Sustainable growth of modern corporations as the major factor for ensuring strategic development

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Abstract. The article highlights some issues related to the topic of sustainable growth of modern companies. In general, this topic is quite broad and is not limited to the activities of companies. It is also about how to ensure sustainable growth in the global economy in the near future and in the long term. For this purpose, the states are joining their efforts to control harmful emissions into the atmosphere, ensuring clean seas and oceans, preserving forests from fires, etc. And if we bear in mind that without the direct participation of business - public and private - it is impossible to cope with this problem, then all companies should build their strategy in such a way as to contribute to this multifaceted programme. The article discusses modern concepts to ensure the growth of companies operating in a difficult economic and political environment. According to the given calculation algorithms, the indicators of sustainable and optimal growth of three Russian public joint stock companies, Severstal, NLMK, and MMK, are determined and evaluated for the period from 2019 to 2021.

1 Introduction

The modern world is developing according to a very complex scheme that includes different mechanisms: natural-climatic, sociological, economic, and others. The economic one can be singled out as a priority one, since the life of the planet's population largely depends on how the economy of households, businesses, and the state is organised. For a long period of time, the world economy has formed and realised two goals - to obtain the maximum possible amount of profit and to reduce production costs. In recent decades, the negative impact of production processes - often non-stop - on the environment has become threatening.

The deterioration of the environmental situation has been noted in almost every corner of the globe [1]. The biggest environmental problems as of the beginning of 2023 have been named:

- widespread warming due to the use of fossil fuels in huge quantities (the increasing mass of greenhouse gas emissions has led to a rapid and steady rise in global temperatures);
- poor governance (economists and environmentalists have been urging politicians for years to get involved in greenhouse gas emissions);

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- the problem of food waste (one third of the food intended for human consumption - about 1.3 billion tonnes - is discarded or lost; this is enough to feed 3 billion people);
- lost biodiversity (the last 50 years have seen a rapid increase in human consumption; humanity is using more of the Earth's resources than it can replenish naturally);
- plastic pollution (in 1950 the world produced more than 2 million tonnes of plastic per year; by 2015 this annual production had increased to 419 million tonnes, exacerbating plastic pollution);
- deforestation (every hour, forests the size of 300 football fields are cut down; by 2030, there may be only 10 per cent of the planet's forests; if deforestation is not stopped, they could all disappear in less than 100 years);
- melting glaciers and rising sea levels (due to climate change, the Arctic is warming more than twice as fast as anywhere else on the planet; sea levels are currently rising at an average rate of 3.2 mm per year globally, and will continue to rise to about 0.7 metres by the end of this century); etc. (https://ecologyofrussia.ru'nazvany-samye...2022-goda/ [Electronic resource: Reference date: 15.07.2023]).

Under the influence of the above-mentioned circumstances, the strategy of "sustainable development" was announced in 1992 at the United Nations (hereinafter - UN) summit in Rio de Janeiro, the capital of Brazil. At that time, it was presented in general outlines, and at the same time the heads of 193 countries agreed to ensure the development of national economies without harming the environment and taking into account the preservation of natural resources for future generations.

In 2015, the next UN summit defined more specific sustainable development goals to be achieved by 2030. Globally, they are divided into two groups:

1.Meeting the needs of people - present and future generations.

2.Taking care of the natural ecosystem and resources (https://trends.rbc.ru/trends/green/cmrm/61543d599a794700c748b2f6/ [Electronic resource: Access date: 15.07.2023]).

In 2022, it was openly stated that the world is failing to cope with environmental problems, which in recent years have been of a threatening nature, and therefore require mankind to urgently take necessary measures. In February last year, experts from the UN Environment Programme published a report in which they named the main environmental risks to humanity: noise pollution, dangerous forest fires and phenological mismatch.

Business, both public and private, can make a significant contribution to improving the world's ecological system. It is known that an important guarantor of success in business is growth. But for this to happen, the stable functioning of companies in different business categories must be ensured. Among the many variables affecting business development, growth is one of the most important for success: market share, market growth, the ratio of marketing expenses to sales or a strong market position [2].

In recent years, Russian business has defined for itself a development trajectory taking into account the minimisation of environmental impact, including greenhouse gas emissions, as well as the selection and implementation of such investment projects that would allow business in a "clean production" environment. In this regard, business pays special attention to mandatory investment, a process in which the first priority is to invest in the renewal of production facilities, replacing old equipment, in which it is impossible to guarantee the maximum level of emissions of harmful substances into the atmosphere, with new equipment that allows minimising the volume of "harmful substances".

2 Main part

Two concepts with different perspectives are usually considered, which determine how sustainable growth can be:

Concept one: the concept of sustainable growth rate (SGR) by Robert C. Higgins, which allows the optimal growth to be assessed from a financial point of view. Here, factors such as the formation of a certain order within the strategy adopted, a number of constraints as well as financial risks are necessarily taken into account. Sustainable growth is considered in the form of an annual percentage of sales growth, consistent with such a financial policy, in which a number of targets are calculated:

- debt-to-equity ratio, which shows how the company's total debt to equity ratio compares;
- dividend payout ratio (dividend yield ratio), showing how much of the earnings will be utilised in the form of a payout per ordinary share;
- profit margin, defined as the difference between the amount of revenue in cash terms and the sum of variable costs;
- the ratio of total assets to net sales.

This concept provides a comprehensive financial framework and formula for calculating SGR in a specific case/for a specific company [3].

As described by Robert C. Higgins, the sustainable growth rate (SGR) concept is based on several assumptions such as constant rate of return, constant debt to equity ratio or constant asset to sales ratio. Consequently, the general applicability of the SGR concept when these parameters are unstable is limited.

Concept two: the concept of optimal growth by Martin Handschuh, Hannes Lesch, Bjorn Heiden, etc., which considers sustainable growth from the perspective of generating total shareholder return and profitability of the company regardless of the chosen strategy, the adopted business model and/or the state of financial constraints.

The peculiarity of this concept is that it is based on statistical estimates, and, moreover, on a long-term horizon.

So, the sustainable growth rate according to SGR means how much the company can sustainably grow and develop in the future without relying on the use of external capital in the form of borrowed capital, and is calculated using return on equity (as the ratio of net profit to revenue) and the retention ratio (which part of profit is retained in the business as retained earnings).

What is important in this process is that the company ensures that its return on (efficient use of) equity capital.

Return on equity (hereinafter - ROE) is an indicator (coefficient) reflecting the financial results of the company. It is defined as the ratio of net profit to the company's equity capital. ROE means the efficiency with which the company uses assets to generate profit. ROE is one of the five main financial and economic indicators of the company.

Retention rate refers to the percentage of a company's profit that is not paid out as dividends but is returned as retained earnings, i.e., it is the company's reinvested earnings. This ratio is often referred to as the net income ratio or the return ratio. The ratio is the opposite of the payout ratio because, the sum of the payout ratio and the retention ratio results in one. This ratio shows how much of the profit is retained as profit for the development of the business. Put differently, it is the percentage of profit that the company retains for its own use and future growth. The retention amount is the residual amount after the amount paid out of the profits as dividend. It is also important to emphasise that a high retention rate shows that the business is using more cash internally. This means that it provides a rate of return higher than the cost of capital. A low retention rate means that a greater proportion of profits are sent to investors as dividend payments.

Since the retention rate and the payout ratio are related elements of the same algorithm for calculating the metric, total return, it is useful to consider how the payout ratio is calculated.

The dividend payout ratio can be calculated as annual dividend per share divided by earnings per share or, equivalently, dividends divided by net income:

$$\text{Dividend payout ratio} = \frac{\text{Dividends paid}}{\text{Net profit}} \quad (1)$$

This indicator can be calculated using the following formula:

$$\text{Dividend payout ratio} = 1 - \text{Retention rate} \quad (2)$$

The retention ratio is calculated according to a certain algorithm:

$$\text{Retention rate} = \frac{\text{Earnings per share - EPS}}{\text{Earnings per share}} \quad (3)$$

here EPS defines earnings per share.

Now that the elements included in the formula for determining the sustainable growth rate have been characterised, it is necessary to consider the algorithm for calculating the sustainable growth rate:

$$\text{Sustainable growth rate} = RR \cdot ROE \quad (4)$$

here RR defines retention rate;

ROE is return on equity.

The sustainable growth rate is often referred to as the operating growth rate that can be achieved without the use of debt, usually represented as debt by the company. This is why the ratio is called sustainable because the company will be able to grow even without external debt investment. This is the growth achieved by the company from the profits that it decides to retain after distributing the amount of money to the shareholders in the form of dividends. Hence, an analyst looking at the sustainable growth ratio will look for options to ensure a higher ratio as this may bode better prospects for the company.

Due to the assumption that a sustainable growth rate can be achieved by the company in accordance with its established financial policies the company as a business entity is a necessary input for several valuation models:

- Gordon models;
- discounted cash flow models.

In general, the models link long-term profitability targets, dividend policy and capital structure assumptions, returning a sustainable, long-term business growth rate achievable in reliance on them.

Sustainable growth rate can be calculated using the following formula below [4]:

$$SGR = \frac{pm \cdot (1 - d) \cdot (1 + L)}{T - (pm \cdot (1 - d) \cdot (1 + L)} \quad (5),$$

where *pm* defines return on sales (on net profit);

d means dividend payout ratio;

L is the ratio of total debt to equity capital;

T is the ratio of total assets to sales.

It is important that when using this formula (model), some assumptions should be taken into account:

- profitability remains stable;
- the ratio of assets to sales remains stable;
- the value of existing assets is maintained after depreciation;
- the company maintains its current capital structure and dividend policy.

As for the indicator of optimal business growth, according to Martin Handschuh, Hannes Lesch and Björn Hayden, it is a growth rate that ensures sustainable development of the company provided that there is a long-term relationship between revenue growth, total shareholder value creation, and profitability of the company. Over the long term and across all industries, total shareholder value creation (share price performance plus dividend payments) increases with revenue growth rate. The longer a company can sustain earnings growth over the long term, the more confident shareholders and investors feel and the more rewarding the company's performance is perceived to be. Typically, shareholders and investors hold the following statements:

- profitability drives growth: companies with significant profitability have the ability to invest more in additional growth;
- growth drives profitability: significant growth can be a driver of additional profitability, for example, through increased attractiveness to high-performing young professionals, higher employee motivation, higher attractiveness to business partners, and greater self-confidence.

Thus, the main elements of the algorithm for calculating the optimal growth of the company are the indicators: return on assets (ROA), return on sales (ROS), return on equity (ROE), which actually increase with increasing profit growth up to 10-25%, but then sharply decrease with further increase in the profit growth indicator.

The concept of optimal growth by Martin Handschuh, Hannes Lesch, Bjorn Hayden, etc. differs from the concept of sustainable growth in that it has no limits, and thus is more flexible when applied in practice. However, speaking about the breadth of coverage, this model provides orientation only for setting medium- and long-term growth goals for companies that have specific features in their functioning (desire for change, significant increase in market share, management culture, etc.).

It is also important to note that attention is paid to different groups of companies for which the so-called basic growth models (strategies) can be applied:

- for companies with low single-digit growth rates, belonging to participants in established markets, for example, in the European and US markets; corporate social responsibility (hereinafter - CSR) and profitability of such companies are higher in "favourable conditions";
- for companies with a growth rate of more than a quarter, belonging to fast-growing segments of industry and regional markets; these are companies in the People's Republic of China and India, which are able to quickly reduce "turnover" in case of sudden negative changes in the market without serious problems.

Having briefly described the concepts of sustainable business growth, which are often relied upon by modern businesses, it is worthwhile to consider how growth indicators - sustainable and optimal - are calculated using the example of Russian companies operating in the timeframe from 2019 to 2021. These are Russian metallurgical public joint stock companies Severstal, NLMK and MMK, which have an interesting history and support the global trend of improving the climate on the planet. Due to the unexpected complexities associated with the spread and consequences of COVID-19, many indicators were not provided by the companies - and this is an objective reason.

Table 1 presents the raw data (in dynamics) of the domestic companies accepted for consideration in order to make calculations to determine sustainable growth in the period from 2019 to 2021. The basis for calculating and analysing the indicators is the financial statements of Severstal, NLMK and MMK.

Table 1. Baseline data in dynamics, calculation and analysis of sustainable growth indicators of public joint stock companies Severstal, NLMK and MMK for 2019-2021.

Indicators	Severstal PJSC					NLMK PJSC					MMK PJSC				
	2021	2020	2019	2021/ 2020	2021/ 2019	2021	2020	2019	2021/ 2020	2021/ 2019	2021	2020	2019	2021/ 2020	2021/ 2019
Earnings per share, RUB	357.6	89.1	136.4	4.0 times	2.6 times	62.0	14.9	14.4	4.2 times	4.3 times	20.5	3.91	4.92	5.2 times	4.2 times
Dividends per share, RUB.	217.1	116.3	115.9	1,9 times	1.9 times	34.7	21.6	17.4	1.6 times	2.0 times	7.99	3.94	5.34	2.0 times	1.5 times
Payout ratio	0.61	1.31	0.85	Abs. -0.7	Abs. - 0.24	0.56	1.45	1.20	Abs. - 0.89	Abs. -0.64	0.39	1.01	1.08	Abs. – 0.62	Abs. – 0.69
Retention rate (RR)	0.39	-0.31	0.15	Abs. 0.7	Abs. 0.24	0.44	-0.45	-0.2	Abs. 0.89	Abs. 0.64	0.61	-0.01	-0.08	Abs. 0.62	Abs. 0.69
ROE, %	115.3	59.4	59.2	1.94 times	1.95 times	103.3	22.0	26.3	4.7 times	3.9 times	72.3	21.1	22.6	3.4 times	3.2 times
Sustainable growth (RR · ROE) (f.4), %	45.0	-18.4	8.9	Abs. 63.4	Abs. 36.1	45.5	-9.9	-5.3	Abs. 55.4	Abs. 50.8	44.1	-0.20	-1.8	Abs. 44.3	Abs. 45.9

Table 1 was compiled by the author based on the financial statements of public joint stock companies Severstal, NLMK, and MMK for 2019-2021.

According to the data in Table 1, we can see that during 2019-2021, the sustainable growth of the companies considered was unstable. It was mentioned above that the objective reasons expressed in the spread of the COVID-19 virus were a constraint on business development around the world, including the Russian Federation. In this regard, the sustainable growth indicators of the companies - public joint stock companies Severstal, NLMK and MMK for 2019 and 2020 were negative (except for PJSC Severstal for 2019). The analyses show that the results of these two years showed an imbalance in indicators such as the dividend payout ratio and the retention ratio. The retention ratios of the three companies for 2019 and 2020 were negative (except for Severstal for 2019). However, it should also be noted that 2021 was a turning point in the three-year period under review, with all three companies' sustainable growth indicators becoming positive in this year, which characterises the business as more stable than in previous years. Despite the fact that companies have different scales of production, different shares of export revenues, different corporate governance systems, etc., their sustainable growth indicators for 2021 are close in value. This may mean that the vectors by which the order of profit distribution is chosen, the share of profit for dividends and the share of reinvested profit, do not diverge significantly [5].

Next, the optimal growth indicators of the companies under consideration, Severstal, NLMK and MMK, are calculated for 2019-2021.

Table 2. Initial data in dynamics, calculation and analysis of optimal growth indicators of public joint stock companies Severstal, NLMK, and MMK for 2019-2021.

Indicators	Severstal PJSC					NLMK PJSC					MMK PJSC				
	2021	2020	2019	2021/2020	2021/2019	2021	2020	2019	2021/2020	2021/2019	2021	2020	2019	2021/2020	2021/2019
Net profit margin, %	35.4	25.5	23.1	1.4 times	1.5 times	35.1	14.0	19.8	2.5 times	1.8 times	28.1	12.9	12.8	2.2 times	2.2 times
Assets, RUB ths.	633.6	518.0	497.1	122.3	127.4	704.5	569.5	537.2	123.7	131.4	578.0	428.1	391.5	135.0	147.6
Sales volume, RUB ths.	770.3	450.9	457.6	170.8	168.3	792.9	437.1	421.8	181.4	187.9	786.0	400.2	434.9	196.4	180.7
Ratio of assets to sales, RUB ths.	0.82	2.15	1.09	Abs. -1.33	Abs. -0.27	0.89	1.3	1.27	Abs. -0.41	Abs. 0.38	0.73	0.7	0.9	Abs. 0.03	Abs. -0.17
Total debt to equity ratio	0.85	1.14	1.41	Abs. -0.29	Abs. -0.56	0.83	0.77	0.45	Abs. 0.06	Abs. 0.38	0.22	0.3	0.24	Abs. -0.08	Abs. -0.02
Payout rate	0.61	1.31	0.85	Abs. -0.7	Abs. -0.24	0.56	1.45	1.20	Abs. -0.89	Abs. -0.64	0.39	1.01	1.08	Abs. –0.62	Abs. –0.69
Optimal growth (f.5), %	45.5	-8.5	8.24	Abs. 54.0	Abs. 37.08	46.23	-9.3	-4.75	Abs. 55.53	Abs. 50.98	40.21	-0.19	-1.4	Abs. 40.02	Abs. 41.61

Table 2 was compiled by the author based on the financial statements of public joint stock companies Severstal, NLMK and MMK for 2019-2021.

Table 2 presents the calculation and analysis of indicators characterising the optimal growth of the companies under consideration. The calculations were made using formula (5), which is provided by the concept of optimal growth of Martin Handschuh, Hannes Lesch, Bjorn Heiden and others. The indicators show that only in 2021 the analysed enterprises provided optimal growth, in the other two years - in 2019 and 2020 the values of optimal growth are represented by negative values. As in the case of sustainable growth indicators, the reasons for the lack of optimal growth in these years for the companies (except for PJSC Severstal for 2019) were the action and then the consequences of the COVID-19 virus.

3 Conclusions

Consequently, it can be emphasised that it is important and necessary for companies to ensure effective management of income (profit) and, therefore, its rational distribution. If we take into account that income is considered as an aggregate of distributed and retained earnings, then the art of choosing their correct proportions is what a modern financial manager should possess. This affects the ability to systematically ensure the growth of the company using given parameters.

Retained earnings contribute to meeting shareholders' expectations and investing in projects that can bring additional profits to the company in the future. Retained earnings (profit) give the opportunity to have a sufficient potential reserve in case of force majeure and investment in long-term projects (https://fsnslnr.su/finansy/raspredelennaya-ili-neraspredelennaya-pribyl-kak-vybrat-optimalnyi-variant-dlya-vasego-biznesa Electronic resource: [Access date: 19.07.2023]).

Of course, this is not the only condition under which the company can guarantee sustainable growth. Important aspects are the tendency of equity capital growth, increase in profitability of the company, as well as capital intensity, independence, and balance.

It is still a challenge to ensure sustainable growth for companies in the real economy. This is mainly due to the fact that such companies have complex business processes, management, logistics, and governance.

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