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Financial Instruments

SIGNIFICANT FINANCIAL RATIOS TO ASSESS THE COMPANY'S FINANCIAL POLICY EFFECTIVENESS

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Abstract

Subject. This article fixates on the financial ratios used to assess the financial policies of companies.

Objectives. The article aims to form a base group of financial ratios enabling to measure the effectiveness of company's financial policy implementation.

Methods. For the study, I used a correlation analysis, critical review of subject-matter literature, and the systems approach.

Results. The article presents a set of financial ratios that can be used to assess the effectiveness of financial policy implemented by companies.

Conclusions and Relevance. Taken in totality, the described financial ratios can serve as an objective information basis to assess the effectiveness of companies' financial policies. The findings can be useful for company management to evaluate the financial policy, for investors to choose the best investment option, and for financial market participants.

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To maintain competitiveness and survive in the future, companies of today should focus on the effectiveness of the implementation of financial policy, which is an integral part of their economic policy and aims to form and use financial resources [1].

A financial policy is based on the financial mechanism adopted by the company. It deals with the following challenges:

- funds generation;
- effective financial management;
- funds management and distribution;

- use of financial instruments in company strategic and operating management;
- others [2].

The development of financial policy is becoming increasingly complex and requires constant changes, which are caused by the instability of the economic environment in modern conditions[1].

Given the importance of the challenges mentioned, the role of financial policy in the company's strategic development can be defined as a key one. It sets the financial activity direction and, using available opportunities and means, it influences financial processes to develop in that direction.

Financial policy is unavoidably associated with the distribution and redistribution of cash flows of a newly created product. It is a practice of cash flows redistributing to enhance financial resources (capital) and create value (capitalization growth) of companies.

Effectively implemented financial policies are essential for a company's long-term growth. A business can experience sustainable growth and add to marginality if the financial aspects are transparent. Effective financial policy management provides a higher return on investment. Each company shapes its own financial policy depending on its performance, requirements, applicability to the specific conditions it operates under.

In scientific literature, financial policy is defined as a form of implementation of companies' financial strategies or a financial ideology, a system of views, targets and ways of adapting and developing company finances to achieve certain goals. I.A. Blank's interpretation of the term *Financial Policy* is widely accepted, it says that *Financial policy is a form of implementation of the company's financial philosophy and main financial strategy in the context of the most important aspects of financial activities* [3].

Any financial policy is developed on the basis of information that is formed as a result of financial analysis. This information is expressed through economic indicators and assessed through financial ratios. It is important to use a reasonable system of coefficients for assessing the financial policy, which does not contain contradictory information and at the same time, includes all significant aspects of financial activity.

[1] Pivnyk K.E. Companies' Financial Policies under Globalization and Sanctions.
In: XXXII International Plekhanov Readings: A collection of articles by graduate students and young scientists in English. Moscow, PRUE Publ., 2019, pp. 121–125.

All this indicates an essential need for scientific research to describe a group of the most significant financial ratios for assessing the effectiveness of financial policy. It determines the relevance of the present research subject matter.

Contemporary financial analytics applies about two hundred different ratios to assess the financial condition of companies. However, most of them are of a specific nature and serve to assess a narrow area of the financial activities of companies. This study makes a choice among the universal coefficients that are used by the management of companies to make managerial decisions[2], (*Tables 1–4*) [1, 4–11].

It should be noted that when assessing the effectiveness of companies' financial policies, financial ratios should be considered from a holistic perspective, for the values of one or two financial ratios chosen on a sample basis can falsify information about the effectiveness of the financial policies implemented by companies – it is concluded following the analysis presented in *Tables 1–4*.

Also, to assess the effectiveness of the financial policies of companies, it is necessary to list financial ratios that can help do it most accurately, and that can meet the policies' main objectives. The companies' effective financial policy main objectives are presented in *Figure 1*.

To sort out impact of the financial ratios presented in *Tables 1–4* on the company's financial policy, the correlation analysis was used. The telecommunications industry was chosen for the study, since it is represented by a sufficient number of large companies, the indicators of which are comparable against each other. This increases the practical significance of the results obtained.

As a resultant indicator characterizing the success of the implemented financial policy of telecommunications companies, net profit is offered, since it most fully meets the objectives of an effective financial policy. The values of financial ratios are partial indicators in correlation analysis (*Tables 1–4*).

The hypothesis of the study is that a certain group of financial ratios has a more significant impact on the assessment of the financial policy of companies among other financial ratios. Five telecommunications companies were selected for further research[3].

[2] Sal'nikov K.V. Express Assessment of the Company's Financial Condition. *Handbook of the Economist*, 2017, no. 11, pp. 19–23. (In Russ.)

[3] PAO MegaFon official website: URL: https://megafon.ru/ (In Russ.); PAO MTS official website: URL: https://mts.ru/ (In Russ.); PAO T2 Mobile official website: URL: https://msk.tele2.ru/ (In Russ.); PAO Vympelkom official website: URL: https://moskva.beeline.ru/customers/products/ (In Russ.); PAO Rostelekom official website: URL: https://msk.rt.ru (In Russ.)

The comparability of the selected companies is important for the quality of the results obtained in correlation analysis. Despite the fact that PAO Rostelecom is one of the five largest telecommunications companies, and it rates high, it is excluded from the sample because its business model differs from the rest, and this may distort the results of the study.

The next step is the calculation of financial ratios presented in *Tables 1–4* for the selected four telecommunications companies. The financial ratios were calculated using the companies' official financial statements for 2018.

Next, we highlight the main criteria on the basis of which we can assess the company's financial policy. In accordance with its main objectives (*Figure 1*), an effective financial policy aims to maximize profits and capitalize the company. These indicators depend on net profit, since the more a company is able to generate net profit, the more it will be able to provide dividend yield for shareholders and create additional value by increasing capitalization.

The next step of the study is conducting a correlation analysis[4] and identifying the financial ratios that have the closest relationship with net profit for the selected companies. The results are presented in *Table 5*.

Table 5 shows that financial ratios numbered 4, 5, 8, 9, 14, 21, 22, 23, and 25 have the strongest impact on the financial policies of telecommunications companies[5].

It should be noted that a negative value shows an inversely proportional relationship. The list of selected ratios at the previous step of the study does not cover all aspects to assess the effectiveness of the companies' financial policies, and it cannot be presented as an effective system, since it will not reflect decisions in the field of liquidity and an important part of financial stability. Therefore, more research is needed.

Financial ratios expressed in absolute terms, such as *Net Working Capital* and *Net Assets*, are to be also excluded from further analysis to ensure comparability. Only seven financial ratios remain showing a close relationship with net profit.

Next, we rank the financial ratios according to their significance, which is determined by the expert method. Here, the selection criterion is the widespread

[4] Chernysh A. Financial and Economic Model: Ten Important Rules for Development. URL: http://krconsult.org/about/analytics/article/financialmanagement/103.html (In Russ.)

[5] PAO MegaFon official website. URL: https://megafon.ru/ (In Russ.); PAO MTS official website. URL: https://mts.ru/ (In Russ.); PAO T2 Mobile official website. URL: https://msk.tele2.ru/ (In Russ.); CNews Telecom 2019: The Largest Telecommunication Companies in Russia. URL: https://cnews.ru/reviews/telekom_2019/review_table/04045ab90cf58b11e187f328a33d6001bbfd09a8 (In Russ.)

use of ratios in financial analysis, in conclusions for M&A transactions, audit reports, economic reports of international rating agencies, relevant scientific research, etc. We distinguish financial ratios from the classification groups, namely, *Solvency ratio*[6] [12], *Receivables-to-Payables ratio*, *Return on Assets*, and *Return on Equity*.

In this aggregate, the group of financial stability ratios is represented insufficiently, and liquidity and solvency indicators are missing. We undertake a background analysis using the Churchman-Ackoff technique. For this purpose, we highlight the following criteria to select financial ratios.

1. Impact on financial policy in different areas (V_1).

2. Universal, irrespective of any industry (V_2).

3. Difficult to calculate (V_3).

4. Availability of primary information for calculation (V_4).

5. Need to use additional software (V_5) [10].

As an alternative, we choose the following.

1. Absolute Liquidity ratio (*A*).

2. Quick Liquidity ratio (*B*).

3. Current Liquidity ratio (*C*).

4. Current Assets Coverage ratio (*D*).

5. Reserves-to-Production ratio, using own funds (*E*).

The calculation results are presented in *Table 6*.

Based on the data of *Table 6*, we can say that it is advisable to choose alternative criteria *C* and *D*, since their *Utility* figures are much higher than the other alternatives' ones.

Thus, the final list of financial ratios that should be included in a system that can be used to assess the effectiveness of companies' financial policies is as follows:

- Current Liquidity ratio;

[6] Volynskaya O.A., Skripov I.V. Assessment of Financial Sustainability of Developer Companies. In: Modern Financial Relations: Problems and Development Prospects: Proc. 4th Int. Sci. and Prac. Conf. Novosibirsk, SGUPS Publ., 2017, pp. 65–70. (In Russ.)

- Return on Equity;
- Return on Assets;
- Current Assets Coverage ratio;
- Solvency ratio;
- Receivables-to-Payables ratio.

This list of financial ratios is not exhaustive. It is applicable as a basis for assessing the financial policies of companies. It can be expanded and augmented in accordance with the goals and specifics of the companies' activities, and the industry's ones, as well.

Based on the results of the study of financial ratios, it is necessary to form a model for assessing the financial policy of companies with a single indicator, according to which a conclusion about the effectiveness of its implementation should be drawn. This is the direction of further research.

Table 1
Solvency ratios

Ratio	Proposed by / Field of use	Ratio's effect on the company's financial policy
Absolute Liquidity ratio	Kozlov S.N. et al. / Agricultural enterprises [5]. Krainova K.A. et al. / Crisis situations [6]	The ratio has an impact in three areas: – if the ratio value exceeds the value of 0.5, the financial policy should be adjusted to improve the capital structure, i.e. it is necessary to include investment programmes to effectively use the most liquid assets; – if the ratio value is within the optimal range (0.2–0.5), the financial policy either remains the same, or high-yielding (risky) assets investment transformation is allowed; – - if the ratio value is below the value of 0.2, the financial policy should include measures to improve the company's solvency
Quick Liquidity ratio	Lavrenova E.S. / Machine-building enterprises [7]. Sal'nikova K.V. / Large corporations	The ratio has an impact in two areas: – if the ratio value is below the critical value of 0.7, the financial policy should include measures to improve solvency, especially in terms of indicators taken into account by investors and creditors; – if the ratio value exceeds the value of one, this indicates the effectiveness of the current financial policy implementation, which should be continued
Current Liquidity ratio	Kozlov S.N. et al. / Agricultural enterprises [5]	The ratio has an impact in two areas: – if the ratio value is below the critical value of 1.5, the financial policy should include anti-crisis measures; – if the ratio value exceeds the value of 2.5, this indicates ineffective use of assets that causes financial benefits loss by the company; revising the current and/or developing a new more effective financial policy can be a solution
Own Working Capital or Net Working Capital	Agibalov A.V. et al. / Financial sector [9]. Gudimenko G.V. et al. / Banking sector [1]	As a general matter, if it is positive, the ratio indicates the financial stability of the company and its successful current financial policy, respectively. However, when forming a financial policy, the ratio has an indirect impact only, as a component of other ratios

Source: Authoring

Table 2
Capital structure and financial stability ratios

Ratio	Proposed by / Field of use	Ratio's effect on the company's financial policy
Solvency ratio	Kozlov S.N. et al. / Agricultural enterprises [5]	The ratio has an impact in two areas: – if the ratio value exceeds the value of 0.5, the current financial policy ensures the company's financial self-sufficiency, and it can be adjusted to further develop the company; – if the ratio value is below the value of 0.5, the current financial policy should be changed to the anti-recession one
Current to Non-Current Assets ratio	Bazarova M.U. et al. / Trade organizations [2]	The ratio has an indirect impact on the company's financial policy
Debt-Equity ratio	Kozlov S.N. et al. / Agricultural enterprises [5]	If the ratio value is below the value of one, the financial policy can remain unchanged; if the ratio value is much higher, the financial policy should pursue the equity capital formation
Long-term Debt ratio	Kolmakov V.V. / Financial sector	The ratio has an impact on the long-term financial stability and a direct impact on the strategic level when implementing the company's financial policy
Net Assets	Gudimenko G.V. et al. / Banking sector [1]	If the ratio has a positive value, the current financial policy can stay unchanged. The ratio impacts the financial policy if there is a need to attract investment capital
Surplus (Lack) of Sources of Funds to Stock	Osipenkova O.Yu. / Large corporations. Gerasimov V.G. / Energy sector	The ratio has an impact on the financial policy of manufacturing companies

Source: Authoring

Table 3
Fixed and working capital ratios

Ratio	Proposed by / Field of use	Ratio's effect on the company's financial policy
Current Assets Coverage ratio	Kravtsova N.I. / Agro-industrial complex. Osipenkova O.Yu. / Large corporations	The ratio has an impact in two areas: – if the ratio value exceeds the value of 0.1 and it keeps on moving up, the current financial policy can remain the same under other favorable conditions; – if the ratio value is below the value of 0.1 or it keeps on moving down, the current financial policy should be adjusted to strengthen owned capital and enhance financial stability
Reserves-to-Production ratio, using own funds	D'yakonova O.S. / Trade organizations	The ratio has an impact on the financial policy of manufacturing companies
Current Assets-to-Equity ratio	Didenko Yu.S. / Agricultural enterprises	If the ratio value is within the normal range (0.2–0.5), the current financial policy can be effective, however, intrinsically, the ratio has an indirect impact on financial policy
Receivables-to-Payables ratio	Kolmakov V.V. / Financial sector. Gudimenko G.V. et al. / Banking sector [1]	The ratio has an impact in three areas: – if the ratio value is below the value of one, this indicates the need to revise the financial policy in terms of borrowing funds, in most cases; – if the ratio value is within the range from one to two, this indicates that the current financial policy is effective, in most cases; – if the ratio value exceeds the value of two, this indicates the need to revise the financial policy in terms of counter-party choosing, in most cases
Asset Effective Cost ratio	Gerasimov V.G. / Energy sector	The ratio has an impact on the financial policy of manufacturing companies

Source: Authoring

Table 4
Turnover and profitability ratios

Ratio	Proposed by / Field of use	Ratio's effect on the company's financial policy
Current Assets Turnover ratio	Kravtsova N.I. / Agro-industrial complex	The ratio growth indicates the effectiveness of the organization's assets use, but it has an indirect impact on financial policy
Inventory Turnover ratio	D'yakonova O.S. / Trade organizations	The ratio has an impact on the financial policy of manufacturing companies
Receivable Turnover ratio	Didenko Yu.S. / Agricultural enterprises	The ratio growth indicates the effectiveness of debtor management, therefore, considering positive dynamics, the financial policy can remain the same
Accounts Payable Turnover ratio	Kolmakov V.V. / Financial sector	The ratio growth indicates the effectiveness of creditor management, therefore, considering positive dynamics, the financial policy can remain the same
Current Debt ratio	Gudimenko G.V. et al. / Banking sector [1]	The ratio growth indicates the effectiveness of owned capital use, therefore, considering positive dynamics, the financial policy can remain the same
Return on Assets ratio	Osipenkova O.Yu. / Large corporations	The ratio has an impact on the financial policy of manufacturing companies
Return on Assets	Gerasimov V.G. / Energy sector. Osipenkova O.Yu. / Large corporations and telecommunication companies	The ratio has a direct impact on the financial policy in terms of: – pricing policy; – investment policy, including domestic investment; – management of income centers
Return on Equity	Fadeikina N.V. et al. / Telecommunications industry [10]	The ratio has an impact in two areas: – if the ratio value comes up, the financial policy can remain unchanged or be adjusted towards expanding the scope of borrowed capital; – if the ratio value comes down, the current financial policy is ineffective, and it needs to be improved
Return on Sales (Services)	D'yakonova O.S. / Trade organizations	The ratio has an impact on the financial policy in a multi-faceted way. It indicates the effectiveness of pricing policy and cost management, but to a greater extent, it is a universal indicator for the overall performance of the organization
Return on Net Assets	Kozlov S.N. et al. / Agricultural enterprises [5]	Since the RONA ratio indicates the effectiveness of capital structure management, the upward changes in the ratio value indicate the acceptability of this part of the financial policy, but its impact is generally indirect

Source: Authoring

Table 5
The results of correlation analysis

Ratio	Correlation coefficient
1. Absolute Liquidity ratio	–0.25
2. Quick Liquidity ratio	0.18
3. Current Liquidity ratio	0.18
4. Own Working Capital or Net Working Capital	–0.6
5. Solvency ratio	0.64
6. Current to Non-Current Assets ratio	–0.29
7. Debt-Equity ratio	–0.49
8. Long-term Debt ratio	–0.54
9. Net Assets	0.9
10. Surplus (Lack) of Sources of Funds to Stock	0.48
11. Current Assets Coverage ratio	0.16
12. Reserves-to-Production ratio, using own funds	0.13
13. Current Assets-to-Equity ratio	0.48
14. Receivables-to-Payables ratio	0.82
15. Asset Effective Cost ratio	–0.71
16. Current Assets Turnover ratio	–0.27
17. Inventory Turnover ratio	0.49
18. Receivable Turnover ratio	0.24
19. Accounts Payable Turnover ratio	0.26
20. Current Debt ratio	–0.37
21. Return on Assets ratio	–0.82
22. Return on Assets	0.89
23. Return on Equity	–0.58
24. Return on Sales (Services)	0.35
25. Return on Net Assets	–0.67

Source: Authoring, based on the companies' data

Table 6
Evaluating the strategies and calculating their usefulness

Alternative criterion	Standardized rate	*A*	*B*	*C*	*D*	*E*
V_1	1.33	0.8	0.8	0.7	0.6	0.6
V_2	0.83	0.8	0.8	0.9	0.5	0.5
V_3	4.5	0.2	0.4	0.7	0.8	0.7
V_4	0.5	0.2	0.3	0.8	0.9	0.9
V_5	0.12	0.2	0.1	0.9	0.9	0.7
Utility	–	0.52	0.57	0.78	0.69	0.64

Source: Authoring

Figure 1
Main objectives of the effective financial policy of companies

Source: Authoring

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