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FEATURES ASSESSMENT OF RUSSIA FINANCIAL PERFORMANCE OF MERGERS AND ACQUISITIONS

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ARTICLEINFO	ABSTRACT
Article history: Received 21 March 2019 Received in revised form 29 May 2019 Accepted 04 June 2019 Available online 14 June 2019 <i>Keywords</i> : Russia economy; Economic environment; Russia Market; Consolidate capitals; Market competitiveness; M&A Transactions; Corporate restructuring; Capital integration; Merger technology; Stakeholders.	ABSTRACT Privatization, stock market development, insurance and credit system improvement generate the demand for a new type of services such as business valuation, valuation of company, its assets, capital and liabilities in the current highly competitive market. Appraisal of the company's value enables to evaluate the company's reserves and potential in the modern economic environment; this, in turn, contributes to the increase of competitiveness in general. Appraisal of value of any property item is a well-ordered process focused on the appraisal of monetary value of such item subject to potential and real income generated by it at a certain point in time and in a specific economic environment. In this paper, the authors analyze the characteristic features of company merger and acquisition (M&A) transactions in the contemporary context, using the methods of scientific generalization. Various classifications of synergetic effects resulting from the conclusion of such transactions are studied. Special attention is paid to the innovative synergy because the innovative impulse for the majority of companies is an important drive to make integration deals. After the completion of the M&A transaction, the acquisition of a target company with an effective innovation patent portfolio generates a significant profit and a high value of the acquiring company's shares. It is noted that mergers and acquisitions are the basic ways to consolidate capitals of two or more companies in order to maximize the capabilities and use the maximum potential to achieve the main goals of the companies. © 2019 INT TRANS J ENG MANAG SCI TECH.

1. INTRODUCTION

Pursuant to Federal Law *Concerning Valuation Activities in the Russian Federation* No. 135-FZ dated 29.07.1998, the following appraisal methods are used for property value appraisal: sales comparison approach, cost approach, and income approach. Each of the foregoing approaches has been further developed in its business valuation methods and techniques.



The main issue of the companies today is improvement of managerial effectiveness and distribution of resources to achieve current goals and objectives. Each company depends on economic realities. Therefore, continuous monitoring of the company's position in the market as well as understanding of the real value of the company's assets, capital and liabilities will be required in order to achieve maximum managerial effectiveness. Business valuation becomes a mandatory procedure for any company.

The main features of financial performance in Russia including privatization, stock market development, insurance, and credit system improvement, which are considered their importance in this study. A properly organized management will enable to make effective management decisions, improve organization's management methods, timely analyze and respond to changes in the business development dynamics, and to identify bottlenecks and potential opportunities to improve position in the market. Most modern companies have a complex multilevel hierarchy. They may include not only tangible assets with a certain value but also intangible assets. For example, copyrights, registered trademarks, technology patents, licenses, goodwill, etc. The company value analysis enables to show the contribution of all assets to the business development and to show the actual standing of the company in the market as accurately as possible.

2. LITERATURE REVIEW

All the basic financial and economic indicators are analyzed in the course of the business valuation process; thus the company's financial, organizational, technological activities are the target of research. Pursuant to the statutory provisions, appraisal shall be mandatory if a federal, regional or municipal property is involved in the deal; in the event of a tax, mortgage foreclosure, marital disputes over the property's value; when restructuring the company, for example, in the event of sale of an enterprise or share, merger, acquisition, liquidation thereof; in the event of payment in kind in the transactions with shares or equity interest; when calculating coverage amounts in business insurance etc.

M&A market transactions are a way to transfer business management from inefficient owners to the efficient ones in order to increase yield and profitability.

Mergers and acquisitions are the main method for restructuring. Through the merger and acquisition process, a company that has a good standing in the market and in the industry will also have an opportunity to gain additional competitive advantages in the market and, hence, to further strengthen its position in the industry.

In the course of the M&A process, two or more businesses are restructured resulting in a new company being formed. The M&A process is an effective tool for gaining competitive advantages in the market. It turns out that a properly restructured business can show better results in the market than several disparate companies. In view of the market specificity and goals in the process of consolidation, the synergy from such transactions is short- or long-term in nature.

M&A has always been an issue for strategic managers and financial analysis, which due to the high competition arising from the fast-changing global market, it has significantly resulted in a condition where firms are finding it gradually difficult to remain competitive. Several studies have

been conducted in developed and developing countries in order to address the effects of M&A on company financial performance [1-6]. In [1] did a study on the Japan manufacturing industry; In [2] concentrated on Greece manufacturing companies; In [3] did in Hong Kong production companies; In [4] research on bank sector in Philippine; In [5] concentrated on Romania on consumer goods and service market; and in [6] concentrated on Holland technology sector. Most of the previous studies on mergers and acquisition utilize financial variables such as Return on assets, Gross profit margin, Return on capital employed, Market Growth, total assets ratio, return on net worth, operational profit margin as their research variable.

M&A transaction has become an integral part of contemporary business. The reasons and the motives for this type of transactions are quite different, and the result of the integration of two companies may not necessarily produce a synergistic effect. The success of an M&A transaction depends not only on the motive and current market position of the company at the time of the transaction but also on the economic situation in the region. Thus, in the period of economic growth, there is a high probability of successful transactions that increase the synergy potential of the merged companies. M&A transactions are still quite common during the market downturn; however, it should be considered that effect from mergers and acquisitions can be quite opposite to the expected one.

3. METHODOLOGY

In order to assess synergistic effects of mergers and acquisitions, it is required to define the role of synergies among other merger motives, the specific characteristics of such transactions, and the factors that necessitated the transaction. The global market dynamics in recent years are also analyzed to identify specificities and regularities typical to the Russian market.

The interpretation of the terms 'merger of companies' and 'acquisition of companies' in the foreign theory and practice differ from the interpretation provided for in the Russian legislation. In everyday life, the terms 'merger' and 'acquisition' are often used synonymously. While analyzing the global practices, it should be noted that M&A is a generalized name of economic procedure that contribute to the consolidation of business and capital, in which the corporate governance and control over the business in all forms are transferred, including the purchase and exchange of assets.

In the modern business environment, a corporate restructuring using capital integration techniques becomes a key factor in gaining and retaining leadership in the global and regional markets. To date, merger and acquisition transactions are the main organizational form of integration processes, which includes a huge range of opportunities to optimize the corporate business processes.

The largest volume of M&A transactions is registered in Western Europe and the United States of America. The M&A market in Russia has been at the nascent stage. The volume of M&A transactions involving Russian assets is gradually gaining momentum and developing. Thus, in the short run, the civilized market of M&A transactions will be able to increase its volumes in this country as well; this will open up new opportunities for traders to gain extra profits.

In the Russian law enforcement practice, 'merger process' is defined as a reorganization of legal entities, in which the rights and obligations of each of them pass to the newly established legal entity

in accordance with the certificate of ownership and merger. And a new business structure is created from the companies that, in turn, lose their independence completely. In theory, a merger is a combination of assets and activities of several businesses aiming at creating a new one or absorbing these businesses by one of them. When analyzing domestic sources of information, it can be found that the term 'merger' is used along with the concept of 'integration'; while in the foreign sources, the term 'merger' means any association of business structures which results in the creation of a new business entity from two or more companies.

In theory, the concept of 'company acquisition' refers to the procedure for establishing control by one economic entity over another, with the acquisition of complete or partial right of ownership thereof [7]. Usually, a large company takes over a smaller firm. In practice, it would be possible to clearly determine whether a transaction between companies is a merger or an acquisition only based on the motives preceding the conclusion of the transaction.

At the present time, there is no established criterion framework for the classification of M&A transactions. The most important classification criteria may be as follows:

- Nature of integration of businesses;
- Corporate nationality;
- Methods of merger of assets and liabilities;
- Merger methods;
- Merger technology,
- Transaction payment methods.

Having analyzed the Russian and American practices of M&A transactions, we can present the most common classification by the nature of integration of companies:

- Vertical integration means consolidation of economic entities from different industries and business areas, which entities, in turn, are connected with a single production chain. Today, a large number of vertical M&A transactions occur in the metallurgy market. Vertical integrations will be primarily present in the markets where the possibilities of horizontal mergers have already been exhausted;

- Horizontal integration means consolidation of economic entities competing in one market. Most of such transactions are concluded in the oil and gas, food, and telecommunications industries. Horizontal integration is a type of volumetric integration which is characterized by the merger of companies that produce identical products. In the event that the products have insignificant differences, such integration is called assortment integration. It is important to note that at present, most merger transactions concluded in Russia are horizontal in nature;

- Conglomerate merger means consolidation of economic entities from unrelated industries or geographical regions, i.e. the business areas of the economic entities being merged are not united technologically.

Having analyzed the practices of various domestic and foreign enterprises, it is possible to highlight the main motive for integration, i.e. opportunity to gain the synergistic effect which is the added value resulting from such integration. An aggregate financial result of the consolidated companies will be significantly higher than the results of independent activities of the companies. If the motive is the desire to achieve economies of scale, then the target company must have similar business processes, business area, structure, and policy. If the motive is the Operating Synergy resulting from the business scale expansion, then the target company must have a much stronger positions in the market. Almost all transactions in the M&A market involve a synergistic effect and are concluded in order to gain the same. However, sometimes no synergistic effect can be achieved for the following reasons:

- Merger with an undervalued company;

- Taking over a company that has an inefficient management system;

- Elimination of competitors. The monopolistic motivation of the company is revealed in the desire of the company to increase its presence in the market. As a result of the merger and acquisition transaction, the merged company is no longer regarded as a competitor. Some M&A transactions result in the closure of the company and in the elimination of the competitor, accordingly.

The reviewed reasons indicate that the mergers and acquisition of companies may be aimed at the improvement of production, business consolidation, financing of research and development activities, and at entering to new market channels, raw material, and technology markets.

In the integration of two companies, the consolidation of all business units takes place, and the combination of business processes in each of them may have its own synergistic effect. M&A professionals suggest different types of synergies while complementing each other and expanding the range of possible effects.

Any and all synergies in the M&A market may be represented by two operative directions. The first direction is subadditivity. Subadditivity represents reduction of costs (basic, labor, financial costs, etc.)The second direction is superadditivity. Superadditivity involves effect due to the growth of the company's product sales volume. Then, based on these directions, it will be possible to further develop and clarify the synergistic effects in various areas of their business activities.

The income approach to business valuation will be the right solution in the assessment of synergies in the merger and acquisition transactions. The essence of the income approach to business is reduced to the assessment of the company's future earnings discounted to the present value. Formulas 1 and 2 present the calculation of the business value based on the income approach:

$$Value = \sum_{t=0}^{t} \frac{CF_t}{(1+r)^t} + \frac{CF_t * (1+g)}{(r-g)}, \qquad (1),$$

and

$$CF = EBIT(1-t) + D&A - CapEx - \Delta NWC,$$
(2),

where

Value: Company Value,

CF: Cash Flows,

r: Weighted Average Capital Cost,

g: growth rate,

t: year,

EBIT: Earnings Before Interest and Taxes,

D&A: Depreciation and Amortization,

CapEx: Capital Expenditure,

 ΔNWC : Change in Net Working Capital.

4. RESULTS

Having analyzed the research studies of other M&A professional, it can be concluded that most authors use the classification of synergies by groups. There are two types of synergies:

- Operating Synergy;
- Financial Synergy.

Operating Synergy is a consequence of integration of various business processes and business units of the company, which results in the acceleration of production growth rates and cost reduction while Financial Synergy is often expressed in reduction of the company's overall tax burden and improvement of creditworthiness.

While analyzing some foreign research studies of the issues of synergistic effect in the process of mergers and acquisitions, it can be concluded that Operating Synergy is the only type highlighted by all authors that do not question its existence. This type of synergy is most often found in the horizontal and vertical mergers. American researcher Bide believes that Operating Synergy is the primary motive of takeover for 30% of concluded transaction.

Synergy can manifest itself in two ways or aspects as follows:

- Direct effect is achieved due to the growth of net assets, cash flows of reorganized companies. The added value of the integrated companies is formed due to economic, operating and management synergy;

- Indirect effect is achieved due to the growth of the value of shares of the reorganized company resulting from the increase of investment appeal. The information effect of the merger combined with the synergies that appear as a direct benefit triggers the increase in the value of shares or the change in the P/E multiplier (price/earnings).

The expected result of the synergistic effect of the respective strategy is displayed in Table 1.

Table 1: Synergistic Effect Strategies			
Strategy Result	Strategy Content		
Production Strategy			
Increase in production capacity Increase in labor productivity at the company Product quality improvement at the company	Combination of complementary resources, diversification of the product portfolio policy of the company		
Investment Strategy			
Protection against competitors Production process optimization	Obtainment of critical resources, business; diversification		
Speculative Strategy			
Purchase price increase	Investment of temporarily free cash in undervalued liquid assets or assets with high growth potential		
Organizational Strategy			
Growth of the company's investment appeal Growth of the company's management effectiveness	Change of the management structure and principles, dissemination of new corporate management methods		
Commercial Strategy			
Increased loyalty of the company's customer Market share increase	Taking on new market segments, customer base diversification		
Financial Strategy			
Company's risk mitigation Company's financial flexibility improvement Market share increase	Change of structure and cost of the funding sources		
Innovative Strategy			
Increased customer loyalty Company's image improvement Increased competitiveness	Obtainment of intangible assets, know how brands		

 Table 1: Synergistic Effect Strategies

The analysis of the synergistic effects displayed in Table 1 is an important step in the merger or

acquisition process. M&A transactions can be ineffective for a number of reasons. One of the most common reasons is an inaccurate valuation of the acquired company, synergistic effects, and added value.

The following classification of the synergistic effects would be possible based on the company's profit criteria:

- Management synergistic effect which manifests itself in the use of experience and qualification of administrative and management staff of the acquiring companies for management, as a rule, in a young and dynamically developing target company which sells a unique, and often innovative product or service;

- Trade (commercial) synergistic effect which is realized through the use of joint distribution channels for differentiated products, common brand, related sales strategy, etc.;

- Operating synergistic effect which manifests itself in a more efficient use of production capacities and human capital, reduction of costs and operating expenses per output product unit;

- Innovative synergistic effect which can be realized in the joint use of equipment and facilities, common stocks of raw and other materials, results of research and development activities and know how in the manufacturing of various products;

- Taxsynergistic effect can manifest itself when a taxable business may be granted the tax preferences that would not have been granted to the disparate companies.

A business valuation method depends directly on the type of expected synergistic effect. When analyzing the synergistic effect, special attention should be paid to the risk assessment. This is due to the likelihood that synergies will not be achieved because of the high-risk level.

The business valuation during the M&A period significantly differs from the normal valuation of the company and is deemed to be an extremely complex process. The following elements should be evaluated in the process of business valuation during the M&A period:

- Synergistic effect assessment;
- Defining the financing method;
- Control premium assessment.

Each of the above elements has a significant impact on the result of the M&A transaction; therefore, each of them should be assessed. In terms of assessment of synergy and value of the restructured businesses, the expected synergistic effect may be called an operating synergistic effect and a financial synergistic effect.

The operating synergistic effect is characterized by the following attributes (Figure 1): economies of scale, monopolistic orientation, tactical and strategic benefits, and entry into new and emerging markets. The operating synergy affects the company's financial performance indicators such as margins, profitability, and growth.



Figure 1: Features assessment of financial performance of M&A (Source: Author)

In turn, cash flow increase and capital cost decrease are influenced by financial synergy. Based on this, the financial synergistic effect is associated with surplus cash management, sustainability and creditworthiness improvement, taxation optimization, and diversification. There is no doubt that almost all transactions in the M&A market have the potential to achieve synergistic effect. To this end, the valuation methods and approaches come to the fore rather than the task of assessment of such effect. Two questions have to be answered: '*What should be paid for?*' and '*How much should be paid?*' Thus the following issues should be thoroughly studied: best synergy assessment method selection and degree of flexibility of such assessment subject to different conditions of the environment.

Thus, the company value depends on the following factors: cash flows; cost of capital; growth rate and duration thereof. The same factors affect the synergy assessment and value.

In the process of valuation of the restructured business and assessment of synergy, it should be considered that synergy can be short- or long-term in nature. Cost reduction and release of additional cash for investment activities should be brought to the forefront in the event of a short term synergistic effect. Deployment and implementation of the new competitive advantage strategy in the market should prevail in order to gain a long-term synergistic effect.

1) According to the survey conducted by Price Water house Coopers in 2018 among American top managers, the expectation of innovative synergy is the main motive for concluding M&A deals in 57% of cases. Other motives, such as commercial or operational synergies are of importance only in 18% and 4% of deals, accordingly.

An effectively chosen strategy is the key factor of success in today's business environment. Innovations, various changes, and technological novelties are in demand by customers; therefore, the company is interested in the innovative way of development because such development can become a tool to increase the value of goods and services offered to the consumer. In the modern context, the companies that are unable to flexibly and quickly respond to changes in the innovation and technological areas are very likely to lose their competitive advantages, and their products will not be able to compete with the flow of new goods and services.

As a rule, large companies pay little attention to internal innovations because it would be easier for such companies to buy someone else's innovation or technology. On the contrary, small companies are usually more interested in the innovation activities thereby occupying a place in the market as a target for acquisition. In this case, the acquiring companies are the large companies that have large patent portfolios but pay little attention to the research and development activities.

In order to obtain an innovative synergistic effect, the M&A transaction procedure must be planned and analyzed well in advance. And for this purpose, the company must possess information about the target company, its technologies, and innovations, as well as about the current market situation. The procedure that includes collection, analysis, and comparison of a large number of various elements of the merger and acquisition business process enabling to perform an unbiased assessment of the target company in different areas and assess the prospects of the transaction is called due diligence. Its main task in the process of mergers and acquisitions is to mitigate existing commercial risks and properly assess relevant information about the innovative potential of the company through the comprehensive study of the company's activities and verification of its financial standing in the market. It should be emphasized that all available information must be considered irrespective of the source of origin [8].

Usually, a potential investor who plans to buy or invest money in the target company is primarily interested in conducting due diligence. The following is typical for the transactions of acquisition of innovative due diligence technologies:

- Patent non-infringement search in the event of a competitor claim;
- Assessment of degree of effectiveness and importance of the patent;
- Patent scope analysis.

2) A merger and acquisition transaction can increase the speed of launching a new product in the market and win the leading positions, leaving behind the competitors provided that the target company is chosen correctly and the merger process is thoroughly thought out and correctly implemented [9].

3) The well-known Apple Company can serve as an example of a successful acquisition. In 2014, Apple concluded more than 20 deals such as acquisition of Beats Electronic (headphone and speaker manufacturer), startup of Snappy Labs (developer of 'burst mode' camera app), startup of Burstly (iOS app developer) and Lux Technology (display technology developer). As a result, Apple obtained patents in various areas and increased its net income by more than 12%.

5. CONCLUSION

The implementation of innovative technologies requires a large amount of production, human and financial resources that the operating company must have or outsource. Modern organizations focus on creating and improving technologies, conducting research and development activities, applying new research in practice, increasing the patent portfolio —all these enable the company to increase the demand for the company's products and improve its standing in the market or take leadership positions. The company valuation may be considered using the three basic approaches such as income approach, cost approach, and sales comparison approach. Each approach includes several methods. Ideally, the calculation results of each of these methods must be equal to each other. However, since the market conditions do not enable the company to be in a static state, it is almost impossible to achieve the same results in the calculation of the company's value; therefore, a convenient calculation method should be selected based on the company's specific characteristics and on the nature of its activities.

M&A Transactions is a promising topic for scientific studies of domestic economists. The number of M&A transactions in the Russian market has increased by 72% over the last 3 years; this indicates the necessity of professional appraisal of value of the companies being in the process of integration in order to maximize the opportunities of using the maximum potential to achieve the main goals of the companies. Potential investors have to know complete unbiased information about the financial standing of the target company, its development prospects, innovative portfolio, and potential company acquisition risks for a successful integration of two and more consolidating companies.

6. DATA AVAILABILITY STATEMENT

No data is used or generated from this study.

7. REFERENCES

- [1] Benoliel, P., & Somech, A. The health and performance effects of participative leadership: Exploring the moderating role of the Big Five personality dimensions. *European Journal of Work and Organizational Psychology*, 2014, 23(2), 277-294.
- [2] Kissi, J., Dainty, A., & Tuuli, M. Examining the role of transformational leadership of portfolio managers in project performance. *International Journal of project management*, 2013, 31(4), 485-497.
- [3] Petrusevich D.A. Analysis of mathematical models used for econometrical time series forecasting. *Russian Technological Journal*. 7(2), 61, 2019.
- [4] Peterson, S. J., Walumbwa, F. O., Avolio, B. J., & Hannah, S. T. RETRACTED: The relationship between authentic leadership and follower job performance: The mediating role of follower positivity in extreme contexts. *The Leadership Quarterly*, 2012, 23(3), 502-516.
- [5] Nadtochii Yu.B., Budovich L.S. Intellectual capital of the organization: the essence, structure, approaches to evaluation. Electronic network journal, *Russian Technological Journal*, 6(2), 82-95, 2018.
- [6] Shannon P. Pratt. Business Valuation: *The Analysis and Appraisal of Closely Held Companies*. Fifth edition. McGraw-Hill, 2000
- [7] Li, Q. and Wang, T. "Financial reporting quality and corporate investment efficiency: Chinese experience", *Nankai Business Review International*, 2010, 1(2), 197–213.
- [8] King, A. Fair value measurement for financial statements: New requirements of FASB, Moscow: 2016.



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