

Nikulin Leonid Romanovich

student

Semina Natalya Sergeevna

student

Nazarova Daria Igorevna

student

Scientific adviser

J.S. Tsertseil

Candidate of Economic Sciences,

Associate Professor

Graduate School of Finance

Plekhanov Russian University of Economics

Moscow

THE IMPACT OF GEOPOLITICAL FACTORS ON COMPANY VALUE

Abstract: *in order to understand the influence of geopolitical factors on the value of the company the value of PJSC Sberbank will be estimated using dividend discount model and earning multiplier and after that compared with values of JPMorgan Chase and HSBC banks which will be calculated using same methods in order to estimate the discount that Russian bank will have in comparison with American and British banks that are supposed to have zero discount since those countries are considered as the most stable and economically developed in the world thus it makes sense to calculate discount rate based on their prices. Also, a regression model which will analyze factors that can affect the price of stocks of those banks will be considered, and if the results for Russian and Western banks are too different, it becomes possible to estimate the error (discount) which is applied when pricing Russian assets.*

Keywords: *company valuation, geopolitical factors, dividend discount model, earning multiplier, corporate finance.*

Никулин Леонид Романович

студент

Семина Наталья Сергеевна

студентка

Назарова Дарья Игоревна

студентка

Научный руководитель

Церцейл Юлия Сергеевна

канд. экон. наук, доцент

ФГБОУ ВО «Российский экономический

университет им. Г.В. Плеханова»

г. Москва

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ВЛИЯНИЕ ГЕОПОЛИТИЧЕСКИХ ФАКТОРОВ НА СТОИМОСТЬ КОМПАНИИ

***Аннотация:** для анализа степени влияния геополитических факторов на стоимость компании проведена оценка стоимости ПАО «Сбербанк» с применением модели дисконтирования дивидендов и метода множителя прибыли. Полученные значения будут сравниваться с показателями банков JPMorgan Chase и HSBC, для которых предполагается нулевой дисконт, поскольку эти страны считаются наиболее стабильными и экономически развитыми в мире, а, значит, могут быть использованы при оценке референсных значений. Также рассмотрена регрессионная модель, для расчета влияния показателей на цену акций этих банков, после чего станет возможным оценить ошибку (дисконт), которая применяется при ценообразовании российских активов.*

***Ключевые слова:** оценка стоимости компании, геополитические факторы, модель дисконтирования дивидендов, множитель прибыли, корпоративные финансы.*

1. Company overview

PJSC Sberbank is the biggest bank in Europe that currently has around 280,000 employees all over Russia which also makes it one of the biggest employers and currently considered as the most stable and credible financial institution in Russia. Moreover, the comparison of Sber with a giants such as JPMorgan Chase is possible since both banks have a wide range of sub branches which activities include not only taking deposits and giving credits for people and companies but also includes insurance services, investment banks branch (CIB), assets management and multiple IT projects that makes Sber a potential competitor for such companies as Yandex, VK and some other companies which are considered to be purely IT-companies, while Sber is still considered mostly as a bank. Moreover, on the annual event which took place in October for employees-shareholders representative of Sber stated that they are transforming the brand into the digital one so usage of banking multipliers is not correct for them anymore and they want to be compared with Yandex, not with VTB for example, so this fact should be taken into consideration when analyzing the company and estimating industry or historically average values of multipliers for them.

So, speaking about economic conditions of Sberbank and its position on the Russian market of financial services potential investor must pay attention to the following figures in annual report for 2022 [1]: market share of 53,8% in mortgage lending, 37,7% in consumers lending, 19,1% in brokerage services and 46,4% in credit cards. Such high shares in all spheres of banking business means that Sber can be considered not only as «some» bank but as a reflection of the Russian economy in general since it represents about half of this economy in many spheres. From those figures it is possible to conclude that in terms of economic condition Sber is doing completely fine and its market price can hardly be discounted for some reason. The performance figures of the bank are also quite impressive: return on-equity, which is considered to be the main indicator of efficiency of the banks, is on the level of 25% which is a very high value since industry average ROE in Russia is around 15–20% which means that Sber outperform the competitors significantly. Share of non-performing loans on the book of the bank is only 3,4% which is a good value which is around industry average. However, Sber gives credits mostly to enterprises so the expected exposure for those credits

is lower than for private loans due to higher recovery rate which decrease LGD (loss given default) value. Capital adequacy ratio is on the level of 13,21% while the minimum value set by Central Bank is 8% which means that the value of capital of the bank to possible risks is nearly 2 times higher than the minimum one. Liquidity and stability values for Sberbank are also on the very high level: instant liquidity ratio (H2) is on the level of 51,57% while the minimum established by Central Bank is 15%. Current liquidity ratio (H3) is on the level of 88,66% with the minimum set by Central Bank equal to 50% and which means that the bank has enough assets to cover obligations that can be easily transformed into money in 30 days. Long-term liquidity ratio (H4) has the value of 76% with the maximum set by CB equal to 120%. All those values show that Sberbank is absolutely stable company which has a very big reserve even in case of severe sanctions and possible bank runs. Also, the ratio of dependence from interbank credits which shows the share of IBC in total liabilities of the bank is on the level of 5% which once again shows that Sberbank is independent from other banks and overall costs of borrowing on the interbank market, so fluctuations in RUONIA rate will not affect stability of the bank.

Ownership and management structure is also very strong in Sberbank: the current Chairman of the Board of Directors is German Gref, who is a very skillful manager with experience in government service since he was a Minister of Economic Development for 7 years in 2000–2007 and after that came to Sberbank. It's interesting to mention that at least until 2021 he was a member of the board of managers of JPMorgan which reflects him as a very talented and wise leader. Shareholders structure of Sberbank is as follows: 50%+1 share belongs to the Government of the Russian Federation (which makes Sber mostly a state company), about 45–48% belongs to different companies (mostly foreign ones) and 2–5% belong to private investors (also mostly foreign ones). Such a structure is very interesting: on the one hand, since Sber can be considered as the state company the level of its creditworthiness can be considered equal to the Russian one which means that there are nearly no risks for the business. Also, due to such a high share of state, Sber is a very stable «dividend aristocrat» and «blue chip» that pays dividends every year without any risks and tricks. On the other hand, there is

about 40% share of foreign in total equity which leads to the very interesting feature of the company: all geopolitical risks are immediately transferred into the price of the stock due to a very high share of foreign investors who seek to reduce geopolitical risks. All government risks are also transferred into the price of the stocks due to its high share which also increases the influence of geopolitical factors on it even if the financial streams of Sberbank remain completely unchanged. However, until the events of 2022 Sberbank had a credit rating of BBB from Fitch credit rating agency [4]. Despite BBB might seem to be not much for foreign investor, the Russian sovereign debt (in the form of eurobonds) had the same credit rating which means that Sber is considered to be as stable as the Russian economy, which is quite good level since creditworthiness of Russia is supported by its infinite natural resources. For years Russia was the favorite emerging market for Western investors, so such a level can be considered as a strong Russian AAA. It is interesting to mention that already on this level of research the influence of geopolitical factors can be seen: despite Western countries been investing in Russia since 1991 without serious incidents (excluding 1998) the maximum level of credit ratings reached by Russia is BBB which is like a kind of «glass ceiling» for all Russian companies only because they are Russian, so the influence of purely geopolitical factors on the values of Russian companies can be seen even without considering any financial layouts.

2. Company valuation

The valuation of the company is going to be done based on the dividend discount model and earnings multiplier model, comparing the values for Sberbank and for industry on average.

The understanding behind the dividend discount model lies in the following: the price of a stock (which is a part of a company so price of a stock and price of a company means close ideas here) is determined by the future dividends paid on it. General formula for dividend discount model is the following:

$$\text{Value of a stock} = \frac{\text{EDPS}}{\text{COE-DGR}} \quad (1.1)$$

where EDPS – expected dividends per share,
COE – cost of equity, DGR – dividend growth rate.

So, by including data for Sber in DDM formula (1.1) it is possible to get the fair price of shares. In our case dividend growth rate can be calculated using historical data: for 2019 and 2020 Sber paid dividends of 18,7 rubles per share, for 2021 – 0 rubles, for 2022 – 25 rubles, so the average growth rate of dividends is 10,2% per year [2]. Expected dividends per share for 2023 are expected to be much higher due to a very successful year for the banking industry and are considered to be around 33 rubles per share if Sber reaches the value of profit of 1,5 trillion rubles [3]. Cost of equity for Sber is around 22,3% [12]. So, adding those values to the formula, there is the following equation:

$$\text{Value of a stock} = \frac{33}{0,223-0,102} = 272,7 \quad (1.2)$$

Interesting to mention that the current price of Sber is around 272 which means that according to the dividend growth model the company is priced absolutely fairly.

As for the estimation of value using earnings multiplier, it is possible to get the following figures: historically average P/E for Sbarbank is 7,3x [13]. Market average for the banking sector in Russia is about 8x [14], which means that Sber is priced around the average. However, with expected income of 1,5 trillion rubles for 2023 current market capitalization must be equal to 11 (7,3*1,5) trillion rubles, but the actual market cap is only 6 trillion rubles which is nearly two times lower than it should be [11].

For estimation of factors that affect the price of the company the regression model will be constructed. It is important to mention that the idea of regression model includes analysis of influence of changes of factors, not the factors itself, so all values are considered as growth rates compared with the value of the previous period. Prime hypothesis in this analysis is that there must be a strong influence of GDP, profit and dividends on the total return of stocks since Sber reflects the general economic condition of Russia. In order to do so the following tables with the data from annual reports of the company and government statements about economic situation can be constructed (table 1).

Table 1

Changes of income values of a Sber for regression model

Year	Revenue	Profit	Dividends	ROE
2022	-17,8%	-78,4%	+32,0%	-80,6%
2021	+14,6%	+64,4%	+33,7%	+50,3%
2020	+8,4%	-9,9%	+0,0%	-27,5%
2019	+3,9%	+1,6%	+16,8%	-3,9%
2018	+1,7%	+11,0%	+33,3%	-4,5%
2017	+12,0%	+38,1%	+100,0%	+16,3%
2016	+18,7%	+143,1%	+204,5%	+103,9%
2015	+9,9%	-23,2%	+337,7%	-31,0%
2014	+17,8%	-19,8%	-85,9%	-28,8%
2013	+19,9%	+4,0%	+24,5%	-14,0%

(compiled by the author based on [1]).

Data in table 2 reflects that Sber had quite significant growth both in commercial and private loans for the last 10 years which explains growth of revenue and profits as well as growth of dividends per share payments. However, the share of non-performing loans was mostly growing which is a bad sign for a bank. Yet, current values of NPL are considered to be normal and so Sber does not expect to have too many defaults on them. It is important to mention that around half of corporate bonds have the floating rate which means that with every rise of the key rate by the Central Bank Sber benefits from it.

Table 2

Changes of assets of a Sber for regression model

Year	Assets	Commercial loans	Private loans	Share of NPL
2022	+1,70%	+2,90%	+8,40%	+3,40%
2021	+14,30%	+11,10%	+25,90%	-32,60%
2020	+20,20%	+10,70%	+15,40%	+5,25%
2019	-3,97%	-3,25%	+16,78%	-4,67%

2018	+15,07%	+1,10%	+18,09%	+50,12%
2017	+6,87%	+3,98%	+13,61%	+0,92%
2016	-7,19%	+1,10%	+1,30%	-16,58%
2015	+8,47%	-2,14%	-7,50%	+65,50%
2014	+38,39%	+4,45%	-10,20%	+51,13%
2013	+20,62%	+3,27%	+5,67%	+13,11%

(compiled by the author based on [1]).

Table 3 consists of important of key interest when estimating the influence of geopolitical factors on the value of particular company since those factors affects the general economic situation in the country which is closely linked with banking sector since the banking sector is sometimes considered as the «blood of economy» which connects all companies and individuals so any negative macroeconomic effects for them are directly transported into the financial condition of banks (and the value of those banks of course).

From the table growth of capitalization corresponds with the growth of GDP except for 2014 and 2020 can be seen. In the first case the reason was purely geopolitical due to Western sanctions imposed on the whole Russian economy while in the second one low interest rates were stated by the Central Bank so a lot of people and companies were taking loans. Also, it can be seen that nearly every year stocks of Sber outperformed the iMOEX in general which shows that investors like this company and believe in it.

Table 3

General economic situation in Russia affecting Sber

Year	Average key rate	iMOEX	GDP	Market capitalization
2022	+90,8%	-43,1%	-2,1%	-51,7%
2021	+24,8%	+15,1%	+4,7%	+8,5%
2020	-26,6%	+5,3%	-2,7%	+6,3%

2019	-8,0%	+25,4%	+2,2%	+36,7%
2018	-14,2%	+11,8%	+2,8%	-17,2%
2017	-14,6%	-5,5%	+1,8%	+29,8%
2016	-19,9%	+26,7%	+0,2%	+71,1%
2015	+29,0%	+53,3%	-2,0%	+84,5%
2014	+80,3%	-4,2%	+0,7%	-45,7%
2013	0	+5,7%	+1,8%	+8,9%

(compiled by the author based on [1]).

By using all this data, it becomes possible to apply the regression model in Excel that will show the most influential factors (X) for the value of stocks return (Y). According to this model, the most influential factors are «profit» and «local index» which have betas of 1,06 and 1,12 respectively which means that usually investors are looking for the profit when calculating the value of the company and estimating if they want to invest in it or not. High beta for the factor «local index» might mean the so-called momentum factor which means that people are likely to buy Sber (thus pushing its price higher) because it was growing before which is understandable due to the share of Sber in «Public portfolio» which was considered before. However, the correlation with GDP is positive and has a beta of 0,75 which means that the correlation is weak and the growth or decline of GDP do not necessarily lead to growth or decline of stocks, but mostly the direction of their movements coincides.

3. Analysis of geopolitical factors influence on company value.

In order to estimate the influence of geopolitical factors on the value of the company one must consider the price of similar companies (JPMorgan Chase and HSBC) that are supposed to have little to zero discount (since they can be considered as the benchmark for other banks all over the world) using the same methods that was considered above: dividend discount model, earnings multiplier and linear regression model.

So, by inserting the values for JPMC into the formula 1.1 that was mentioned in part 2.2 getting the following construction given that EDPS = 4,20\$, CCE = 9,4%, DGR = 1,5% [8, 9]:

$$\text{Value of a stock} = \frac{4,20}{0,094-0,015} = 53\$ \quad (1.3)$$

However, the current price of JPM stocks on the NASDAQ stock exchange is 146\$ which means that according to the dividend discount model the price of JPM stocks must be about 3 lower than it is now. By applying same formula for HSBC bank, the following values are received given that EDPS = 2, CCE = 11,3%, DGR = 0,5% [5, 7]:

$$\text{Value of a stock} = \frac{2}{0,113-0,005} = 18,5\$ \quad (1.4)$$

With the current price of stocks of HBSC equal to 37,03\$ per share it can be concluded to have the double «over price» from the fair value. For Sberbank current value of stocks and fair value using dividend discount model were around 1, so they were more or less equal. From this comparison it can be concluded that for some reason Russian assets get around 63,4% discount in comparison with quite similar American assets and 50% in comparison with similar British assets. Taking into account the size and importance of those businesses in respective countries there hardly can be any additional risks that they face and that could possibly lead to such discounts so it can be concluded that purely geopolitical factors lead to discounts on Russian assets of about 50–60%.

The second way to assess the fair price of the company is using an earnings multiplier: historical P/E ratios for JPMC and HSBC are 8x and 4,5x respectively [9], their incomes in 2023 are expected to be around 50 billion USD [20] and 16 billion USD [6] in 2023, which gives estimated («fair») market cap of about $8 \cdot 50 = 400$ billion USD and $4,5 \cdot 16 = 72$ billion USD. Current market caps for those banks are 425 and 144 billion USD respectively, which gives controversial results: in case of HSBC, it is obvious that fair value is twice lower than current market cap (in case of Sberbank it was 2 times higher than market cap) which show huge overvaluation of stocks of British bank in comparison with Russian peer. On the other hand, at first blush the JPMorgan

situation looks as if it is priced fairly. However, there are factors that seriously affect the potential growth of JPM: since this bank is so big, the government prohibited it from acquiring smaller banks and taking new deposits from the population which means that bank cannot organically grow anymore, so the current incomes are nearly maximum possible for it. Also, JPM is one of eight G-SIB (stands for global systemically important banks) which means that it is considered by being too big not just to fail but even to be affected by any risks, which means that it has to hold more assets than smaller peers. Currently they hold 50 billion USD (same value as the revenue in 2023) in assets that cannot make any profit which reduces possible incomes that banks can give to shareholders [16]. However, even under such harsh conditions bank is priced twice higher than Russian Sberbank which is expected to face the recovery of Russian economy (as it was stated before, Russian market is the best one between emerging ones) and have access to give more credits for CIS countries which means that the potential to grow is very big, but this point has no reflection in market pricing of stocks which can be explained by geopolitical factors that are «priced» on the same level as the legislative prohibition of and thus absence of future growth thus once again giving discount of around 50%.

The third way to estimate the influence of geopolitical factors on the value of Sberbank is to consider the linear regression which will depict factors that influence its peers and compare with factors that influence Russian banks. The main hypothesis is that correlation between dividends and profits of Western banks will be lower than those values for the Sber while the influence of growth of local index and GDP of a particular country will have a higher effect giving something like a momentum factor for the stocks. So, applying linear regression in Excel to the values in appendix 1 and 2 shows that both banks have biggest betas for the same factors: profit, commercial loans and share of non-performing loans. JPMorgan Chase has betas for those factors equal to 0.82, 0.92 and 0.91 respectively (appendix 1), HSBC has values of 0.73, 0.57 and 0.3 respectively (appendix 2). For the Sberbank company the value of beta for profit was 1.06 which shows that correlation of profits and market capitalization is stronger for Russian company while prices of stocks of Western banks are less affected

by the profit factors and influenced by other factors instead which proves prime hypothesis that value of Western companies less affected by dividends and profit payments. From the standpoint of potential investors, low correlation between dividends and price is strange since usually even big funds seek to get profit for their investments instead of becoming co-owners of business (which can result in interest towards growth of volume of commercial loans and share of NPL). Comparing betas for different banks one can see that Western banks are overvalued from the standpoint of their profit (which was also considered above) while Sberbank have mostly fair estimation of such influence so once again getting that discount on Russian bank is around 25–30% from this standpoint.

4. Recommendations on increasing the value of company.

As it can be concluded from previous sections, the discounts on Russian assets are varying from 20 to 50% depending on the chosen model, so the ways to increase the value of Sberbank are hard to estimate: with such a huge discount bank itself cannot do anything and the way to increase the value of this company is to decrease global geopolitical tensions and attract new investors both from the East or from the West which is more like a task for the government or even different governments but not the management of bank itself. However, since the whole Russian market is not covered by most popular rating agencies nowadays institutional investors are prohibited to invest into it while for private investors it is too complicated to enter the Russian market due to different political and economic restrictions both from the Western world and from the Russian Central Bank. Also, due to a huge number of sanctions imposed on all companies by different Western states for a private investor it is nearly impossible to invest in public Russian companies (especially big ones) without accepting risks of being sanctioned for this, so even if people or investment companies are willing to invest in seriously undervalued Russian assets the risk of doing so is so high that no return can compensate it. However, there are two macroeconomic trends that might be helpful in increasing the value of Sberbank: worsening relationships between China and USA and high inflation that can boost the Russian market as it did in Iran or in Turkey. Both trends will be deeply considered later in this chapter.

First trend that will be considered is worsening relationships between China and the USA. Potential benefits for Russian stocks are the possibility of Chinese investors coming out of Western assets (that becomes more and more toxic as the conflict develops) and investing their money in the friendly market of Russia. Currently, the risks of getting sanctioned for investing in Russia are too high for Chinese investors, but if geopolitical tensions deepens and sanctions will be imposed anyway then Eastern partners might be interested in buying undervalued Russian assets most of which are paying stable dividends and are not affected by sanctions much such as oil and metal extraction companies. In case this scenario becomes real the potential value of Sberbank can increase not just by some percent but by times from the current values since the Chinese economy is much bigger than the Russian one thus the flow of money on the financial market can be really significant. Moreover, as it was considered before, currently the biggest part of the Russian stock market belongs to private investors which create around 80% of all turnover on the market which means that a big flow of Asian money will give a significant boost for the Russian financial market and economy in general. Also, growth of cooperation between China and Russia might lead to development of existing managerial practices in local companies which will increase potential profits and so value of Russian companies. In order to benefit from this trend, the bank itself can develop relationships with Chinese partners which is currently done by the bank. Also, it develops relations with partners in India and considering expansion of existing network of branches on Indian territory. All that factors might attract more investors and increase the market value of the company. However, the process of attracting investors on the Russian market is extremely complicated and requires cooperation of different financial institutions in Russia such as the Central Bank, Ministry of Finance, Tax Service, Government of the Russian Federation. In such complicated process Sberbank itself can only keep disclosure information and show the example of both public company in Russia and modern and efficient bank so when the time will come Asian investors will know a lot about it and their first buy on the Russian market will be stocks of Sber.

Another trend that might affect the price of Sberbank company is a high level of inflation in terms of closed financial market and economy in general as it can be seen in Iran or Turkey. The idea of this process is that when the capital is somehow «locked» inside the country for some reason and the level of inflation is high enough all assets are starting to get some kind of «inflation premium» which is explained by the fact that it is impossible to «print» those assets while money is «printed» (created) easily and injected into economy by the state. For example, Turkish consumer price index created by Eurostat (TRHICP) increased by 154% since the beginning of 2022. At the same time, Turkish main stock index Bist100 (XU100 ticker) in TRY increased by 328%, which means that capital was running from hyperinflation to financial assets causing growth of prices by 3 times in 2 years (figure 1).



Fig. 1. Consumer price index (BIST) in 2020, % [15]

Currently all required conditions in Russia are formed: investments from Russia are closed by sanctions from the West and restrictions from the Russian Central Bank so it is impossible to transport big sums of money from the country. At the same time, a lot of rich people were forced to evacuate their money and assets from Western countries when their governments started to expropriate assets of those people just because those people were connected with Russia (or considered to be connected without much proof of this thesis). Under all those conditions people started to return their money to

Russia and invest them in local assets thus increasing their value and locking the capital inside of the Russian economy. This fact explains huge share of private investors on the stock market reported by Moscow Exchange: those people who return their assets are not familiar with Russian financial institutions or do not trust them completely so they decide to invest money on their own or create a personal family office that won't be registered anyhow and will invest as a private investor or group of them.

However, despite the positive influence of high inflation and restrictions on capital movements on the value of stocks (and nominal capitalization of financial market) this trend is mostly negative for market and financial system in general since the inflation can be considered as a regressive tax on everyone. When prices are going up people from lower class and some part of the middle class cannot afford spending money on buying assets that will grow in price since they spend all their money on basic needs and consumption, and if they are not good in financial planning their structure of spendings leaves them with no money to buy assets. At the same time, upper-middle class and upper classes have plenty of money to invest in businesses while those businesses itself are able to transfer growth of costs into growth of prices so in real terms (after adjusting incomes to inflation) rich people do not lose money since the growth of prices is compensated by growth of assets while poor people have to pay for this growth without being able to take part in those businesses. Moreover, as it was stated before, the growth of prices on assets is faster than the real inflation due to «inflation premium» in asset prices which means that rich people are getting richer while poor ones are getting poorer. In this case owners of assets are satisfied and happy since their wealth is growing, but the economy in general is suffering, people on average become poorer, social instability and dissatisfaction is growing etc. Growth of value of Sberbank can become quite controversial from the standpoint of ethics and economy of Russia in general, but owners of the company will definitely be satisfied with potential growth.

5. Summary.

From the performed analysis it is possible to conclude that geopolitical factors have a very significant influence on the Russian assets. Despite the fact that Russian companies and economy in general survived the harsh influence of Western sanctions

imposed in 2022 the current price of Russian stocks still have very big discounts when compared with similar American and European companies. In order to estimate the fair value of stocks of PJSC in this work the following models were used: dividend discount model, earnings multiplier and linear regression which was used to assess the factors that influence price of stocks and compare them between Russian and Western banks. Using those models, the following results were obtained: according to the dividend discount model the current price of Sberbank can be considered as «fair» since both current market price and estimated «fair» price are equal to 272 rubles per share. Using earnings multiplier model for Sberbank it was estimated that P/E value for this bank is around average for Russian banking market but using this value current market capitalization of Sber is 2 times lower than it should be (around 6 trillion rubles currently against 11,5 trillion rubles estimated «fair» cap). From the regression model it was concluded that the most influential factors for Sber are profit, dividends and growth of local index which shows that investors love the company so the growth of index (which is a result of overall economic growth in 2012–2022) gives Sber's stocks momentum as well as growth of profit which is later transformed into dividends.

In order to estimate if the Russian assets are undervalued or not the values of similar Western assets were considered: American JPMorgan Chase and British HSBC banks. By applying dividend discount model for them it was concluded that current market price of JPM is 3 times higher than it should be according to DDM while for HSBC overprice of stocks was of 2 times. Earnings multiplier model which was used to estimate correlation between profit and market capitalization delivered similar results: JPM is overpriced by 10% while HSBC is overpriced by 2 times. However, for JPM «just 10%» is still a big overprice since it cannot increase revenue anymore and have significant expenditures due to current legislation.

From the regression analysis it was concluded that prices of Western companies are less explained by their profit which means that their prices are formed somehow else which can be explained by a kind of «geopolitical upside», while the price of Sberbank had a correlation of nearly 1 which is more fundamentally reasonable. The difference between betas of different banks was around 25–30%. To crown it all, it can

be concluded that currently discounts on Russian assets (similar to Western ones) caused by purely geopolitical factors is varying from 30 to 60% which gives around 40% discount on average.

References

1. Annual report 2022 [Electronic resource]. – Access mode: https://www.sberbank.com/common/img/uploaded/_new_site/com/gosa2023/sber-ar-2022-en.pdf (date of access: 23.11.2023).

2. Dividends [Electronic resource]. – Access mode: <https://www.sberbank.com/ru/investor-relations/dividends> (date of access: 23.11.2023).

3. Ministry of Finance expect Sber dividends «not less 50%» from net income [Electronic resource]. – Access mode: <https://www.forbes.ru/finansy/498523-minfin-zalozil-v-proekt-budzeta-dividendy-sberbanka-ne-menee-50-cistoj-pribyli> (date of access: 23.11.2023).

4. Fitch Affirms Sberbank of Russia and Sberbank Leasing at 'BBB'; Outlooks Stable [Electronic resource]. – Access mode: <https://www.fitchratings.com/research/banks/fitch-affirms-sberbank-of-russia-sberbank-leasing-at-bbb-outlooks-stable-19-07-2021#:~:text=Fitch%20Ratings%20-%20Moscow%20-%202019%20Jul,VR> (date of access: 23.11.2023).

5. HSBC Dividend History [Electronic resource]. – Access mode: <https://www.nasdaq.com/market-activity/stocks/hsbc/dividend-history> (date of access: 23.11.2023).

6. HSBC Gross Profit 2010–2023 | HSBC [Electronic resource]. – Access mode: <https://www.macrotrends.net/stocks/charts/HSBC/hsbc/gross-profit> (date of access: 23.11.2023).

7. HSBA.LHSBC Holdings PLC [Electronic resource]. – Access mode: <https://valueinvesting.io/HSBA.L/valuation/ddm-stable> (date of access: 23.11.2023).

8. JPM Dividend History [Electronic resource]. – Access mode: <https://www.nasdaq.com/market-activity/stocks/jpm/dividend-history> (date of access: 23.11.2023).

9. JPMorgan Chase & Co [Electronic resource]. – Access mode: <https://valueinvesting.io/JPM/valuation/ddm-stable> (date of access: 23.11.2023).

10. JPMorgan Chase Gross Profit 2010–2023 | JPM [Electronic resource]. – Access mode: <https://www.macrotrends.net/stocks/charts/JPM/jpmorgan-chase/gross-profit#:~:text=JPMorgan%20Chase%20gross%20profit%20for%20the%20twelve%20months%20ending%20September,a%201.42%25%20increase%20from%202020> (date of access: 23.11.2023).

11. SBER.ME Relative Valuation [Electronic resource]. – Access mode: <https://valueinvesting.io/SBER.ME/valuation/pe-multiples> (date of access: 23.11.2023).

12. SBER.ME Sberbank Rossii PAO [Electronic resource]. – Access mode: <https://valueinvesting.io/SBER.ME/valuation/wacc> (date of access: 23.11.2023).

13. Sberbank (SBER) multiplier P/E (price/earnings) IFRS (annual data) [Electronic resource]. – Access mode: https://smart-lab.ru/q/SBER/MSFO/p_e/ (date of access: 23.11.2023).

14. Top Russian companies by P/E ratio [Electronic resource]. – Access mode: <https://companiesmarketcap.com/russia/russian-companies-ranked-by-pe-ratio/> (date of access: 23.11.2023).

15. View on BIST index [Electronic resource]. – Access mode: <https://ru.tradingview.com/chart/nTbcQL3T/?symbol=BIST%3AXU100> (date of access: 23.11.2023).

16. Why Does JPMorgan Chase’s Stock Seem so Cheap? [Electronic resource]. – Access mode: <https://www.fool.com/investing/2017/07/07/why-does-jpmorgan-chases-stock-seem-so-cheap.aspx> (date of access: 23.11.2023).