Evaluation of the Marketing Influence on the Investment Attractiveness of the Company

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Abstract: The study considers marketing activities of companies and their influence on the companies' investment attractiveness. Based on the role and content of marketing in modern conditions, the authors evaluate investment attractiveness by indicators characterizing cash flows and efficiency of the company's activities. Two companies and set of criteria were selected to assess the impact of marketing on their investment attractiveness. Correlation analysis revealed the indicators which are influenced by marketing technologies most of all. Evaluation of the impact of the company's marketing activities on investment attractiveness showed certain methodological problems, which require further research.

Keywords: Investment attractiveness of the company, marketing influence.

1. INTRODUCTION

The company should be investment attractive at any stage of the life cycle. Therefore, all costs incurred by the company must "work" for the formation of its investment attractiveness. Hence, there is a contradiction between the need to increase marketing costs or optimize them in the periods of a decline in consumer demand.

In their financial statements, companies disclose data from ongoing studies of the consumer, the market, the audience, the product, forecasts of growth in demand or supply, and the penetration of goods into a new market. However, they do not assess the effectiveness of marketing because of the lack of the necessary methodological base. The evaluation of marketing effectiveness is just beginning to develop in the business processes of companies.

2. ROLE AND CONTENT OF CONTEMPORARY MARKETING

The marketing system in modern companies is the connecting link of all processes - from the creation of a product / service to the control of their quality by the consumer (service, warranty service, feedback, etc.). Thus, it directly participates in the creation of consumer

Table **1** presents modern marketing technologies widely used by companies of various industries.

2. ATTRACTIVENESS OF THE COMPANY

Investment attractiveness is interpreted as obtaining maximum profit at a certain level of risk in the theories of Markowitz and Sharpe (Markowitz, 1959; Sharp, 1999).

However, most authors consider the investment attractiveness of the company as an integral characteristic, reflecting various aspects of its activity. Here we are at the standpoint of the efficiency of business development and maintaining competitiveness (Margolin, 2006, Mozgoyev, 2002; Krylov, Vlasova, Egorova, 2003; Kovalev, 2014). In order to assess the investment attractiveness of the company, the authors use various indicators. In particular: 1) the financial condition (Anshin, 2002), 2) the results of financial and economic activity (Krylov et al., 2003), 3) risk ratio (including all financial and economic indicators) and profitability (Sharp, 1999), 4) integral indicators, such as assessment of the investment attractiveness of the industry, region, country (Kalacheva, 2015), 5) market value, reflecting profitability and investment risk (Yudkina, Berlin, 2010).

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value and its transformation in the company's financial results. At the same time, marketing, forms a "sense of the market" and allows the business to take fewer risks, increase competitiveness, win a larger market share and increase the financial result.

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Table 1: Main Types of Modern Marketing Technologies

| Marketing technologies | Characteristics |
|-------------------------------------|---|
| Guerrilla marketing | Minimizes costs by searching for non-standard ways of advertising and promoting goods / services; It is characterized by non-traditional, non-standard, flexible and high results |
| Viral Marketing | Uses the consumer as a distributor of information by creating an unusual, bright, creative idea that is embedded in the mind of the consumer |
| Trade marketing and merchandising | Increase in sales through the correct location of the goods, packaging and delivery of goods to the consumer |
| Network marketing | Somewhat similar to a shopping pyramid/ Promotes goods through independent distributors, who are consumers most often. It covers and involves as many people as possible |
| Integrated marketing communications | Effective use of communication resources - analysis, selection, implementation and monitoring of various types and elements of marketing communications. They most effectively affect all transactions between the organization and its current and potential customers |
| Cross-marketing | Creating or promoting a product in which two or more companies participate. Their goods / services complement each other. |
| Call Center | The system for receiving and processing a large number of calls, working with customers on the phone (Purchase returns, orders, sales, etc.) |
| The Internet | Work on sites, social networks, advertising via the Internet, etc. |
| Mobile marketing | Use of mobile phones for advertising and communication with the consumer |
| Product placement | Implicit advertising in programs, games, serials, films, etc. |
| Direct marketing | Any direct marketing event |

Table 2: Indicators of the Company's Investment Attractiveness

| Indicator | Justification of the choice | |
|---|---|-----------------|
| | description | characteristics |
| Sales revenue (S) | the potential cash flow as a result of the company's activities for the reporting period (produced and realized value); characterizes the scale of the company's activities | CF (+) |
| Earnings before interest and taxes (EBIT) | the cash flow to be distributed between the state and investors | CF (+/-) |
| Return on Sales (ROS = EBIT/S) | the efficiency of operating activities | AE |
| Working assets | the most liquid capital | CF (-) |
| the working capital turnover ratio | the efficiency of working capital | AE |
| Accounts receivable | potential cash flow | CF (-) |
| Accounts receivable turnover ratio | efficiency of settlements with customers | AE |
| Asset Turnover Ratio | the efficiency of the company's total capital | AE |
| Net income (loss) | the potential cash flow | CF (+/-) |
| Gross profit | the financial result of production activities | CF (+/-) |
| Aggregate amount of obligations | potential inflows / outflows of cash | CF (+) |
| Profit margin | profitability of sales by net profit (loss) | AE |
| EPS | net profit attributable to common stock | AE |
| P/E | term covering the cost of acquisition of ordinary shares | AE |
| P/B | ratio of market capitalization to book value of the company's capital; characterizes overvaluation / undervaluation of the company by investors | AE |
| EV/EBITDA | term covering the cost of company acquisition; characterizes overvaluation / undervaluation of the company by investors | AE |

Table 3: The Chain of Marketing Productivity

| Marketing activity | Results of the company's activities |
|--|--|
| Tactics (advertising, incentive actions, etc.) | Strategy of product promotion, communications |
| Influence on the consumer (image perception, satisfaction, etc.) | Marketing assets (brand value, etc.) |
| Influence on the market (change in market share, sales, etc.) | Market position (market share, sales, etc.) |
| Financial influence (ROI, EVA, etc.) | Financial condition (profit, revenue, etc.) |
| Impact on the company value (MVA) | The company value (market capitalization, Tobin's ratio) |

For the purposes of this study, it is advisable to evaluate the investment attractiveness of the company based on system of indicators characterizing its cash flows (hereinafter referred to as CF) and performance (hereinafter referred to as activity efficiency - AE), since they reflect the ultimate marketing goals.

4. APPROACHES TO ASSESSING THE IMPACT OF MARKETING ON THE COMPANY'S ACTIVITIES

In 1998 the authors (Srivastava, Shervani, Fahey, 1998) proposed influence chain of marketing assets indicators (brand, customer base, partnerships) through marketing results (acceleration of penetration rates, price premium, premium for increasing the market share, service and sales surcharges, increase in profits through loyalty and retention rates) on company value (acceleration of cash flow, increase in cash flow, decrease in volatility and risk, increase in residual value). The authors based on the assumption that marketing investments naturally lead to an increase in marketing assets, which, in turn, can be estimated from the market position (market share, brand attitude, risk perception, confidence level, loyalty level, etc.). Positive assessment and growth of these assets leads to the strengthening of the company's market position and, as a result, to the growth of financial indicators and the value of the company by increasing the market share and reducing the share of costs.

Rust and other authors (Rust, Ambler, Carpenter, Kumar, Strivastava, 2004) developed this model in their study. They put forward a theory that it is necessary to evaluate not only the performance indicators, but also marketing actions, carrying out two parallel but interconnected chains.

In further research of Srivastava and other authors (Srivastava R., Reibstein J., Joshi Y. 2007), the authors concluded that the company value in the long run is not directly related to the ROI indicator, so it can not be

included in the chain of marketing productivity. At the same time, the authors discussed the mutual influence of the ROI indicator and intangible assets. Doyle (2001) wrote about the impact of marketing activities on intellectual assets (client base, market share, brand, etc.).

One of the methods of empirical evaluation of these or other marketing instruments influence on the strategic and economic efficiency of the company is the PIMS model (Profit impact of marketing strategy) (Mintzberg, 1998; Buzzell, 2004). They used the regression equations, when creating the model. They relate profitability indicators to 37 variables (indicators of market conditions attractiveness, competitive position and its strength, investment efficiency, budget use, market position changes). However, the model does not give a clear idea of the relationship of marketing with financial indicators

The model NMC (Net Marketing Contribution) show the direct dependence of the obtained profit on marketing costs allows (Best, 2015):

$$NMC = R - MC = V * M - MC = D * MS * P * AVC - MC$$
 (1)

Where R - gross margin, MC - marketing costs, V - product volume, M - margin per unit of output, D - market demand for products, MS - company's market share, P - unit price, AVC - variable costs for unit of production.

According to the estimates of various scientists, companies that actively use marketing tools receive a higher revenue (2.3 times) and a profit level (4 times) compared to companies that do not use marketing tools and strategies (Bravermann, 2006).

Best (2015) proposed a scheme of influence of marketing strategies on factors of NMC formation.

In addition to NMC, the indicators that summarize the effectiveness of marketing in the company are:

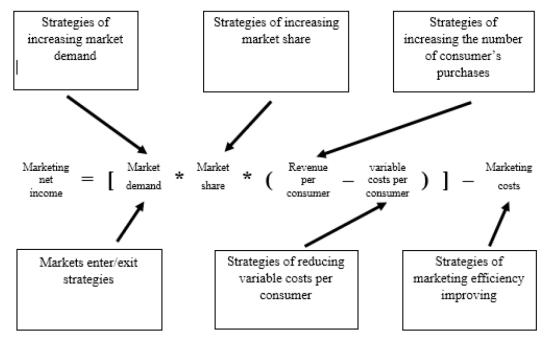


Figure 1: The impact of marketing strategies on the value of NMC.

- MROI (Marketing Return on Investments) (Bessler, Treppo, Notaney, 2007);
- MROS (Marketing Return on Sales).

Best's study (2015) revealed the dependency and relationship between MROI and ROIC (return on invested capital) indicators. The author showed the ROIC indicator decreases or may be negative when MROI is low, and vice versa.

Thus, authors paid the main attention in research to the impact of marketing activities on financial results and company value.

At the same time, short-term and long-term results of the company's marketing activities:

- ensure the stability of cash flows affecting the profitability of the company;
- affect the intensity of cash flows use determining the profitability of the company's assets;
- affect the liquidity indicators (customer loyalty, brands, assortment, brand recognition, etc.);
- ensure a reduction in costs, including marketing (through effective implementation);
- ensure the receipt of additional revenues (from activities with tradable securities, sales of assets, brands, etc.).

All this has a direct impact on the company's investment attractiveness (Egan, 2014) and stipulates the choice of investment attractiveness indicators.

5. CHOICE OF COMPANIES FOR ASSESSING THE RELATIONSHIP OF MARKETING ACTIVITY AND INVESTMENT ATTRACTIVENESS

The authors selected two companies for this study:

- advanced Micro **Devices** (AMD) manufacturer of integrated microcircuit electronics and one of the largest manufacturers graphics processors, chipsets motherboards and flash memory. In 2016, the company ranked second in terms of production and sales of processors with 30% of market share in the manufacture of discrete graphics cards. AMD and NVIDIA increased their market shares in 2017;
- NVidia Corporation (NVidia) one of the largest developers of graphics accelerators processors, as well as sets of system logic. The company's products are known under such trademarks as GeForce, nForce, Quadro, Tesla, ION and Tegra in the market.

The choice of companies is determined by the following factors:

they were the leaders of growth in the entire stock market in 2016;

- the products of companies are highly technological with constantly growing demand;
- they are growing, investing actively in marketing;
- they are direct competitors in the oligopolistic market of the two companies. Therefore, it is easy to assess their market share;
- Competition in the oligopolistic market reflects the effectiveness of marketing the most fully.

6. ASSESSMENT OF INVESTMENT ATTRACTIVENESS OF THE COMPANY AMD

The company has two main business segments (computers and graphics, special orders), and strong

regional segmentation of the market (Japan, China, USA, Singapore, Europe).

Technical analysis shows that most of the main indicators signal the expediency of buying shares of the company, the moving averages also confirm the bullish trend (as of May 2017).

According to the fundamental analysis, the company is not financially stable, because:

- there is no positive cash flow (EBITDA);
- there is no economic growth of the company (the value of total assets and equity is reduced while revenue grows).

Table 4: AMD Technical Indicators

| Indicator | Indicator value | Investment conclusion |
|---------------------|-----------------|-----------------------|
| RSI(14) | 63,865 | Buy |
| STOCH(9,6) | 73,054 | Buy |
| STOCHRSI(14) | 26,772 | Sell |
| MACD(12,26) | 2,495 | Buy |
| ADX(14) | 71,562 | Overbought |
| Williams %R | (34,208) | Buy |
| CCI(14) | 77,1477 | Buy |
| ATR(14) | 2,5132 | High Volatility |
| Highs/Lows(14) | 1,3418 | Buy |
| Ultimate Oscillator | 65,766 | Buy |
| ROC | 290,175 | Buy |
| Bull/Bear Power(13) | 3,9890 | Buy |

Buy: 9. Sell: 1. Neutral: 0.

Source: the authors' calculations based on AMD's historical data (as of May 2017).

Table 5: Moving Averages by AMD Company

| Period | Simple | Exponential | | |
|--------|----------------------------|----------------|--|--|
| MA5 | 12,760 Sell | 12,014 Sell | | |
| MA10 | MA10 10,559 10,529 Buy Buy | | | |
| MA20 | 7,013 Buy | 8,372 Buy | | |
| MA50 | 4,736 Buy | 6,137 Buy | | |
| MA100 | 5,349 Buy | 6,800 Buy | | |
| MA200 | 10,251 Buy | 8,306 Buy | | |

Buy: 10.

Sell: 2

Source: the authors' calculations based on AMD's historical data (as of May 2017).

Table 6: Indicators of Investment Attractiveness of AMD Company

| Indicator | | years | | | | |
|-----------------------------------|---------|---------|---------|--|--|--|
| | 2014 | 2015 | 2016 | | | |
| Sales revenue (mln. \$) | 5506 | 3990 | 4272 | | | |
| EBIT (mln. \$) | (398) | (646) | (448) | | | |
| EBIT margin (%) | (7,23) | (16,19) | (10,48) | | | |
| EPS (\$) | (0,53) | (0,84) | (0,6) | | | |
| P/E (x) | (5,03) | (3,41) | (18,88) | | | |
| P/B (x) | 0,54 | 0,72 | 2,85 | | | |
| EV/EBITDA | (28,86) | (11,98) | (39,24) | | | |
| ROS (%) | (7) | (16) | (10) | | | |
| Working assets (mln. \$) | 2736 | 2320 | 2530 | | | |
| Working assets turnover ratio (x) | 1,96 | 1,58 | 1,76 | | | |
| Accounts receivable (mln. \$) | 818 | 533 | 311 | | | |
| Receivables turnover ratio (x) | 6,67 | 5,91 | 10,12 | | | |
| Assets (mln. \$) | 4052 | 3426 | 3203 | | | |
| Asset Turnover Ratio (x) | 1,36 | 1,16 | 1,33 | | | |
| Net income (loss) (mln. \$) | (403) | (660) | (497) | | | |
| Gross profit (mln. \$) | 1839 | 1080 | 998 | | | |
| Company's obligations (mln. \$) | 3580 | 3496 | 2905 | | | |
| Profit margin (%) | (7,32) | (16,54) | (11,63) | | | |

Source: the authors' calculations based on the company's reports (Quarterly reports of AMD 2015-2017).

Nevertheless, the increase in the efficiency of business activity (turnover indicators growth) and increase of financial stability (reduction of liabilities) positively affects market valuation of a company (P/E, P/B).

However, SWOT analysis of the company allows us to conclude it has more strengths and opportunities than weaknesses and threats.

7. ESTIMATION OF INVESTMENT ATTRACTIVENESS OF NVIDIA COMPANIES

NVidia is a larger growing company. It occupies about 70% of the video processor market. The market capitalization of the company is six times that of AMD.

The main segments of the company's business are graphics and processors (96%) (World of NVIDIA, 2017). The company actively began to engage in

Table 7: AMD SWOT Analysis

Strengths **Opportunities** · A business model with low fixed costs in the computer • The growing demand for open source technologies and the penetration processors production in market of servers with ARM architecture • The microprocessors developer focused on research and · Redirect the focus from traditional markets to market of products based development, the production of central processors and video on ARM SoC architecture-based chips processors, as well as ARM architecture. · Increased demand for graphics processing · Presence in the consolidated market with high entry barriers Weak sides **Threats** · Lack of price force · Loss of market share because of increased competition among developers of mobile microchips based on ARM architecture. · Difficulties in penetrating the market of mobile phones with their own technologies · Reducing the cost of information technology in case of a global economic downturn. · Dependence on casters - partners. · The weakening of PC and laptop markets, as well as a slowdown in corporate sector investments.

Source: compiled by the authors.

Table 8: Technical Indicators of NVIDIA

| Indicator | Indicator value | Investment conclusion | | | |
|----------------------|-----------------|-----------------------|--|--|--|
| RSI (14) | 88,313 | Overbought | | | |
| STOCH (9,6) | 67,423 | Buy | | | |
| STOCHRSI (14) | 67,010 | Buy | | | |
| MACD (12,26) | 25,000 | Buy | | | |
| ADX (14) | 78,581 | Overbought | | | |
| Williams %R | (0,215) | Overbought | | | |
| CCI (14) | 149,2439 | Buy | | | |
| ATR (14) | 16,7186 | High Volatility | | | |
| Highs/Lows (14) | 59,3693 | Buy | | | |
| Ultimate Oscillator | 75,271 | Overbought | | | |
| Indicator | Indicator value | Investment conclusion | | | |
| ROC | 309,065 | Buy | | | |
| Bull/Bear Power (13) | 66,4320 | Buy | | | |

Buy: 7. Sell: 0. Neutral: 0.

Source: authors' calculations based on NVIDIA's retrospective data (as of May 2017).

Table 9: Moving Averages for NVIDIA

| Period | Simple | Exponential |
|--------|---------------|---------------|
| MA5 | 113,93 Buy | 115,61 Buy |
| MA10 | 96,96 Buy | 98,81 Buy |
| MA20 | 67,26 Buy | 77,09 Buy |
| MA50 | 37,94 Buy | 49,26 Buy |
| MA100 | 25,98 Buy | 34,20 Buy |
| MA200 | 19,56 Buy | 23,87 Buy |

Buy: 12. Sell: 0.

Source: authors' calculations based on NVIDIA's retrospective data (as of May 2017).

artificial intelligence and the development of unmanned vehicles. The company has a strong regional market segmentation (Taiwan, China, Asia, USA, and Europe).

Technical analysis shows that most basic indicators give a bullish trend and signal the need to purchase securities of this company (as of May 2017).

According to fundamental analysis, the company is the attractive investment, as evidenced by the following:

- presence of stable and significant economic growth (revenues, assets and equity indicators);
- maintenance of stable business activity (turnover ratios).

All listed above has a positive effect on the market valuation of a company (P/E, P/B, EV/EBITDA).

The high value of EV/EBITDA testifies to the manifestation of the "knowledge economy" with

Table 10: NVIDIA Investment Attractiveness Indicators

| Indicator | | Years | |
|--|-------|-------|-------|
| | 2014 | 2015 | 2016 |
| Sales revenue (mln. \$) | 4682 | 5010 | 6910 |
| EBIT (mln. \$) | 755 | 743 | 1905 |
| EBIT margin (%) | 16,12 | 14,83 | 27,57 |
| EPS (\$) | 1,12 | 1,08 | 2,57 |
| P/E (x) | 17,90 | 30,36 | 41,44 |
| P/B (x) | 1,56 | 2,53 | 7,03 |
| EV/EBITDA | 14,43 | 22,84 | 35,00 |
| ROS (%) | 16 | 15 | 28 |
| Working assets (mln. \$) | 8713 | 6053 | 8536 |
| Working assets turnover ratio (x) | 1,53 | 1,47 | 1,05 |
| Accounts receivable (mln. \$) | 474 | 505 | 826 |
| Accounts receivable turnover ratio (x) | 10,40 | 10,23 | 10,38 |
| Assets (mln. \$) | 7201 | 7370 | 9841 |
| Assets turnover ratio (x) | 0,65 | 0,69 | 0,80 |
| Net income (loss) (mln. \$) | 631 | 614 | 1666 |
| Gross profit (mln. \$) | 2599 | 2811 | 4063 |
| Company's obligations (mln. \$) | 2783 | 2901 | 4048 |
| Profit margin (%) | 13 | 12 | 24 |

Source: the authors' calculations based on the company's financial statements (NVidia Financial Statements 2015-2017).

significant share of intangible assets in the company value.

SWOT analysis of the company allows us to conclude that the company has more strengths and opportunities than weaknesses and threats.

Thus, both companies have the potential for growth, but NVIDIA is more attractive for investments.

8. EVALUATION OF MARKETING ACTIVITY OF COMPANIES AMD AND NVIDIA

Both companies are actively engaged in market research and use modern marketing technologies.

Table 11: NVIDIA SWOT Analysis

Strengths

- The company is a recognized specialist in computer graphics and as provider of integrated services for visual computing solutions: from licensing intellectual property to graphics processors, chips and systems on chips, graphics cards and fully integrated systems
- The company has high market positions in key markets, professional visualization and high-performance computing, the availability of data centers
- The company provides solutions for mobile applications by delivering processed graphics from the cloud to any device; Top-rated supplier (Green500 supercomputer list)

Weak sides

- Difficulties in using the experience of designing processors for non-GPU applications
- The difficulty of penetrating the market for devices with graphics processors designed for mobile applications
- High research and development costs as a percentage of sales compared to other semiconductor companies

Opportunities There is an in

- There is an increase in the number of visual computing in cars for entertainment and visual information systems, as well as image processing systems used in autonomous driving in the world
- There is the growth in the number of high-performance and enterprise computing systems using a huge number of GPU cores in the world
- Company can diversify activities with increasing market share of non-GPU developments, including the mobile market

Threats

- Enhancing competitive pressure in the development of the GPU
- Accelerated transition from PC to console games
- Reduce the cost of information technology or budgetary pressure on research projects in the event of a global slowdown in economic growth.

Source: compiled by the authors.

The main direction of AMD's marketing strategy is price dumping. It allowed the company to increase its market share from 22.7 to 30% in the sphere of discrete graphics cards.

The main marketing strategy of NVidia is ensuring a balance between high prices, quality and use of branding.

Both companies use:

- marketing technologies: advisory marketing, ratings and reviews, search engine optimization, content on the product, content staging, guest posting, demonstration marketing.
- "push" -tools: advertising in social networks, advertising mailings, authoritative marketing, and partner programs.

Marketing costs in companies account for approximately the same share in revenue: 10.8-12.1% in AMD and 9.6-12% in NVIDIA. However, NVIDIA's marketing activities are more effective in terms of MROS and MROI performance.

9. EVALUATION OF THE MARKETING IMPACT ON THE INVESTMENT ATTRACTION OF COMPANIES AMD AND NVIDIA

The influence of marketing activities on the investment attractiveness of companies is determined

by the statistical relationship between the corresponding indicators for the period from 2008 to 2016, using the Pearson correlation coefficient.

Correlation analysis showed:

- 1) the presence of dependencies, namely:
- the high influence of marketing activities on the investment attractiveness of a larger company;
- the high influence of marketing activities on revenue, profit (net profit, EBIT, EPS), on market valuation of the company by investors (R/V), on ROS and P/E;
- significant impact of marketing costs on the investment attractiveness (high correlation) and net marketing profit (NMC) (significant correlation), as well as on MROS and ROMI indicators;
- 2) absence of dependencies, namely:
- the influence of the company's market share on its investment attractiveness:
- the influence of marketing activities on the company's business activity (turnover ratios);
- 3) the inexpediency of using the EV/EBITDA multiplier to assess the impact of marketing activities on investment attractiveness.

Table 12: AMD Marketing Performance Indicators

| Indicator | | Years | | | | | | | |
|---|------|-------|------|------|------|------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Aggregated market share for comparable activities | 19% | 20% | 24% | 25% | 20% | 18% | 14% | 12% | 12% |
| Marketing Costs, (mln. \$) | 1304 | 994 | 934 | 992 | 823 | 674 | 604 | 482 | 460 |
| NMC, (mln. \$) | 1016 | 1278 | 2027 | 1948 | 412 | 1304 | 1235 | 598 | 538 |
| MROS | 17% | 24% | 31% | 30% | 8% | 25% | 22% | 15% | 13% |
| MROI | 78% | 129% | 217% | 196% | 50% | 193% | 204% | 124% | 117% |

Source: the authors' calculations based on the company's reports (Quarterly reports of AMD 2008-2016, NVIDIA World, 2017).

Table 13: Performance Indicators of Marketing Activities for NVIDIA

| Indicator | Years | | | | | | | | |
|---|-------|------|--------|--------|--------|--------|------|------|------|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Aggregated market share for comparable activities | 15% | 21% | 16% | 16% | 15% | 19% | 20% | 23% | 32% |
| Marketing Costs, (mln. \$) | 362 | 367 | 361,5 | 405,6 | 430,8 | 435,7 | 480 | 602 | 663 |
| NMC, (mln. \$) | 812 | 809 | 1047,5 | 1650,4 | 1795,2 | 1831,3 | 2119 | 2209 | 3400 |
| MROS | 24% | 24% | 30% | 41% | 42% | 44% | 45% | 44% | 49% |
| MROI | 224% | 220% | 290% | 407% | 417% | 420% | 441% | 367% | 513% |

Source: the authors' calculations based on the company's financial statements (NVidia 2008-2016 Financial Statements, NVIDIA World, 2017).

Table 14: Results of the Correlation Analysis

| | Indicators | Companies | | | | | | |
|-----------------|------------------------------------|----------------------------|---|-------------------------|---|--|--|--|
| Of marketing | Of investment attractiveness | | AMD | | NVIDIA | | | |
| activities | | correlation coefficient | tightness of correlation relationships* | correlation coefficient | tightness of correlation relationships* | | | |
| Market share | Sales revenue (S) | 92% | very strong | 86% | strong | | | |
| | ROS | 35% | moderate | 56% | noticeable | | | |
| | Working capital turnover ratio | 13% | weak | (31%) | moderate | | | |
| | Accounts receivable turnover ratio | 5% | no relationships | 20% | weak | | | |
| | Asset Turnover Ratio | (32%) | moderate | (10%) | weak | | | |
| | Profit margin | 30% | weak | noticeable | noticeable | | | |
| | EPS | 18% | weak | 75% | strong | | | |
| | P/E | 49% | moderate | 25% | weak | | | |
| | P/B | (33%) | moderate | 92% | very strong | | | |
| | EV/EBITDA | 66% | noticeable | 24% | weak | | | |
| Share | Sales (S) | 73% | strong | 95% | very strong | | | |
| marketing costs | EBIT | (25%) | weak | 87% | strong | | | |
| | Net income | 59% | noticeable | 82% | strong | | | |
| _ | EPS | (42%) | moderate | 88% | strong | | | |
| | P/E | 54% | noticeable | 53% | noticeable | | | |
| | P/B | (52%) | noticeable | 72% | strong | | | |
| | EV/EBITDA | 40% | moderate | (21%) | weak | | | |
| NMC | Sales (S) | 82% | strong | 97% | very strong | | | |
| | EBIT | 61% | noticeable | 98% | very strong | | | |
| | Net income | 4% | no relationships | (70%) | noticeable | | | |
| | Working capital turnover ratio | 53% | noticeable | 97% | very strong | | | |
| | EPS | 45% | moderate | 98% | very strong | | | |
| | P/E | 37% | moderate | 68% | noticeable | | | |
| | P/B | (17%) | weak | 68% | noticeable | | | |
| | EV/EBITDA | 56% | noticeable | (38%) | moderate | | | |
| MROS | Sales revenue (S) | 68% | noticeable | 78% | strong | | | |
| | Net income | 71% | strong | 93% | very strong | | | |
| | ROS | 59% | noticeable | 82% | strong | | | |
| | Profit margin | 63% | noticeable | 92% | very strong | | | |
| | EPS | 51% | noticeable | 85% | strong | | | |
| | P/E | 30% | weak | 82% | strong | | | |
| | P/B | (14%) | weak | 31% | moderate | | | |
| | EV/EBITDA | 58% | noticeable | (63%) | noticeable | | | |
| ROMI | Sales (S) | 41% | moderate | 80% | strong | | | |
| | Net income | 75% | strong | 96% | very strong | | | |
| | ROS | 70% | noticeable | 88% | strong | | | |
| | EPS | 66% | noticeable | 90% | strong | | | |
| | P/E | (3%) | no relationships | 80% | strong | | | |
| | P/B | 7% | no relationships | 38% | moderate | | | |
| | EV/EBITDA | 33% | moderate | (62%) | noticeable | | | |

^{*}In accordance with the Chaddock scale.

10. METHODOLOGICAL PROBLEMS FOR CONDUCTING ASSESSMENT OF MARKETING AND INVESTMENT INDICATORS

Evaluation of the impact of the company's marketing activities on investment attractiveness revealed the following methodological problems:

- 1) transformation of qualitative indicators into quantitative ones, because:
- the distinctive feature of marketing is that its influence on investment attractiveness is indirect degree. Therefore, not all indicators of marketing activities can be linked linearly and quantitatively with indicators of investment attractiveness;
- most marketing technologies can be assessed only from the point of view of functional management processes, which do not have a common system of evaluation and analysis;
- many indicators of marketing, as well as the entire chain of application of marketing technologies and their impact on the results of activities can only be determined using qualitative assessments and an expert method. It should be taken into account that the transformation of qualitative indicators into quantitative ones using expert assessment has a large error;
- 2) evaluation of the delayed effects obtained from the use of marketing technologies;
- 3) evaluation of the integration of marketing operational level with strategic one. The indicators of marketing activity are often oriented to short-term periods and, accordingly, do not take into account the further influence of the growth in the number of clients and additional investments for their servicing on the growth in the company's value;
- 4) the labor intensity of determining the company market share, especially if its activities are significantly diversified.

11. CONCLUSIONS

Companies optimize their costs in the period of decline in purchasing power and sales volumes. Most often, they reduce marketing and promotion costs first. It is especially true for large companies, since it is quite difficult to analyze the impact of marketing activities on the company's investment attractiveness. However, the

company should be attractive to investors at any stage of its life cycle, both for existing investors (in order to keep their investments and do not increase the riskiness of investments) or potential ones (ready to invest at an acceptable capital cost level for the company). The evaluation of marketing effectiveness is just beginning to develop in the business processes of companies.

It is proposed: 1) a system of indicators characterizing marketing activities; 2) a system of investment attractiveness indicators reflecting cash flows and efficiency of company's activities to assess the marketing impact on the investment attractiveness of the company. This evaluation based on marketing content and role in creating consumer value and turning it into financial results.

The choice of companies to assess the impact of their marketing activities on investment attractiveness was due to a number of factors (belonging to the high-tech sector, significant investment in marketing, finding one oligopolistic market, the presence of a growing business and investment attractiveness).

Evaluation of the impact of marketing activities on the investment attractiveness of companies was carried out using the correlation analysis for the period 2008-2016. The results showed significant impact of marketing activities on investment attractiveness in general, as well as on its individual indicators.

A number of methodological problems were identified, when assessing the impact of marketing activities on the investment attractiveness of companies. They are subject to further research.

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