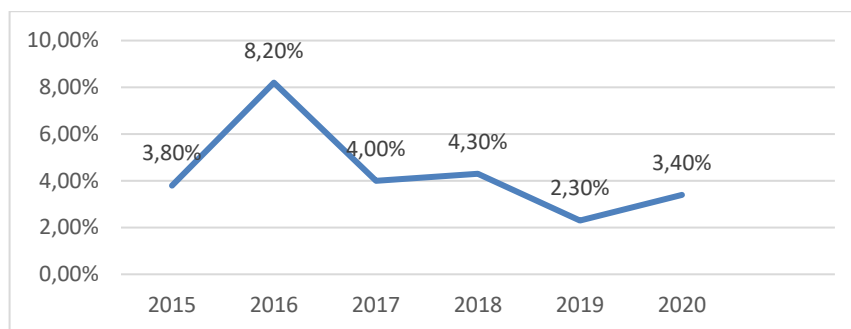


Figure 6. Vacancy dynamics in Russia in the warehouse sector, 2014-2020¹⁷

The average rental rate in the regions of Russia was 3,750 rubles / m2 / year without VAT and NUT, having changed relative to the level of the end of the previous year by 50 rubles. A small increase is associated with the entry into the market of new warehouse complexes, the rates in which are higher than in the secondary market (see figure 7). The highest rental rates are recorded in Vladivostok (4,300 rubles / m2 / year), Voronezh (4,100 rubles/ m2 /year) and Ufa (4,100 rubles/ m2 /year).

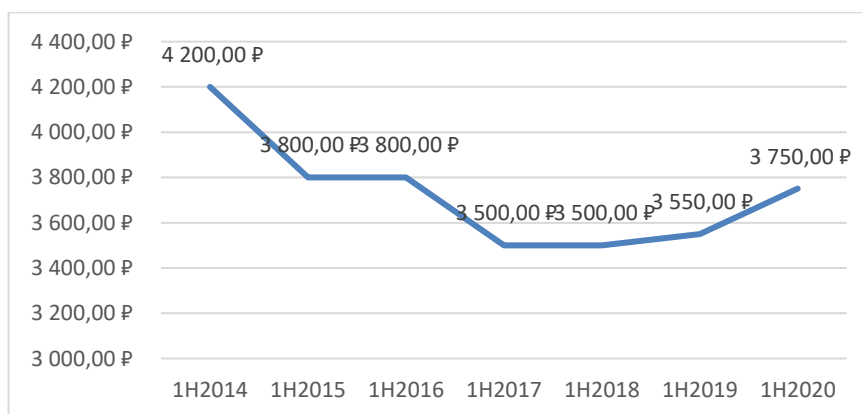


Figure 7. Rental rate for warehouse space in the regions of Russia, 1H 2014-1H 2020, RUB / m2/ year¹⁸.

¹⁷ Colliers International. – URL: <https://www.colliers.com/ru-ru>

¹⁸ Colliers International. – URL: <https://www.colliers.com/ru-ru>

The active implementation of projects in the Moscow region over the past few years has led to a redistribution of interest and an increase in demand from key federal players to the regions — as a result, a serious increase in demand for regional warehouses was recorded in 2020. The current plans of the key retailers imply the further development of regional warehouse capacities, which, according to our estimates, will lead to the preservation of a high share of regional transactions in the total Russian demand volume in 2021.

For operating activities, the basic element of calculating the company's net cash flow by the indirect method is its net profit received in the reporting period. By making appropriate adjustments, the net profit is then converted into a measure of net cash flow. The use of the indirect method of calculating cash flow allows us to determine the potential for the formation of the company's main internal source of financing for its development-net cash flow from operating and investing activities, as well as to identify the dynamics of all factors affecting its formation. In addition, it should be noted that the reporting of cash flows is relatively low in complexity, since the vast majority of indicators required for calculating the indirect method are contained in other forms of the company's current financial statements.

The direct method is aimed at obtaining data that characterize both the gross and net cash flow of the enterprise in the reporting period. It is intended to reflect the entire volume of cash receipts and expenditures in the context of individual types of economic activities and for the enterprise as a whole. The differences in the results obtained for calculating cash flows by the direct and indirect method relate only to the operating activities of the enterprise. When using the direct method of calculating cash flows, direct accounting data describing all types of cash receipts and expenditures are used.

To sum the second chapter up, it is feasible that shopping mall and office real estate segments have suffered the most during COVID-19 lockdown or in the pandemic times as a whole because: employees were not allowed to enter the offices – firms gave up some areas previously rented or owned by them; shopping centers were closed for a quite long period of time. As a result of these two cases, companies incurred losses and cash gaps.

The flip side of the coin is that warehouse segment is a booming sector. That is why there we no such financial problems as in the previous two cases.

Chapter 3. Increasing efficiency of cash-flow management using banking instruments

1.1. Cash flow management during COVID-19 on the example of company X

First and foremost, the names of the developers are concealed for the purpose of not revealing commercial secret. The flipside of the coin is that all figures are real (see table 3).

Company X – company from the warehouse real estate segment in the Russian region. Latest specification – warehouses, distribution centers for the retailers, especially, e-commerce retailers.

First of all, let us see GBA (gross building area) and GLA (gross lease area)

Table 3. Company X Industrial Capacities¹⁹

Name	Company X
GLA (Gross Leasable Area)	76 111
Percentage of occupation	88,1%
Rental rates (without VAT) , thousands Rub	2 667
Share top-5 tenants	35,4%

Name	3Q2019	3Q2020	Share (%)	Change (%)
Fixed Assets	597 138	791 146	88%	+32%
Deferred tax assets	73	0	0%	0%
Non-current assets	597 211	791 146	88%	+32%
Inventory	2 073	2 579	0%	+24%
Accounts receivable	75 264	79 180	9%	+5%
Securities	0	0	0	0%
Cash	29 236	19 132	2%	-35%
Other non-current assets	3 864	4 906	1%	+27%
Current assets	110 437	105 797	12%	-4%
Assets	707 648	896 943	100%	+27%
Equity	10	10	0%	0%
Retained earnings	39 414	73 826	8%	+87%
Equity	39 424	73 836	8%	+87%
Long-term borrowings	613 215	762 588	85%	+24%
Long-term liabilities	613 215	762 588	85%	+24%
Short-term borrowings	4 896	13 281	1%	+171%
Accounts payable	50 113	47 238	5%	-6%
Short-term liabilities	55 009	60 519	7%	+10%
Liabilities & Equity	707 648	896 943	100%	+27%

The asset structure is typical for the Client's activities, the share of current assets is 12%, the share of non-current assets is 88%. The sources of asset financing are equity (8% of the balance sheet currency) and debt capital (92% of the balance sheet currency).

The asset is dominated by fixed assets – 791 million rubles, which make up 88% of the assets, formed by land plots and property by Company X (see table 4).

¹⁹ Internal PJSC VTB sources

Table 4. Company X P&L statement²⁰

Name	01.10. 2019	01.10. 2020	Change (%)
Revenue	303 433	288 596	-5%
COGS	138 547	117 528	-15%
Gross profit	164 886	171 068	+4%
SG&A	92 829	82 801	-11%
Profit (loss) from sales	72 057	88 267	+22%
Interes payable	46 696	53 234	+14%
Other income	3 214	122 300	+3705%
Other expenses	3 508	125 299	+3472%
Profit before tax	25 067	32 034	+28%
Tax on profit	5 290	6 544	+24%
Net profit	19 777	25 490	+29%

The Client's revenue amounted to 288,596 thousand rubles for the last 9 months, the revenue is formed by leasing warehouse and office space. According to the results of 9 months of 2020, the Client's activity is profitable (25,490 thousand rubles). LTM EBITDA as of 01.10.20 = 141,9 million rubles. EBITDA margin=36%. When calculating EBITDA in accordance with the SBCS, interest receivable was excluded and interest payable recorded in Form 2 was taken into account. Adjustments were made for other income/expenses.

With respect to other income/expenses: The Client changed the boundaries of the land plots, the book value of the former objects in the accounting is liquidated, the book value of the new plots is registered. Due to this fact, the change was reflected in the account 91 (merger/separation of the operating system), (see table 5) which led to a sharp increase in other income/expenses.

Table 5. Company X Debt Burden²¹

Debt (Bank Loans+Loans)	775 869
Bank Loans	707 093
Loans	68 775
EBITDA	141 944
Interest	68 341
Debt (Bank Loans+Loans) /EBITDA	5,46
Debt (Bank Loans) /EBITDA	4,98
EBITDA/Interest	2,08

Debt (loans) / EBITDA = 4.98, which corresponds to the maturities of loans in the concealed Bank, the loans attracted are long-term, with maturities up to 29.04.26 and 18.06.27. It is assumed that the loans of concealed Bank will be refinanced for a period of 7 years with the possibility of prolongation for 3 years. Given the maturity of the obligations (up to 10 years, taking into account the refinancing of concealed Bank loans), the availability of real estate collateral, the debt burden can be considered acceptable.

²⁰ Internal PJSC VTB sources

²¹ Internal PJSC VTB sources

As it is clearly seen, the client came to the PJSC VTB for refinancing (one of the banking products/instruments) to decrease the interest rate payable, thereby, improving cash flow model. Moreover, as the segment of operations is warehouse real estate, there were barely no negative impact on the company's operations and financial statements, unlike the shopping center segment (the example of such a situation will be disclosed on the following chapter).

1.2. Cash flow management during lockdown on the example of company Y

Group of companies Y – developer, segment shopping malls, the most affected by COVID-19 outbreak sector of the developer business (see table 6). Manages 2 shopping malls in the Russian Region.

Table 6. Company Y Industrial Capacities²²

Indicator	Shopping Mall 1	Shopping Mall 2
GLA (Gross Leasable Area)	39 000	6 425
% occupation	98%	91,7%
Rental rates (without VAT)	10 223,0	12 584,7

Name	3Q2019	3Q2020	Share (%)	Change (%)
Fixed Assets	323 055	306 903	14%	-5%
Profitable investments in tangible assets	1 523 696	1 469 557	66%	-4%
Non-current assets	2 192 694	2 094 584	94%	-4%
Inventory	16 235	29 841	1%	84%
Accounts receivable	150 457	184 491	8%	23%
Securities	14 331	12 884	1%	-10%
Cash	15 027	24 741	1%	65%
Other non-current assets	1 079	779	0%	-28%
Current assets	197 129	252 740	11%	28%
Assets	2 389 823	2 231 169	100%	-7%
Equity	12 632	12 632	1%	0%
Retained earnings	30 486	27 563	1%	-10%
Equity	43 118	40 195	2%	-7%
Long-term borrowings	2 028 798	1 940 113	87%	-4%
Long-term liabilities	2 040 497	1 941 004	87%	-5%
Short-term borrowings	146 545	119 790	5%	-18%
Accounts payable	159 641	130 158	6%	-18%
Short-term liabilities	306 208	249 970	11%	-18%
Liabilities & Equity	2 389 823	2 231 169	100%	-7%

The revenue indicator is reduced by 26.7%, due to the impact of the virus pandemic, namely, the shopping centers were closed for a long period of time, many tenants were given discounts / deferrals on paying rent. Since July-August of the current year, there has been a gradual recovery of the rental flow, which corresponds to the smooth exit of the Republic from quarantine.

The Loans / EBITDA indicator (interest on the reference) is 8.08.

²² Internal PJSC VTB sources

Loans / EBITDA (interest on Form 2) is 6.04.

The financial conditions during the quarantine was undermined heavily, so it makes sense to take a closer look at the company's performance using ratio analysis: debt burden, profitability and liquidity ratios. First and foremost, for the credit analyst it is very important to evaluate debt burden ratios (see table 7):

Table 7. Company Y debt burden²³

Period	9M2019	12M2019	12M2020	6M2020	9M2020
Total Debt	2 175 343	2 034 665	2 040 113	2 071 177	2 060 691
Incl. Bank Loans and Loans	2 175 343	2 034 665	1 811 555	1 811 555	1 811 555
EBITDA / [Interest+Debt]	0,17	0,18	0,17	0,13	0,11
EBITDA/ Interest	1,29	2,20	2,21	2,22	2,63
Debt / EBITDA	5,09	5,17	5,28	7,05	8,80
Debt (loans) / EBITDA	5,09	5,17	4,69	6,17	7,74

One of the most important indicators for the Bank in terms of loan issuance is Debt/EBITDA ratio, starting from 6M2020 the ratio has significantly increased up to 7.74 in 9m2020, and the reason is simple – COVID-19 outbreak in Russia, certain rules were imposed, and the overall EBITDA LTM dropped down. Judging by this fact, the Client asked PJSC VTB for loan refinancing at our Bank and debt restructuring procedure because the firm was completely unable to pay the debt using previous debt schedule. Moving forward, profitability ratios are presented:

When building the basic model, the following initial data were taken into account.

The revenue part is built in accordance with the current register of tenants of the firm Y. It also provides for a variable fee (% of turnover and compensation for utility payments), a register of seasonal tenants (in 2020, there was no register of seasonal tenants due to COVID-19 restrictions, but in the foreseeable future they will appear. Therefore, starting from 2-3 quarters of 2021, income from the 2018 register is taken into account), other compensation of tenants (other income).

The revenues of Shopping Mall 1 and Shopping Mall 2 in Q4 2020 and Q1 2021 correspond to the forecast values provided by the client. Q2 2021 – Q4 2021-a gradual recovery in revenue is planned. In the 1st quarter of 2022 revenues are recovering to pre-crisis levels, namely: 1st quarter of 2020.

- Closing balance of cash at the end of the 3rd quarter of 2020 is 24 437 thousand RUB the Interest of the 4th quarter of 2020 was paid in advance in Q3 2020, so 44 866 thousand RUB percent in the model are returned in cash at the beginning of the period.

- Rental income, starting from the 4th quarter of 2021, is indexed annually by 4% (long-term forecast for inflation);

²³ Internal PJSC VTB sources

- The expenditure part was constructed in accordance with the retrospective data for 2019 and the 1st quarter of 2020, expenses are also indexed by 4% starting from the 4th quarter of 2021);

- The financial flow provides for repayment of the principal debt in VTB and payment of interest on the loan over the next 9 years (the last payment is Q4 2028), Q4 2025 - the date of payment of capitalized interest under the agreement. (see Appendix 4)

Thus, net debt in the terminal year after debt restructuration and loan refinancing is 128 757 th.rub. (4Q2028).

Judging by the presented financial statements above it could be fairly stated that shopping malls sector of the developer industry has been affected the most among the rest representatives of the market. Therefore, I will give specific recommendations regarding both shopping mall segment and warehouse segment.

The financial performance of the firm Y was much worse than company X. In the initial model – before application of refinancing procedure and debt restructuring company Y had various cash gaps. Certainly, you cannot work properly with various cash gaps, new debt financing will be needed again and again. The slump in 2027 stipulated by 60% balloon part of the principal repayment.

However, even in such a hopeless situation both Bank and its client (Company Y) did benefit. For now company operates with cash gaps and with accordance to the cash-flow model. COVID-19 pandemic is a unique precedent. Each Bank tries to retain its clients but selects the most conservative approach to its customers. In the conventional world (before 2019) it was a tough job to make the bank to offer you low interest on the bank loan because it simply eats up the bank margin on the credit issued.

None of the banks is willing to see their clients are non-performing on debt repayment, on this ground they will keep restructuring loans until the situation around pandemic in Russia stabilizes.

Certainly, there are some other requirements on how to improve financial performance of the shopping mall centers:

1. The beneficiaries should nowadays switch to a not such big shopping centers because it will be beneficial in terms of maintenance of the space, less utility costs for 1 sq.m, less workforce needed, less taxes on property and land plot. However, marginality and rental will remain quite the same despite of the size. In Moscow developers already switch to a tighter variant of shopping centers build-up.

2. Since the warehouse industry is booming nowadays, it might be quite beneficial in financial terms to partly reorganize the business and partly switch to the distribution center. Especially relevant for regional developers: in the Russian regions shopping malls remain very big in terms of GBA, part of this GBA area could be given to local or federal distribution centers. Both parties will

benefit: shopping center will receive cash during lockdown while e-commerce retailers will have less need to acquire and build up new areas. Better to use existing ones.

3. Since developer industry at all is a quite capital intense industry – beneficiaries are seeking for the debt capital because it is much cheaper to contain debt capital rather than equity one. For this reason, developer raise capital at the Banks: Banks never want clients to quit, even a loss-making ones. That is why Banks, especially, PJSC VTB offers various instruments to retain its customers. For instance: loan refinancing, special state programs (1764, 696, 1528, 494), debt restructuring. All these instruments help both bank and its client to feel satisfied financially.

Thus, it is noticeable in the graphs, tables and appendixes below that Bank instruments such as debt restructuring and various state programs can straightforwardly affect companies' financial, especially, cash-flow statement.

Finally, the recommendations to business beneficiaries: do not hesitate to come and ask for better conditions in the Bank. Presumably, after the COVID-19 lockdowns end up, it will become much tougher to receive attractive loan terms.

Conclusion

In the first chapter the concept of real estate was discussed - real estate is a form, physical embodiment, and reflection of various types of human activity (business and personal activity), fixed in a certain place. The concept of real estate market is a mechanism that ensures the transformation of value into the price. There are three vital elements of the development process — land plots, participants in the development process and social manifestations.

Each element is defined by its own rules and patterns. The developer searches for areas in the city that are potentially attractive for development, based on certain criteria, decides, or rejects the project, or postpones the decision and continues the study. The nature of the developer's activities deserves further detailed description, considering the types of financial risks and various behavioral strategies. Moreover, the COVID-19 also provides opportunities for the Flexible area development, new development milestone for the market.

The warehouses were barely the one that were not much affected by COVID-19 crisis because the demand for BTC warehouse areas has increased due to the fact that e-commerce as well as conventional retailers increased demand for warehouse space in the regions of the Russian Federation. To overcome this issue, beneficiaries must manage the cash-flow statements of the firms accurately: PJSC VTB in this case is of great help because using state program №1764 for refinancing procedure at lower interest rate and debt restructuring procedure could improve cash-flow statement of the Client and give it an opportunity to pay off both principal and interest part of the debt despite severe deterioration of the financial results of the firm.

In conclusion, it can be said that, indeed, there are certain features of managing developers' cash flows. Banks, as the main debt institution, play a major role in the recovery of the industry after the crisis.

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Appendices

Appendix 1

Company X cash flow model before bank intervention

	ПОКАЗАТЕЛЬ	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
III	Financial activities												
	Income from financial activities:	117 000	900 000	0	0	0	0	0	0	0	0	0	0
	Attracting loans from other banks												
	Attracting loans to VTB	0	900 000	0	0	0	0	0	0	0	0	0	0
	Attracting leasing	0	0	0	0	0	0	0	0	0	0	0	0
	Raising shareholders' funds	0	0	0	0	0	0	0	0	0	0	0	0
	Expenses related to financial activities	33 670	916 918	116 798	113 378	126 889	138 690	131 850	125 010	155 795	145 155	134 515	195 000
	Repayment of loans in VTB	0	27 000	38 000	38 000	54 000	72 000	72 000	72 000	112 000	112 000	112 000	195 000
	Repayment of loans from other banks	14 300	805 700	0	0	0	0	0	0	0	0	0	0
	VTB interest payment	0	84 218	80 798	77 378	72 889	68 690	59 850	53 010	43 795	33 155	22 515	0
	Interest payments to other banks and creditors	19 370	0	0	0	0	0	0	0	0	0	0	0
	Cash flow from financing activities	83 330	-16 918	-116 798	-113 378	-126 889	-138 690	-131 850	-125 010	-155 795	-145 155	-134 515	-195 000
	Cash flow across all activities	-11 347	47 013	31 662	39 820	31 049	23 872	35 443	47 257	21 225	36 597	52 244	-5 324
	Cash balance at the end of the period	7 785	54 798	86 460	126 279	157 328	181 201	216 643	263 900	285 125	321 723	373 967	368 642

Source: Composed by the author

Appendix 2

Company X cash flow model after bank intervention

	ПОКАЗАТЕЛЬ	2020	2021	2022	2023	2024	2025	2027	
	Purchase of other objects	130 000	80 000	0	0	0	0	0	
	Денежный поток по инвестиционной деятельности	-132 643	-90 681	-11 122	-11 581	-12 058	-12 555	-13 071	-1
III	Financial activities								
	Income from financial activities:	117 000	900 000	0	0	0	0	0	
	Attracting loans from other banks								
	Attracting loans to VTB	0	900 000	0	0	0	0	0	
	Attracting leasing	0	0	0	0	0	0	0	
	Raising shareholders ' funds	0	0	0	0	0	0	0	
	Expenses related to financial activities	33 670	899 188	99 788	97 088	111 544	124 650	119 250	1
	Repayment of loans in VTB	0	27 000	36 000	36 000	54 000	72 000	72 000	7
	Repayment of loans from other banks	14 300	805 700	0	0	0	0	0	
	VTB interest payment	0	66 488	63 788	61 088	57 544	52 650	47 250	4
	Interest payments to other banks and creditors	19 370	0	0	0	0	0	0	
	Cash flow from financing activities	83 330	813	-99 788	-97 088	-111 544	-124 650	-119 250	-1
	Cash flow across all activities	-11 347	61 197	45 270	52 852	43 325	35 104	45 523	5
	Cash balance at the end of the period	7 785	68 982	114 252	167 103	210 428	245 533	291 055	34

Source: Composed by the author

Appendix 3

Company Y cash flow model before bank intervention

	ПОКАЗАТЕЛЬ	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Выдача займов/приобретение активов	0	0	0	0	0	0	0	0	0	0	0
	Cash flow from investing activities	936	-2 102	-6 408	-4 701	-1 302	3 371	9 408	16 907	25 468	-6 994	12 650
III	Financial activities											
	Income from financial activities:	0	0	0	0	0	0	0	0	0	0	0
	Attracting loans from VTB	0	0	0	0	0	0	0	0	0	0	0
	Attracting leasing	0	0	0	0	0	0	0	0	0	0	0
	Raising shareholders' funds	0	0	0	0	0	0	0	0	0	0	0
	Expenses related to financial activities	44 866	308 220	336 570	263 389	252 289	241 189	230 089	218 989	1 092 108	0	0
	Repayment of loans in VTB	0	135 000	180 000	120 000	120 000	120 000	120 000	120 000	1 025 151	0	0
	Repayment of loans from other banks	0	0	0	0	0	0	0	0	0	0	0
	Capitalized interest											
	VTB interest payment	44 866	173 220	156 570	143 389	132 289	121 189	110 089	98 989	66 957	0	0
	Payment of interest to other banks and lenders	0	0	0	0	0	0	0	0	0	0	0
	Cash flow from financing activities	-44 866	-308 220	-336 570	-263 389	-252 289	-241 189	-230 089	-218 989	-1 092 108	0	0
	Cash flow across all activities	-30 265	-52 193	10 725	71 674	96 798	123 709	152 520	183 348	-672 591	389 292	425 189
	Cash balance at the end of the period	39 038	-13 155	-2 429	69 245	166 043	289 752	442 272	625 620	-46 971	342 321	767 510

Source: Composed by the author

Appendix 4

Company Y cash flow model before bank intervention

	ПОКАЗАТЕЛЬ	2020	2021	2022	2023	2024	2025	2026
III	Financial activities							
	Income from financial activities:	0	0	0	0	0	0	0
	Attracting loans from VTB	0	0	0	0	0	0	0
	Attracting leasing	0	0	0	0	0	0	0
	Raising shareholders' funds	0	0	0	0	0	0	0
	Expenses related to financial activities	36 378	188 013	247 410	246 599	258 184	378 843	208 374
	Repayment of loans in VTB	0	44 130	110 233	118 158	139 496	274 814	120 000
	Repayment of loans from other banks	0	0	0	0	0	0	0
	Capitalized interest							
	VTB interest payment	36 378	143 883	137 177	128 441	118 688	104 029	88 374
	Payment of interest to other banks and lenders	0	0	0	0	0	0	0
	Cash flow from financing activities	-36 378	-188 013	-247 410	-246 599	-258 184	-378 843	-208 374
	Cash flow across all activities	-23 678	62 973	103 037	95 881	99 499	-7 106	174 875
	Cash balance at the end of the period	37 137	100 109	203 146	299 026	398 526	391 420	566 295

Source: Composed by the author

Appendix 5

The largest shopping centers built



Source: Composed by the author based on Colliers International report