

## Corporate Diversification Effect on Firm Value (Unilever Group Case Study)

Varvara Nazarova

*National Research University Higher School of Economics, Russia*  
E-mail: nvarvara@list.ru

This article deals with an analysis of the M&A strategy utilized by Unilever Group, as well as with issues relating to identifying the factors defining the value of a diversified company. This article includes an estimation of the effectiveness of Unilever Group's mergers and acquisitions strategy, aimed at creating the optimum business portfolio within the diversified corporate structure (company) by how it affects value of the company. The general hypothesis assumes that diversification does not have a destructive effect on the value of an international multi-business company that builds its portfolio based on the success of certain brands and business areas.

*Key Words:* Company value; Diversified company; Merger and acquisition transactions; Strategy effectiveness; Expected rate of return on invested capital.

*JEL Classification Numbers:* G21, G34.

### 1. INTRODUCTION

The development of the company via the procedure of mergers and acquisitions (M&A) can have the negative impact on its appreciation by business groups, analytics and investors, and it can be estimated as value destruction (Asimakopoulos and Athanasoglou, 2013; Amihud, Lev, and Travlos, 1990; Berger, 1995; Lang, 1994; Rajan, 2000). This problem is relevant today because each diversified corporate structure (the diversified company) is a unique phenomenon (Maksimovic, 2006; Erdorf, 2012; Graham, 2002). Therefore, for the diversified companies, developing by the M&A strategy, the problems of value creation or value destruction as well as of the market perception of a corporate conception have to be studied in the framework of the individual approach.

The problem considered in this study is how company development through the mergers and acquisitions process may in itself have an adverse effect to the company reputation in the business community and among analysts and

investors, and may be deemed as destructive to its value. The pertinence of this issue is confirmed by the unique nature of each individual diversified corporate structure. This is a reason why an individual approach must be taken by diversified companies developing through an M&A strategy when it comes to the issue of increased and decreased in value and, what's more important, how such a corporate concept is perceived by the market.

The purpose of this paper is to estimate the efficiency of the M&A strategy that is aimed to form the optimal business portfolio for the diversified company, via its influence on the firm value.

We test a hypothesis that a diversification does not destroy a value for a multi-business and multi-national company that builds up its portfolio based on the success of certain brands and areas of business. The significance of this impact is manifested in improved overall competitiveness and the long-term key competencies of a purchasing company on the local market.

The study is significant as it summarizes the experience gained by Unilever Group in the area of implementing its mergers and acquisitions strategy. The theoretical importance of this study includes the possibility of the further application of the approach developed to the analysis of other diversified companies. The practical value is here connected to the ability of a diversified company management to use the obtained results to increase the value and significance of the company for market participants.

The article is structured as follows. The first part examines the theoretical aspects of the M&A procedure. It discloses some important issues linked with the corporate diversification. The second part is devoted to analyze an M&A strategy developed by the Unilever Group. The paper also includes the implementation of the idea of market-expected return rates on invested capital to verify the conformity of market evaluation of the Unilever Group with its intrinsic value. We also use the Cumulative Abnormal Returns approach to give the evidence for the advanced hypothesis. In the last part, the main results are concluded and the applicability of the study to a general diversified company is discussed.

## 2. LITERATURE REVIEW

Corporate diversification can be represented as modeling the mergers and acquisitions strategy, which implies the acquisition of businesses in sectors that are not at the core of a given company's activities. The question is raised as to what caused such business development decisions. Two key reasons for corporate diversification are often cited. (DePamphili, 2010, p. 28) The first one is the attempt to stabilize gross income by means of mitigating shareholders' risk. The second reason for diversification is to update an enterprise's offerings and entering more prospective markets. Growth is

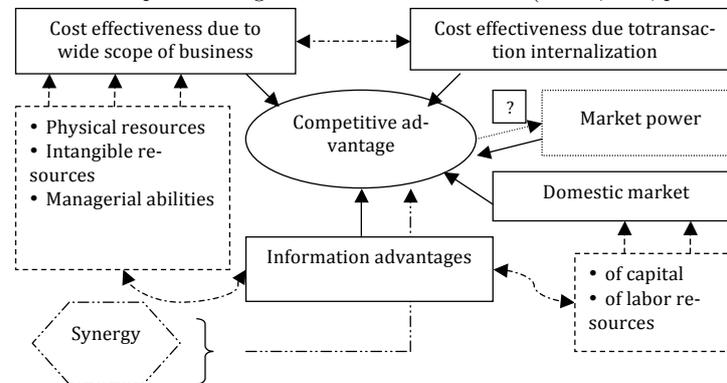
another oft-mentioned validation of corporate diversification. (Grant, 2012) The reasons listed are interrelated to a great extent and, moreover, they correspond to the types of diversification strategies considered above. In fact, the reasons given to justify diversification are what result in the diversification strategy.

Growth itself as the reason for diversification is an example of an agency problem, as it occurs as a result of profitability and may even lead to hostile take-overs. It is pointed out that the potential of a hostile take-over is a disciplinary mechanism moving company management to act with the intention to raise the company's value. (Shleifer, 1988, p.11) To some extent, increased profitability goes hand in hand with the decision to update product lines and enter new markets.

As decisions on corporate diversification should be taken as part of the framework for creating shareholder value, various effects testing methods can be applied. For example, it is possible to use an approach aimed at determining the attractiveness of a sector, as well as the cost of entry and incremental increases in welfare. It is necessary to point out potential sources for of value creation under corporate diversification, as they are likewise considered to be the justification for such diversification.

The main factor behind value creation in a diversified company is the relationships between different business types. (Grant, 2012, p. 447). This means that the creation and the use of such interrelationships form the company's competitive edge. The creation and the use of connections means the distribution of resources and capabilities among various businesses. Figure 1 represents some factors forming the competitive edge of a diversified company and constituting potential sources for value creation.

**FIG. 1.** Competitive Edge Based on Diversification (Grant,2012, p.448-453)



From the viewpoint of corporate finance, a company's value is largely affected by the realization of the synergistic effect. The presence of a syn-

ergistic effect, and what's more important, the ability to manage it, forms the specific competitive edge of a diversified company. Synergy reveals itself in the form of improved business effectiveness (profitability), for instance due to the shared use of resources, infrastructure and business areas. The synergistic effect will be described in detail in the next chapter. For now, we would like to note that synergy is divided into financial and operational. The implementation of operational synergy is more typical of related diversification. (Shamraeva, 2010, p. 38)

The arrangement of the scheme shown in Figure 1 has room for improvement. It is proposed that value factors of a diversified company be divided into three groups: economic, financial and administrative. (Shamraeva, 2010, p. 39) Economic factors include an increase in market strength and the effective use of resources. The financial factors of a diversified company's value comprise the following: the domestic capital market, a potential increase in debt burden (on account of risk mitigation), tax advantages and reduced transaction costs. Administrative factors comprise both different management techniques (including those dependent the stage of the company's life cycle) and making decisions on scale of the business, managing the coordination controlling expenses, counteracting information asymmetry, motivation issues and creating an efficient organizational structure.

It is assumed that if a given resource is used in several areas of business (that harmonize well with each other) and it leads to reduced expenses, cost-effectiveness is present due to the breadth of the area of business. Similar to cost-effectiveness owing to scale, expenses are also reduced by increases in production and the number of product types. This factor is also related to cost-effectiveness due to the internalization of transactions, which is achieved by reducing or eliminating entirely the possibility of adverse external effects being transformed into internal effects. Thus, market contracts may be ineffective for the protection of a company's resource value and competencies that result in a company making diversification decisions aimed at their independent use. As regards effective resource use, it should be noted that the company might afford a greater degree of diversification, while possessing fewer specific resources. It has been pointed out that the improved market strength as a factor behind a diversified company's value is a consequence of strategy rather than the cause behind companies' adherence to the strategy. (Shamraeva, 2010, p. 39) In general, when it pertains to the positive and negative effects on a company's value caused by corporate diversification, we have no choice but to refer to the empirical studies available on the subject.

For a long time, the diversification strategy had been considered to be a "rational and effective business development pattern". (Grigoriady, 2009, p. 360-361). But later, this strategy began to be severely criticized due to empirical studies that have shown that a company's value is adversely

affected by diversification (Lang, 1994; Berger, 1995; Kuppuswamy, 2010). An undervaluation was a result of diversification discounts.

To avoid this negative outcome, companies began, in practice, eliminating non-core areas of business, building up a business portfolio around the company's key competencies. Their diversification strategy was transformed. Nevertheless, there is no clear-cut opinion as to the whether corporate diversification is a rational choice.

A considerable number of studies on this subject reveal the negative impact of diversification on a company's value through reduction of shareholder value. Studies proving the reduction of shareholder value in diversified companies' include classic works by Berger (1995) and Ofek, Lang (1994) and Kuppuswamy (2010). Summarizing evidence of the hypothesis of shareholder value destruction, the following findings can be singled out (Maksimovic, 2001, p. 43-44):

- Diversified firms tend to have a lower Tobin's Q ratio;
- They are traded at a discount amounting to 15% compared to portfolios made up of comparable independent companies;
- They face the increasing possibility of dissolution through reorganization (this possibility is directly dependent on the amount of the discount);
- The stock market responds positively strengthened corporate concentration policies.

The reasons behind the failures experienced by multi-business companies may be explained by the workings of the internal capital market, which turns out to be ineffective when resources are distributed within the company. This was proven by Scharfstein and Stein (2000), who rely on the agency problem. Maksimovic and Phillips (2001) arrive at the conclusion that even if the factor of the agency problem is excluded, conglomerates appear to be less effective in their distribution of resources depending on the stage they are in their life cycle and responses to industry shocks that are the focus of other firms of the same size.

In their subsequent work, Maksimovic and Phillips (2006) made an attempt, using the results obtained by them and by their colleagues, to make a clear-cut conclusion regarding the ability of conglomerate structures' to distribute resources. They came to the conclusion that diversified firms primarily behave as "value maximizers", providing conditions for high productivity, and that their internal capital markets ensure efficient distribution of resources. However they emphasize that such a conclusion is not to be regarded as correct for the majority of conglomerate firms. Besides, the conclusion that internal capital markets are not, on average, exposed to ineffective distribution means that the firms can be exposed to the agency problem. That means that managers may make provisions for effective resource distribution but at the same time expropriate shareholder value by

using the same resources, for instance, to purchase another company at a significant premium.

Erdorf (2012) believe that the impact on the value is different from one firm to another and that corporate diversification is not the only factor leading to a discount or a premium. The influence of factors specific to a particular industry, economic conditions and management structure cannot to be excluded.

There are studies where the authors conclude that corporate diversification does not destroy share-holder value and even creates it. The arguments connecting diversification and discounts arising from it are based on the idea that conglomerate firms somehow differ from themselves before the diversification program began. (Maksimovic, 2001, p. 45) Formally, the opinion that companies adhering to a diversification strategy are systematically different from typical focused firms, and errors in identifying endogenous grounds for diversification result in inaccurate conclusions.

This statement is supported by the observations revealed that diversified firms tend to have been traded at a discount prior to diversification. This is confirmed by the works of Graham (2002), Lemmon and Wolf, Villalonga (1999), where the discount is explained by the features specific to the companies acquired in the course of diversification. Graham and others estimate the pre-diversification value of companies acquired by conglomerates. They discovered that companies to be acquired are sold at an average discount of about 15% during the final year of their independent operation.

This hypothesis is also supported in the work of Campa and Kedia (2002), though the discount here is explained by internal factors. (Brigham, 2004) They have found that conglomerate structures differ from firms operating in a single segment in terms of such features as, for instance, their size, the relationship of capital costs, EBIT and R&D costs to revenue, and also by the industry growth rate. They have also discovered that prior to following a diversification strategy they are sold at a discount. Therefore, if such differences are controlled in the course of diversification, the resulting discount can be significantly reduced or completely excluded.

Villalonga (2000) espouses the view that diversified firms are traded at a premium, and that the opposite results obtained by other researchers are due to their use of different databases which, in her opinion, have a number of shortcomings. For example, the firms are actually more diversified than is recognized in sector financial reports. It may be explained, for instance, by the fact that diversified companies may have easier access to capital markets than focused firms, which is explained by the challenges investors face due to information asymmetry.

The same author have determined that the value of corporate diversification itself grew during the 2007-2009 financial crisis, as it provided companies with both financial and investment advantages. (Kuppuswamy, 2010)

They conclude that corporate diversification still performs an important insurance function for investors.

Moreover, a number of studies are focused on specific types of diversification. For the most part, there are works devoted to industrial and international (including geographical) diversification and their effect on company value. These studies differ in terms of their results: they include conclusions both on lost value and on the lack of diversification-related discounts. For example, Fauver (2004) and others have found that American companies are traded at a discount compared to companies doing business solely within the domestic market. At the same time, they discovered that international diversification makes no impact on the value of German and British companies. As far as industrial diversification is concerned, it has an adverse effect on American and British companies but no influence on German companies.

Doukas and Kan's study (2006) is of interest as well. Using the example of American companies, they come to the conclusion that global diversification does not lead to lost company value. They recognize the existence of a global diversification discount. However, they rely on the viewpoint of the theory of contingent claims, which claims that global diversification has a positive effect on a company's debt value. Shareholder value is simultaneously destroyed but this reduction is compensated for by the increased debt value.

A study concerning markets already under development, and namely Malaysian public companies, is given in a study by Li and Khoo, et al. (2012) They found no evidence of any significant impact from global diversification on company value. They also established that industrial diversification has a slight positive effect on company value.

Villalonga et al. (2012), in their study of a selection of diversified companies from 38-countries, have found that the value of these companies (as compared to focused firms) is higher in countries where capital and labour markets are less effective.

An overview of studies on the topics in question testifies to the current relevance of the subject matter. It also makes it possible to select the methods that are applied in the practical part of this study to analyze diversification within the context of mergers and acquisitions.

### 3. PRINCIPLE OF THE METHODS.

The rate of return on invested capital (*ROIC*) is one of the key factors underlying value. The concept of market-/investor-expected rate of return on invested capital ( $ROIC_e$ ) assumes that the market valuation of public companies constitutes their intrinsic value. The method includes the following stages:

1) At the first stage, the historic value of *ROIC* is estimated according to the formula:

$$ROIC_t = \frac{EBIT \times (1 - T)}{CI} \quad (1)$$

where *EBIT* is the earnings before interest and taxes; *T* is the corporate tax; *CI* is the value of capital investment

2) At the second stage, the expected *ROIC* is estimated. The weighted average of capital costs during the period from 2002 through 2012 has been estimated for Unilever Group that is the focus of this study. The required return on equity capital is estimated in accordance with the CAPM model, and the required return on loan capital is estimated as the sum of the risk-free rate and the credit margin.

3) At the third stage, estimated market value added is calculated as the difference between value on the equity capital market and the balance sheet value ( $E_{bv}$ ). It should be noted that the study makes the assumption that the economic value added is constant in the long-term. (Mielcarz, 2012, p. 14) Thus, the value of the expected *ROIC* can be obtained using the following formula:

$$ROIC_e = \frac{(MV - CI) \times WACC}{CI} + WACC \quad (2)$$

where *MV* is the market value (calculated as the sum of equity capital plus joint debt values). *WACC* is the weighted average capital cost.

4) The final stage consists of comparing the expected *ROIC* with the actual amount. For illustrative purposes, an *ROIC* tree is built as a model showing the effectiveness of current corporate strategy at a glance.

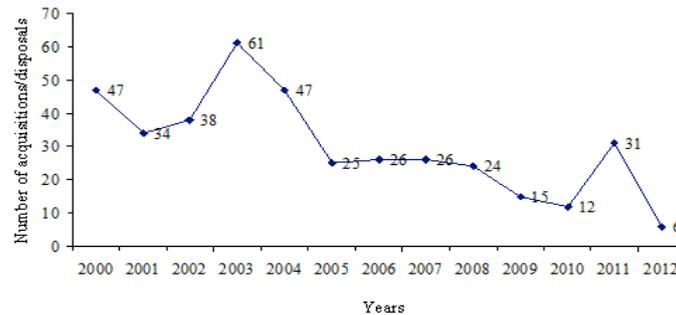
The cumulative abnormal return method is used as an additional study method for confirming a proposed hypothesis. The cumulative abnormal return (CAR) has been chosen by Unilever Group as a general indicator for estimating the effectiveness of M&A.

Data for the period from January 2000 through April 2013 (about 13 years) were taken from the Zephyr database and Unilever Group's official website were used in the study. That particular period of time was chosen, because two vital events for the company occurred during that span of time: the five-year "Path to Growth Strategy" was implemented as well as the 20-year strategic "Sustainable Living Plan". Both plans rely on the active application of the M&A strategy to optimize a subset of the company's businesses.

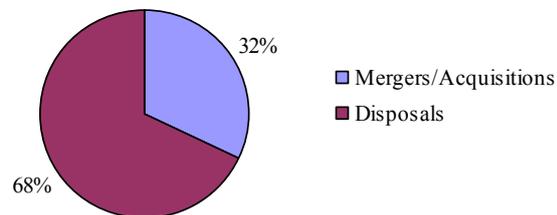
The resulting sample includes transactions executed worldwide by companies that are part of Unilever Group. It also comprises mergers and demergers of the company's major units. Because the M&A strategy for Unilever Group also includes selling businesses (or company-owned brands),

at first a sample of 247 transactions was selected where a company acted as buyer, a seller or object of sale. Transactions included into such sample were divided in terms of their current status: completed, announced or pending. Each transaction was defined as an acquisition, merger or demerger. Two samples were highlighted out of the sample: M&A transactions and disposals, which comprised 79 and 168 transactions, respectively.

**FIG. 2.** Number of acquisition and disposal transactions, 2000-2012 (Official site of Unilever Group)



**FIG. 3.** Distribution of transactions for acquisitions and disposals, 2000-2013 (1<sup>st</sup> quarter) (Official site of Bureau van Dijk)



Figures 2 and 3 represent, respectively, the number of business acquisition and disposal transactions in accordance with the company's consolidated statements and the distribution of transactions on acquisitions and disposals based on Zephyr data.

It was further decided to perform an analysis with only mergers and acquisitions transactions. Notably, the sample included only transactions

where over 15% of shares were acquired and Unilever Group's participatory interest after the completion of the transaction amounted to no less than 51% (Unilever's minimum participatory interest was 65%). Thus, a sample of 56 transactions was compiled which included 19 transactions with known costs.

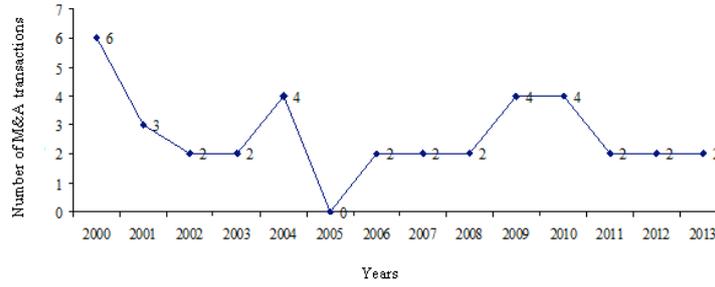
Cumulative abnormal return values have been estimated based on the method described in the works of MacKinlay (1997), E. F. Grigoriady et al. (2009).

In this work cumulative abnormal return is the average value of abnormal return for all transactions effected by Unilever Group over the period of time under analysis. A positive CAR value means that the event (M&A transaction) is perceived as effective by the market. In other words, if  $CAR \geq 0$ , this corporate decision has not resulted in value destruction. It should also be established whether the obtained value is statistically significant, which can be checked using the t-test. Thus, the hypothesis for the empirical analysis at hand is formulated as follows: M&A transactions, effected by Unilever Group, being a diversified corporate structure, cause no value destruction ( $CAR \geq 0$ ).

An vital issue is determining the estimation period and event window. The estimation period is the period of time during which normal share price movement is expected, i.e. the transaction under study (the event) has no impact on quotations. The event window is the period of time when quotations are expected to be influenced by a transaction. The transaction announcement day considered the day of the event. Payment of dividends and stock splits were expected to be regarded as significant events also effecting the quotations. Stock splits took place twice for the analyzed period. The event window is 5 days: two days before the event and two days after it (-2; +2). The estimation period is 20 days (-20; 0). This length for the estimation period and event window has been selected in order to exclude, where possible, the impact of vital events such as other transactions announcements. Transactions announcements made within the same day were considered a single event. The sample was therefore further reduced down to 37 transactions. Figure 4 shows the year-by-year breakdown.

Thus, abnormal returns (AR) on shares are to be calculated at the first step. Because Unilever Group's corporate centre is a double structure, the shares of the British Unilever PLC Corporate Centre, the basic trading platform for which is London Stock Exchange, were selected as the shares with CAR to be calculated. It was previously revealed that Unilever PLC accounted for the maximum share in Unilever Group's total capitalization. CAR is the difference between Actual Return and Normal Return on a

FIG. 4. Distribution of transactions based on year-by-year sample (Official site of Bureau van Dijk)



share, calculated on a daily basis:

$$r_{jt} = R_{jt} - \hat{R}_{jt}, \quad (3)$$

where  $r_{jt}$  is the abnormal share return for the  $j$ -th transaction on the day of event window  $t$ ;

$R_{jt}$  is the actual return on the share;

$\hat{R}_{jt}$  is the normal return on the share.

The actual return was calculated as the growth rate of Unilever PLC's share price within the event window. Normal return has been estimated using three methods: the method of mean adjusted return model, the market model and the market-adjusted return model. In the first case, normal return represents the average return value for the estimation period. The market model is based on the following formula:

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_{jt}, \quad (4)$$

where  $R_{mt}$  is market return in the estimation period;

$\alpha_j$  is return not explained by the market;

$\beta_j$  is the quoted to the market return;

$\varepsilon_j$  is the statistical error.

Market return is estimated based on the FTSE 100 Index. First, estimation period data are used to find estimates  $\hat{\alpha}_j$  and  $\hat{\beta}_j$ . The estimates obtained for 37 transactions are used to arrive at the expected return for the event window under the following formula (the market return is calculated as the FTSE 100 growth rate within the event window):

$$\hat{R}_{jt} = \hat{\alpha}_j + \beta_j \hat{R}_{mt}, \quad (5)$$

We find the estimate  $\hat{\beta}_j$  for the adjusted market model as  $\hat{\alpha}_j = 0$ .

The results of the abnormal return values are aggregated at the second step. This can be done in several ways. The average abnormal return value is calculated according to the following formula ( $N$  is the number of transactions):

$$AR_t = \frac{\sum_j r_{jt}}{N} \quad (6)$$

And finally the cumulative abnormal return shall be calculated as the sum of the aggregated values of the abnormal return for the estimation period  $(-m; m)$ :

$$CAR = \sum_{t=-m}^m AR_t \quad (7)$$

Let us summarize the foregoing in respect of the approach applied to analyze the cost and effectiveness of the M&A strategy used by Unilever Group. As the diversified company in question has a complex corporate structure, represented not only in numerous business segments but also geographically diversified, it causes certain problems when it comes to its cost estimation. As far as globally diversified companies are concerned, it turns out to be quite a challenging process to develop a cost estimation model which enables the creation of company value under various prescribed conditions, and at the same time to monitor the contribution of each business area, primarily due to the limited information.

The cost estimation approach based on the comparison of forecast and historical ROIC makes it possible to reveal a gap between the real value of the company and its market valuation.

A CAR-based analysis enables preliminary conclusions on the efficiency of the mergers and acquisitions strategy.

The techniques considered first make possible an approximation that identifies the value of diversified companies, the market under-/overvaluation of the company and the effect that the concluded M&A transactions have on the market's perception of the company. The techniques are applicable both to the course of events aimed increasing a company's value and to strengthening a firm's market positions.

#### 4. EMPIRICAL RESULTS

To calculate historical ROIC the following prerequisites are used.

1) The invested capital value is estimated as the average for the period (a year was taken as the period). The results are given in Table 1.

2) To calculate the expected *ROIC* the following information was used: Unilever Group's weighted average capital expenses were calculated for the period from 2002 to 2012. Unilever Group's aggregate market capitalization

was used as the equity capital cost (capitalization,  $E$ ). (Official site of Unilever Group) As the company follows IFRS standards when preparing its financial statements, the long-term and the short-term debts posted to the statements are considered to be the company's fair value. The tax rate applied ( $T$ ) was calculated as the effective tax rate. The return on 10-year bonds of the UK Government shall be used as the risk-free rate. The risk premium amount is taken from the works of P. Fernandez (2012) The value of the Beta coefficient for Unilever PLC was taken from data provided by A. Damodaran. The return required for the equity capital was calculated according to the CAPM model. The return on loan capital required shall be calculated as the sum of the risk-free rate plus the credit margin, which in the case of the company's margin has an  $A+$  rating assigned to it. The results are presented in Table 2.

The following information is used for the third step, and namely to estimate the market value added: The market value added is the difference between the market and the balance sheet value of the equity capital. The assumption is made that the generated value-added growth rate is permanent in the long run. The market value is calculated as the sum of equity capital plus debt amounts. The results are provided in Table 3.

**TABLE 1.***ROIC* Historical Values, 2002-2012

|                      | $ROIC_t = EBIT * (1 - T) / CI$ |        |        |        |        |        |        |        |        |        |        |        |
|----------------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                      | 2001                           | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   |
| IBD                  | 26,305                         | 20,511 | 16,564 | 12,487 | 12,788 | 9,096  | 9,853  | 11,380 | 10,219 | 9,832  | 14,005 | 10,621 |
| Ebv                  | 7,859                          | 5,321  | 6,360  | 7,629  | 8,765  | 11,672 | 12,819 | 10,372 | 12,536 | 15,078 | 14,921 | 15,716 |
| CI                   | -                              | 29,998 | 24,378 | 21,520 | 20,835 | 21,161 | 21,720 | 22,212 | 22,254 | 23,833 | 26,918 | 27,632 |
| EBIT                 | 4,946                          | 5,007  | 5,483  | 4,239  | 5,074  | 5,408  | 5,245  | 7,167  | 5,020  | 6,339  | 6,433  | 6,989  |
| T                    | 44.18%                         | 39.60% | 33.65% | 21.87% | 26.15% | 23.72% | 21.76% | 25.87% | 25.57% | 25.02% | 25.97% | 25.96% |
| NOPAT                | 2,761                          | 3,024  | 3,638  | 3,312  | 3,747  | 4,125  | 4,104  | 5,313  | 3,736  | 4,753  | 4,762  | 5,175  |
| ROIC historical, %   | -                              | 10.08% | 14.92% | 15.39% | 17.98% | 19.49% | 18.89% | 23.92% | 16.79% | 19.94% | 17.69% | 18.73% |
| ROIC average, %      | 17.62%                         |        |        |        |        |        |        |        |        |        |        |        |
| Economic Profit (EP) | -                              | 1,073  | 1,556  | 917    | 1,639  | 1,929  | 2,010  | 3,886  | 2,356  | 3,373  | 3,548  | 4,003  |

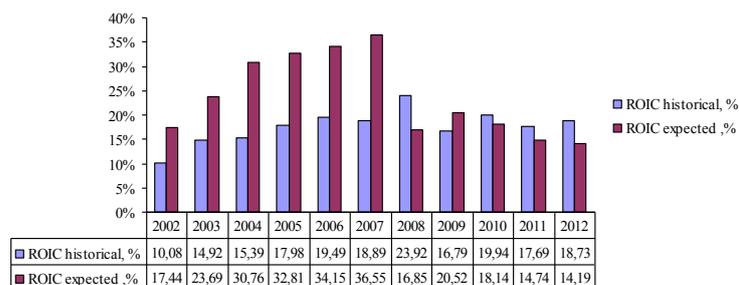
**TABLE 2.**

Unilever Group Weighted Average Capital Cost, 2002-2012

|                          | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Capitalization, mln euro | 64,519 | 59,917 | 51,060 | 46,991 | 54,757 | 60,538 | 72,501 | 46,882 | 63,409 | 64,803 | 73,949 | 81,858 |
| Debt cost, mln euro      | 26,305 | 20,511 | 16,564 | 12,487 | 12,788 | 9,096  | 9,853  | 11,380 | 10,219 | 9,832  | 14,005 | 10,621 |
| Share of Equity, %       | 71.04% | 74.50% | 75.51% | 79.01% | 81.07% | 86.94% | 88.04% | 80.47% | 86.12% | 86.83% | 84.08% | 88.52% |
| Share of Debt, %         | 28.96% | 25.50% | 24.49% | 20.99% | 18.93% | 13.06% | 11.96% | 19.53% | 13.88% | 13.17% | 15.92% | 11.48% |
| T, %                     | 44.18% | 39.60% | 33.65% | 21.87% | 26.15% | 23.72% | 21.76% | 25.87% | 25.57% | 25.02% | 25.97% | 25.96% |
| rf, %                    | 4.94%  | 4.49%  | 4.94%  | 4.58%  | 4.27%  | 4.54%  | 4.70%  | 3.36%  | 3.60%  | 3.34%  | 1.81%  | 1.60%  |
| Premium, %               | -      | 4.70%  | 6.30%  | 6.10%  | 6.05%  | 5.96%  | 5.30%  | 5.50%  | 5.30%  | 5.20%  | 5.30%  | 5.50%  |
| Beta                     | -      | 0.65   | 0.8    | 1.36   | 1.2    | 1.13   | 1.06   | 0.69   | 0.57   | 0.54   | 0.59   | 0.53   |
| re, %                    | -      | 7.55%  | 9.98%  | 12.88% | 11.53% | 11.27% | 10.32% | 7.16%  | 6.62%  | 6.15%  | 4.94%  | 4.52%  |
| Long-term credit rating  | A+     |
| Credit Margin, %         | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  | 1.25%  |
| $r_d$ , %                | 6.19%  | 5.74%  | 6.19%  | 5.83%  | 5.52%  | 5.79%  | 5.95%  | 4.61%  | 4.85%  | 4.59%  | 3.06%  | 2.85%  |
| WACC, %                  | -      | 6.51%  | 8.54%  | 11.13% | 10.12% | 10.38% | 9.64%  | 6.42%  | 6.20%  | 5.79%  | 4.51%  | 4.24%  |

Figure 5 shows that from 2002 to 2007 the expected ROIC significantly exceeded the actual value. This means that investor expectations regarding the company's ability to achieve a higher ROIC value in the future exceeded the values that were actually achieved for the specified period of time. In other words, the company was overestimated. In 2009 the investors' expectations also exceeded real outcomes though not to the same extent as from 2002 to 2007.

**FIG. 5.** Comparison between Historical *ROIC* and Expected *ROIC*, 2002-2012



In 2008, the company achieved its highest ROIC value for the period under analysis, which clearly exceeded investor expectations. Over the past three years, the actual and expected ROIC values have nearly equalized. Nevertheless, expected ROIC tends to decrease which has been particularly apparent in the past year. Therefore it is reasonable to speak of Unilever Group being underestimated by the market.

Tables 4 and 5 reveal Unilever Group being estimated on the basis of ROIC historical and actual value of the company market capitalization. Figure 6 illustrates the gap between the actual value of the company and its market valuation during the period in question.

**FIG. 6.** Unilever Group Shareholder Value, 2002-2012



**TABLE 3.**

Estimation of Market Value Added (MVA) and ROIC Expected, 2002-2012

| $ROIC_e = (MV - CI) \times WACC / CI + WACC$ |        |        |        |        |        |        |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   |
| Capitalization (E), mln euro                 | 64,519 | 59,917 | 51,060 | 46,991 | 54,757 | 60,538 | 72,501 | 46,882 | 63,409 | 64,803 | 73,949 | 81,858 |
| Debt (IBD), mln euro                         | 26,305 | 20,511 | 16,564 | 12,487 | 12,788 | 9,096  | 9,853  | 11,380 | 10,219 | 9,832  | 14,005 | 10,621 |
| Market Value (MV), mln euro                  | 90,824 | 80,428 | 67,624 | 59,478 | 67,545 | 69,634 | 82,354 | 58,262 | 73,628 | 74,635 | 87,954 | 92,479 |
| Equity (Ebv), mln euro                       | 7,859  | 5,321  | 6,360  | 7,629  | 8,765  | 11,672 | 12,819 | 10,372 | 12,536 | 15,078 | 14,921 | 15,716 |
| Market Value Added (MVA), mln euro           | 56,660 | 54,596 | 44,700 | 39,362 | 45,992 | 48,866 | 59,682 | 36,510 | 50,873 | 49,725 | 59,028 | 66,142 |
| Capital Invested (CI), mln euro              | -      | 29,998 | 24,378 | 21,520 | 20,835 | 21,161 | 21,720 | 22,212 | 22,254 | 23,833 | 26,918 | 27,632 |
| WACC, %                                      | -      | 6.51%  | 8.54%  | 11.13% | 10.12% | 10.38% | 9.64%  | 6.42%  | 6.20%  | 5.79%  | 4.51%  | 4.24%  |
| ROIC expected, %                             | -      | 17.44% | 23.69% | 30.76% | 32.81% | 34.15% | 36.55% | 16.85% | 20.52% | 18.14% | 14.74% | 14.19% |
| ROIC average, %                              | 23.62% |        |        |        |        |        |        |        |        |        |        |        |

**TABLE 4.**

Unilever Group Cost Estimate Based on ROIC Historic, 2002-2012

|                                 | $V = CI + (ROIC - WACC) \times CI/WACC$ |        |        |        |        |        |        |        |        |        |         |         |
|---------------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
|                                 | 2001                                    | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011    | 2012    |
| WACC, %                         | -                                       | 6.51%  | 8.54%  | 11.13% | 10.12% | 10.38% | 9.64%  | 6.42%  | 6.20%  | 5.79%  | 4.51%   | 4.24%   |
| Capital invested (CI), mln euro | -                                       | 29,998 | 24,378 | 21,520 | 20,835 | 21,161 | 21,720 | 22,212 | 22,254 | 23,833 | 26,918  | 27,632  |
| ROIC (with cash)                | -                                       | 10.08% | 14.92% | 15.39% | 17.98% | 19.49% | 18.89% | 23.92% | 16.79% | 19.94% | 17.69%  | 18.73%  |
| <i>V + cash</i>                 | -                                       | 46,491 | 42,592 | 29,760 | 37,031 | 39,745 | 42,568 | 82,695 | 60,235 | 82,072 | 105,555 | 122,076 |
| Debt (IBD), mln euro            | 26,305                                  | 20,511 | 16,564 | 12,487 | 12,788 | 9,096  | 9,853  | 11,380 | 10,219 | 9,832  | 14,005  | 10,621  |
| Equity (E), mln euro            | -                                       | 25,980 | 26,028 | 17,273 | 24,243 | 30,649 | 32,715 | 71,315 | 50,016 | 72,240 | 91,550  | 111,455 |
| Share of Unilever PLC, mln euro | -                                       | 8,054  | 7,808  | 5,182  | 6,546  | 9,501  | 10,469 | 22,821 | 15,505 | 21,672 | 27,465  | 31,207  |

**TABLE 5.**

Combined Market Capitalization of Unilever Group, 2002-2012

|  | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Combined Market Capitalization, mln euro | 64,519 | 59,917 | 51,060 | 46,991 | 54,757 | 60,538 | 72,501 | 46,882 | 63,409 | 64,803 | 73,949 | 81,858 |
| Share of Unilever PLC, %                 | 32%    | 31%    | 30%    | 30%    | 27%    | 31%    | 32%    | 32%    | 31%    | 30%    | 30%    | 28%    |
| Share of Unilever PLC, mln euro          | 20,646 | 18,574 | 15,318 | 14,097 | 14,784 | 18,767 | 23,200 | 15,002 | 19,657 | 19,441 | 22,185 | 22,920 |

The ROIC tree was further built up based on the data of the consolidated financial statements. Because the revenue report in the consolidated financial reports is given in a summarized form and because the notes also stop short of identifying the factors behind the operating margin: the report formats are changed nearly every year by the company, and this segment of the ROIC tree is represented only by general numbers. The building of the ROIC has shown that the company has a shortage of working capital. It is caused by the M&A strategy followed by Unilever Group. That means that the market undervaluation that revealed earlier was the result of the peculiarities of specified strategy: funds from core activities are diverted by the company. For example, Unilever Rus buyers fewer and fewer spare equipment parts from outside suppliers. Currently nearly all parts are manufactured by the internal repair services, save for elements requiring high adjustment accuracy. In other words, Unilever Group's capitalization is made up mainly of brands contained in its portfolio rather than its products or business areas as such. This has also been confirmed by the fact that the share of intangible assets among property assets is practically equivalent to the share of fixed assets. Thus, the general hypothesis presented in this article has already been confirmed. Below are the results of the analysis following the cumulative abnormal return method, which will finally confirm or invalidate the hypothesis this Article covers.

Let us consider the results obtained on the basis of the cumulative abnormal return method. Table 6 represents the results of the calculation of the cumulative abnormal return for 37 transactions included in the sampling, covering a time period from 2000 to the Q1 2013. The estimations from the three methods of normal return calculations are provided.

**TABLE 6.**  
Cumulative Abnormal Return Estimates for Unilever Group M&A Transactions,  
2000-2013

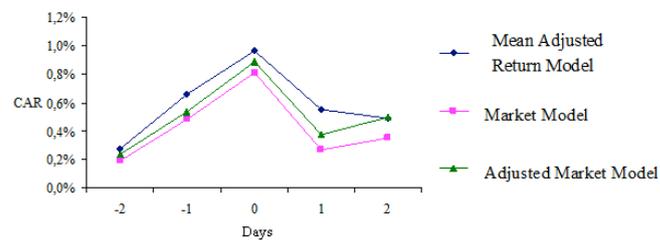
|                          | Mean Adjusted Return Model | Market Model | Adjusted Market Model |
|--------------------------|----------------------------|--------------|-----------------------|
| CAR average, %           | 0.487%                     | 0.349%       | 0.494%                |
| Observation number       | 37                         | 37           | 37                    |
| t-statistics             | 2.16                       | 1.64         | 2.35                  |
| Level of significance, % | 12%                        | 22%          | 12%                   |

It is evident from Table 6 that the results obtained turn out to be significant at the level of more than 10%. First, such a result is accounted for by the low scale of the sample. Second, for Unilever, M&A strategy is closely connected to selling businesses or particular brands, that's why more statistically significant results could have been obtained for the sample including both acquisition and disposal transactions. They could further be divided into two sub-samples and the results obtained separately could

be compared. However within this study the decision was made to focus upon M&A transactions. It should be concluded that the hypothesis that the M&A transactions executed by Unilever Group's diversified corporate structure do not result in value destruction cannot be discarded at a 12% level of significance for the mean adjusted return model and the adjusted market model. For the market model this hypothesis cannot be discarded at 22% significance level.

As can be seen from Figure 7, the highest CAR value is achieved on the transaction announcement date for all three models. But it may be observed that growth occurs at the beginning of the event window, declining afterwards. The result obtained may be connected with a short event window selected that hinders clearly tracking the trend. However, it may be due to the specifics of the company itself and of its corporate strategy.

**FIG. 7.** CAR Values in the Event Window



A cost estimation approach based on comparing expected and historical ROIC has made it possible to reveal a gap between the actual value of the company and its market valuation. Until 2008, Unilever Group was valued at much higher than its true value, i.e. the market provided a premium. At the moment, the situation has changed and the company receives a discount from the market.

The CAR analysis showed that it is impossible to make a clear-cut conclusion as to efficiency of the mergers and acquisitions strategy followed by Unilever Group. Though the obtained CAR values are positive and may be deemed significant at a certain level, there are still doubts as to whether it is correct to consider only mergers and acquisitions transactions. That means that the structure of Unilever Group's optimal portfolio is also closely related to the disposal of some businesses and brands and, if full information (particularly insider information) is available, the estimate may be more accurate.

Following the analysis, recommendations may be given to Unilever Group to modify its M&A strategy with the focus placed on market development. Unilever market development strategy should combine the Group's global presence and also local its features, which implies the following:

- the company should maintain the same diversification in terms of its portfolio categories (food products, personal care, drinks and home care);
- these categories should be enhanced both by means of local brand acquisitions and by developing products with specific characteristics corresponding to local preferences;
- key competencies should be developed, including local knowledge obtained due to M&A, which will be expressed as positive synergy;
- presence should be expanded in underserved markets, not only by involving more consumers with different needs and opportunities, but also by involving local small businesspeople being involved in the supply network (local producers of raw materials, small distributors of finished products), which will allow the company to strengthen its position in terms of the distribution of its products and its resource base;
- investments should be redirected into brand support and at the same time into research and development on the company's products and technologies;
- the actual results should be demonstrated of implementation of the sustainable development plan improved living standards in particular regions, which will provide for a strengthening of Unilever Group's goodwill among local stakeholders and potential employees, i.e. the company will be granted access both to human and financial resources.

All this should be finally perceived positively by the market and lead to a reduction in the gap between the company's market capitalization and its actual value. In this case diversification may be considered the factor behind the creation of value by the company.

From this case study, several further lessons can be drawn for future development of the Unilever Group and with some changes for other firms seeking to exploit learning and knowledge transfer opportunities:

- Unilever Group's business portfolio is structured of how well the businesses complement each other. This creates added value to a greater extent than that created on the basis of affinity. In this case, the key complementary asset is local knowledge to be obtained in the course of successive mergers and acquisitions in different regions and within various business areas.
- The portfolio optimization and the creation of a clearly defined corporate management model will be able to provide Unilever Group with constant development. Unilever Group is at several life cycle stages simultaneously, which is specific to this diversified corporate structure. To a great extent, this has been achieved due to the implementation of the M&A strategy. The company is also implementing a number of local strategy types, trying to penetrate the market, and maintain and grow its presence in different markets and in different product classes.

- The estimate of the expected ROIC revealed that Unilever Group has had a gap between the actual value of the company and its market valuation over the past 10 years. Expected ROIC tends to decrease over the last years. This is indicative of Unilever Group being undervalued by the market.
- Undervaluation of Unilever Group has also been caused by specifics of the strategy practiced by the company: core activity funds are diverted by the company and are transferred to effecting M&A. Therefore Unilever Group capitalization is formed mostly due to the brands included into its portfolio rather than its products or business areas themselves.
- An analysis of the effectiveness of Unilever Group's M&A strategy has revealed that it causes no value destruction, but we cannot consider this result as statistically significant to a high degree of significance.
- Unilever Group is implementing an M&A strategy that at least causes no value destruction. The long-term planning horizon used by company management in its corporate management practice must be combined with sufficient mobility ensuring timely modification of the company's package of businesses and brands. The company implements M&A strategy by forming the optimal combination of its business portfolio, which enables it to be at a number of life cycle stages simultaneously.

## 5. CONCLUSION

- The purpose of this article is to test whether mergers and acquisitions create value to shareholders and reveal the main determinants of M&A performance. Such research will help managers to justify a company's expansion via M&A and create value after the deal.
- In contrast to other studies in emerging capital markets, we use economic profit to assess the impact of M&A on company performance and also use traditional accounting performance measures in order to compare the results.
- While assessing the efficiency of M&A strategy, as a difficult diversified structure presented not only in different business segments but also geographically diversified, it is reasonable to choose the approach to appraisal of value based on the comparison of the expected and historical ROIC. It allows unravelling a gap between the valid cost of the company and its marketing assessment.
- The structured research hypothesis that diversification has no destructive impact on value of the international multi-business company building up its portfolio under success of particular brands and business areas should not be rejected especially as it pertains to brand portfolio formation.
- The Method of the saved-up excess profitability (Abnormal returns) is based on studying the stock market reaction to announcements about

takeovers and mergers for the purpose of diversification. If the given value of the saved-up excess profitability is of positive size, it proves a positive assessment by the market of diversification of the company. If CAR is negative, it testifies to a negative assessment by the market of strategy of diversification.

- At a first approximation, the analysis based on the saved-up excess profitability allows determining the cost of companies of this type and the existence of their market under/overestimation. There is also an opportunity to take into account the influence of companies' mergers and takeovers on the market acceptance. As a result, it can be applied by the company's management team while accumulating the cost and management of the market acceptance (increase in value).

- For international companies with a wide grocery basket, diversification implies the need for carrying out organizational changes aimed at business adaptation to its difficult grocery and geographical structure.

- The large international company Unilever Group is a good example, that made it possible to determine what strategies of international diversification imply. On the one hand, they allow the companies to reach the greatest efficiency in the long-term and short-term periods. On the other hand, they are strategies that focus on local markets and strategies of global leadership.

- Based on the event-study analysis, we find that target shareholders gain significantly in M&A deals, while returns for acquiring firms are positive in some event windows and negative in the others. The observed negative impact of M&A on company performance means that managers should focus more on the post-merger integration process to realize potential synergies and create value for shareholders.

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- For an increase in the efficiency of diversification strategy, it is necessary to concentrate on the identification of levers of creating value and reaching synergies both in the short-term, and long-term periods, taking into consideration a high probability decrease in the current efficiency of business that makes it unavoidable to plan costs of adaptation of business to the international activity, and to realize measures for minimization of possible growth costs of the capital.

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