

Changes in Property and Ownership Structure of Companies as a Consequence of Mergers in the Czech Republic

Jaroslav Sedlacek, Petr Valouch, Eva Hyblova, Zuzana Krizova

Masaryk University

Lipova 41a, 602 00 Brno, Czech Republic

E-mail: sedl@econ.muni.cz; valouch@econ.muni.cz; hyblova@econ.muni.cz; krizovaz@econ.muni.cz

crossref <http://dx.doi.org/10.5755/j01.ee.25.2.4030>

Combinations of companies in the form of mergers lead to the concentration of capital accompanied by an increase in the value of assets as well as economic power; moreover, the ownership structure changes, new organizational systems and various projects in the personnel policy are created and developed, global company culture and company philosophy are born. This paper presents partial results of the Czech Science Foundation research project no. 403/11/0447, whose objectives are to identify the problems in merger preparation in compliance with valid Czech regulations and to analyse economic causes and consequences of mergers. The source of information is a basic dataset formed in the structure necessary for statistical analysis; the dataset was created by the project implementers. An empirical research has been conducted on the basic statistical file that contains information about all the companies in the Czech Republic, which merged in the last 10 years (2001–2010), and published in digital form financial statements in the collection of the Trade Register. We analyse temporal series reflecting the development of mergers in companies as divided by size and the role of the company in the merger process, measured by the number of mergers and volume of assets of the successor and the dissolved companies.

Our research has proven that the Czech economic environment is dominated by the combinations where a larger company devours the smaller one with the objective to achieve a more advantageous position in the market and economies of scale. A closer dependence was found for development trends in the cases when the dissolved companies were larger than the successor company than in opposite cases.

Keywords: *company transformations, mergers and acquisitions, successor companies, acquired companies, macroeconomic environment, regression and correlation analysis.*

Introduction

The first references to mergers and acquisitions were observed at the end of the 19th century, when in the USA there was a need for larger investments in business and an effort to stabilize the position of some enterprises in the market. The study into the historical development of company combinations, specifically mergers and acquisitions (M&A), has proven that activities in the M&A market did not happen evenly but they fluctuated in dependence on the level of the economic environment, development of financial markets and mainly the ideas of bidders and target businesses about the price of a takeover. Some authors in this respect use the term merger and acquisition waves – these waves come at a certain level of development of an economy. E.g. Levy & Sarnat (1999) talk about 3 waves, Bobenic-Hintos (2009) mentions 4 waves, Bruner (2004) divides the fourth wave into two: a) and b), Martynova & Rennebook (2008) differentiate 5 waves, Lipton (2006) identifies 6 waves of mergers and acquisitions.

In each wave of mergers and acquisitions we can find sensible motives for company combinations which correspond to the degree of the development of society. As regards economic motives, investors or the management believe that two or more businesses together will be of more value than separately. Implementation of these

combinations is supported by generally valid economic laws, such as economies of scale in relation to horizontal mergers, economies of vertical integration, non-used tax shields, removal of low production efficiency, diversification, lower financial costs, etc. We may think, together with other authors (Bruner, 2004) that at the top of the economic cycle businesses have free cash funds and acquisitions and mergers represent good investment opportunities for them. The growth of world economy promotes efforts towards concentration of capital and application of acquisitions and mergers in a global scale (Cassiman & Colombo, 2006; Gimzauskiene & Kloviene, 2010; Gole & Hilger, 2008). Looking at the opposite stage of the economic cycle, in the period of economic problems and low capital prices in financial markets, activities in the area of mergers and acquisitions should increase, not slow down (Boateng *et al.*, 2011). The economic motive is probably somehow related to growing markets, when purchase is more intensive. Although we are unable to explain the timing of merger and acquisition (M&A) waves reliably (Brealey, Myers & Allen, 2006), we can deduce dependence between the economic cycle and activities in the M&A market.

The objective of our research (Sedlacek *et al.*, 2011; Sedlacek, 2010) is to confirm or deny the hypothesis that the Czech M&A market behaves similarly to the markets of developed European countries. If the growth of

performance of companies affects macroeconomic indicators positively and, vice versa, the decrease in economic growth is reflected in business negatively, there should logically be some relationship with the level of activities in the field of company combinations (Zilinske, 2010; Kocmanova & Simberova, 2011; Kraftova *et al.*, 2011). The decreasing entrepreneurial trust, decreases in expenses on capital investments, lower demand for imports, slump of financial markets and heavy price discounting will probably be reflected in a reduction of activities in the M&A market (Stunguriene, 2010); on the other hand, undervalued financial markets represent an opportunity for interesting investments and expansion of entrepreneurial activities.

Research methodology

The dataset containing all domestic mergers implemented between 2001 and 2010 is analysed in detail. The data were taken from the financial statements saved in a digital form in the collection of documents of the Trade Register (2011). In the database there were inserted identification data of the merging companies and temporal, legal and economic information. Theoretical definition of mergers included in the basic dataset complies with the documents of the commercial law. According to West's Encyclopedia of American Law (2011), a merger or acquisition is a combination of two companies where one corporation is completely absorbed by another corporation. The less important company loses its identity and becomes a part of the more important corporation, which retains its identity. A merger extinguishes the merged corporation, and the surviving corporation assumes all the rights, privileges, and liabilities of the merged corporation. A merger is not the same as a consolidation, in which two corporations lose their separate identities and unite to form a completely new corporation.

The Czech trade law defines a merger as a combination in which one or more companies cease to exist without liquidation and their equity, including rights and duties following from labour-law relations, is transferred to another existing or a newly established successor company. It means that this is a legal combination which requires an agreement of all participating companies. On the other hand, acquisition is a transaction in which one company (the bidder) gains a decisive share of the basic equity of another (target) business. The acquisition can have a character of capital investment (capital acquisition) or property acquisition, in which the entire company or its part is purchased. By this a group of companies connected by their capital arises and the legal position of individual companies does not change (Picot, 2008). Unless this is a hostile takeover, also a legal takeover can take place in case of property acquisition or capital acquisition by one owner. Differences between mergers and acquisition will mainly stand out in accounting procedures (Strumiskas & Valanciene, 2009; Mykolaitiene *et al.*, 2010; Bohusova *et al.*, 2012; Malikova & Brabec, 2012). Similarly, the European law (Directive 2005/56/EC of the European Parliament and of the Council of 26 October 2005 on cross-border mergers of limited liability companies) defines a merger as a process in which

one or more companies, on being dissolved without liquidation, transfer all their assets and liabilities to another existing or a new company, in exchange for the issue of securities or shares representing the capital of the successor company and, if applicable, a cash payment not exceeding 10 % of the nominal value of those securities or shares.

In compliance with the Czech act on transformations (Act no. 125/2008) these are all implemented domestic mergers referred to as combination by which dissolved companies pass over to an existing (successor) company. A typical feature of mergers is an agreement on the combination of two or more companies into the successor one, which thus gains more advantages than the companies would have doing business separately. The merger should be of benefit to all owners (shareholders or partners) of participating companies (Sedlacek & Valouch, 2009). If the company which is defined as more significant continues and the less significant one is dissolved, there is an infinite number of opinions regarding the classification of a company from the perspective of its significance. Concentrating on the factor of the size of participating companies as measured by the volume of assets, the companies are divided into four categories (European Commission, 2005), see Table 1. The table shows how many mergers were implemented in particular categories in the observed period. At the same time, the real value of total assets reported by companies that participated in mergers is presented for each category (Moeller *et al.*, 2004).

Table 1

Company categories by the volume of assets (m€)

Category	Micro	Small	Medium	Large
Volume of assets	≤ 2	≤ 10	≤ 43	> 43
Number of mergers	116	133	97	70

The temporal distribution of mergers in the dataset shows that the greatest number of mergers is implemented during the first quarter of each year (71 %), predominantly as of the first day of a new year. A detailed view of the temporal progress of mergers is shown in Table 2. Previous studies confirmed the development of M&A in waves; there is also undulation within an annual cycle (Cheung *et al.*, 2011). The question is how and why the waves proceed. We can express the first hypothesis which is based on purely pragmatic causes of the undulation within the annual cycle and which expects the maximum amplitude at the beginning of a new calendar year. To reject or accept the hypothesis we will use a graphical analysis based on the number of implemented combinations divided by the size of companies. Four temporal series are analysed, described by the polynomial regression function which manifests the highest agreement with the data.

$$y = ax^2 + bx + c \quad (1)$$

where: a , b , c – parameters of the theoretical regression function.

Table 2

Temporal distribution of mergers in the dataset (number of mergers)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total	Proportion
Q1	16	28	26	32	7	49	47	19	27	41	292	0,71
Q2	3	1	3	2	2	5	2	6	8	4	36	0,08
Q3	4	3	4	7	1	10	7	5	9	9	59	0,14
Q4	2	2	8	0	1	2	2	5	5	2	29	0,07
Total	25	34	41	41	11	66	58	35	49	56	416	1,00

We will choose two regression functions out of the calculated ones which show the highest agreement of the model with the data (R^2). We will measure dependences between development trends of mergers of selected types of companies described by regression curves using Pearson correlation coefficient. Temporal development of mergers in particular company categories measured by the volume of assets is evaluated similarly.

Further, we will attempt to test a hypothesis that the more important company at the same time is the larger one (the second hypothesis). We will create two sets and monitor the number of mergers implemented in the particular period. The first set will include the mergers where the more important (successor) company is larger than all the dissolved companies; the second set will include the mergers where the dissolved companies are larger. To compare the progress of both series, a specific regression function suitable to describe the dependences of both quantities will be chosen. The highest quality of agreement with the data is manifested by the logarithmic function.

$$y = b_0 \ln(x) + b_1 \tag{2}$$

where: $b_{0,1}$ – parameters of theoretical regression function.

Graphical analysis is supplemented with the observation of the size ratio of the successor company to the dissolved companies, measured by the volume of assets of participating companies. The relationship when the total assets of successor company (A_S) exceed the assets of dissolved companies (A_D) is termed positive; the opposite one is termed negative.

$$A_N > A_D \tag{3}$$

$$A_S < A_D \tag{4}$$

To rejection or non rejection of the second hypothesis it is necessary to create three temporal series for each inequality (3) and (4), both for the cases when the successor company is larger than the dissolved ones and for the cases when it is the other way round. When the successor company is larger, linear equations will be created with respect to the value of R^2 coefficient.

$$y = b_0 + b_1 x \tag{5}$$

where: $b_{0,1}$ – parameters of theoretical regression function.

When the relationship is negative (4), power functions seem to be more relevant as the agreement of the model with the data is higher.

$$y = b_0 x^{b_1} \tag{6}$$

where: $b_{0,1}$ – parameters of theoretical regression function.

Pearson coefficient will be used again to measure the correlation between the development trends of the calculated regression functions.

Results and interpretation

Classification of the dataset by the size of merging companies provided us with four temporal series whose progress is presented in Figure 1. Graphical analysis of temporal distribution of mergers confirms the first hypothesis which assumes that the highest number of mergers appears at the beginning of each calendar year. The wave with the maximum amplitude occurs in all curves and is not probably related to the size of a company. A logical explanation for this progress is the agreement of the decisive date of merger with the beginning of the accounting and taxation period for most enterprising entities. They thus do not have to create extra financial statements as of the day preceding the decisive day and they save both time and money. Regression functions are described by the following equations

$$y = 0.0026x^2 - 0.0551x + 2.6043; R^2 = 0.0326 \tag{7}$$

(micro)

$$y = 0.0038x^2 - 0.1186x + 3.6774; R^2 = 0.0195 \tag{8}$$

(small)

$$y = -0.0046x^2 + 0.1966x + 0.9665; R^2 = 0.0261 \tag{9}$$

(medium)

$$y = -0.0056x^2 + 0.2364x - 0.0239; R^2 = 0.0415 \tag{10}$$

(large)

The graph shows the progress of two regression functions for medium and large companies, for which we found the greatest agreement of the model with the data based on equations (9) and (10). Correlation between the curves expressed by coefficient $r_{xy} = 0.843638$ is very significant. Both curves manifest a gradual rise of the number of mergers until 2006; after that there is a gradual decrease in activities caused by the coming financial and then economic crisis (Allen & Overy, 2011).

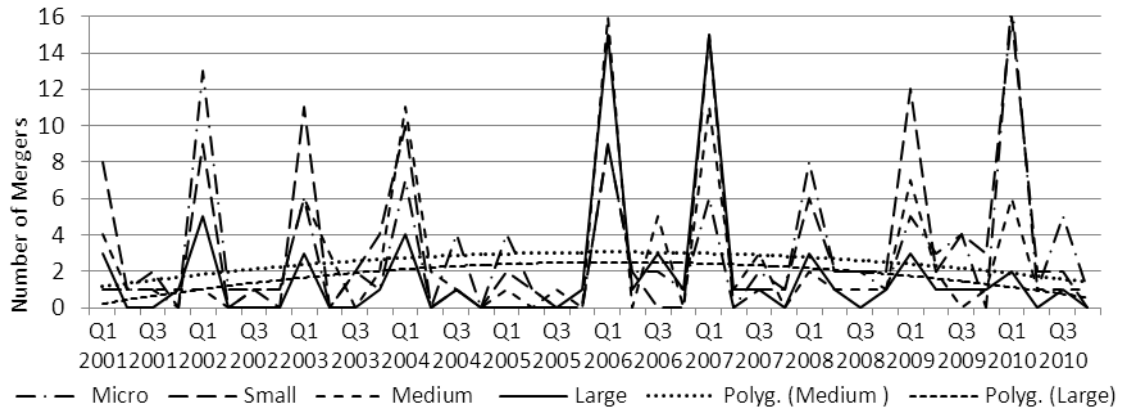


Figure 1. Development of Mergers in the Czech Republic in the Period of 2001 – 2010 (volume of deals)

Resulting evaluation of temporal development of mergers of particular company categories, measured by the volume of assets, is shown in the graph of Figure 2. Four equations of logarithmic regression curves were created to describe the development trend:

$$y = 38.215\ln(x) + 417,2; R^2 = 0.0104 \text{ (micro)} \quad (11)$$

$$y = 792.53\ln(x) + 1756; R^2 = 0.1259 \text{ (small)} \quad (12)$$

$$y = 3485\ln(x) + 4371,4; R^2 = 0.1107 \text{ (medium)} \quad (13)$$

$$y = 19190\ln(x) + 19736; R^2 = 0.1084 \text{ (large)} \quad (14)$$

Correlation of regression curves for medium and large companies in Figure 2 is again very high $r_{xy} = 0,955921$. Logarithmic function describing the development of assets of large companies manifests a growing trend in the monitored period, and the maximum volume of mergers of companies of all sizes for 2006 has been confirmed together with the following drop in the value of mergers in the years to follow.

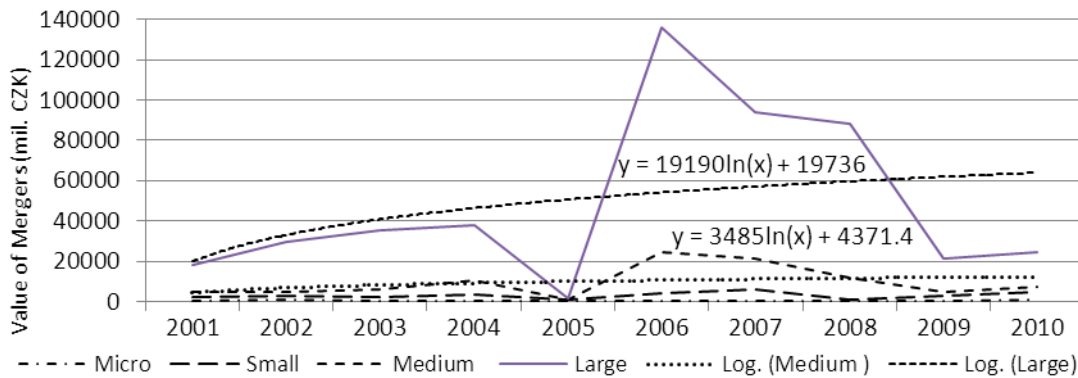


Figure 2. Development of Mergers in the Czech Republic in the Period of 2001–2010 (value of deals)

To verify the second hypothesis, first the number of mergers implemented in the observed period is analysed. Two temporal series are created. The first one captures the mergers in which the more important (successor) company is larger than the dissolved ones; the second one reflects the mergers where the dissolved companies are larger. Equations of regression logarithmic functions are created to compare the progress of both series:

$$y = 8,3393 \ln(x) + 18,304; R^2 = 0.2065 \quad (15)$$

$$y = 3,0994 \ln(x) + 6,0186; R^2 = 0.2191 \quad (16)$$

The progress of both curves in Figure 3 shows a much higher activity concerning mergers implemented by successor companies that are larger than the dissolved ones. The curves have a growing character; the maximum number of mergers was achieved in the year before the

financial crisis. Coefficient of correlation is of high value $r_{xy} = 0.509881$.

Using the ratio of successor company size to the size of dissolved companies measured by the volume of assets of the participating companies for the analysis, we can create the following equations of regression functions describing three temporal series for the positive relationship expressed by inequality (3):

$$y = 2631,6x + 28685; R^2 = 0.497 \quad (17)$$

(value of assets of successor company)

$$y = 1271,5x - 1581,6; R^2 = 0.198 \quad (18)$$

(value of assets of acquired companies)

$$y = 1360x + 27103; R^2 = 0.0162 \quad (19)$$

(the surplus assets of successor company)

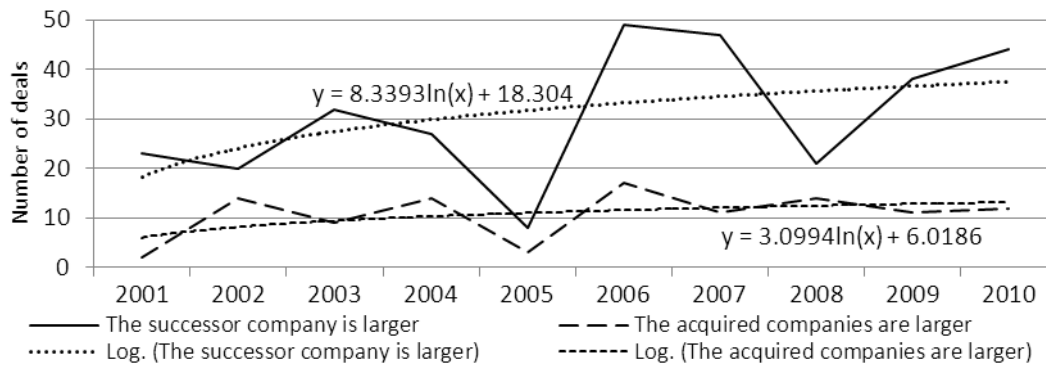


Figure 3. Development of Mergers in the Czech Republic in the Period of 2001 – 2010 (volume of deals)

Even in this case, the second hypothesis has been confirmed because the value of total assets of successor company exceeds the sum of assets of dissolved companies many times. The regression lines provided in Figure 4 have a growing trend and the coefficient of correlation between the value of assets of successor companies and the value of

assets of dissolved companies is medium $r_{xy} = 0,444989$. The slope of the line expressing the excess of assets of successor companies over the dissolved ones is gentler as a consequence of the gradual rise in the value of assets of dissolved companies.

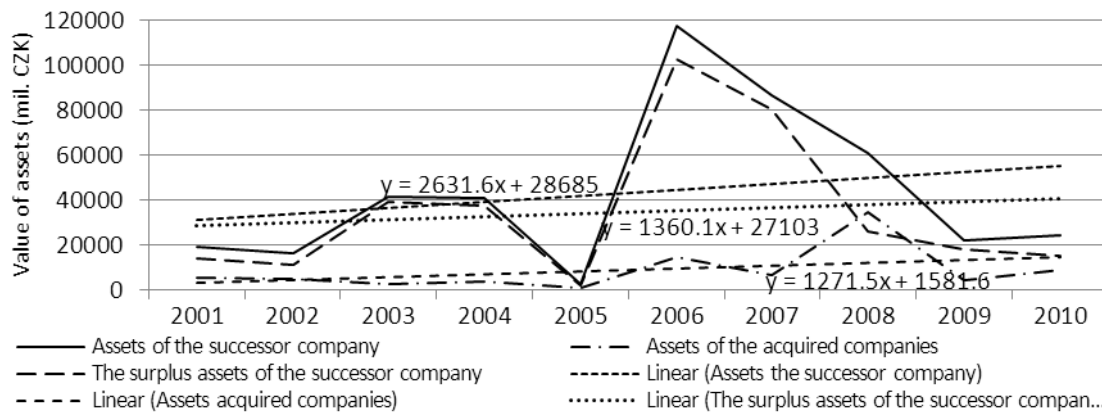


Figure 4. Development of Mergers in the Czech Republic (assets of the successor company are larger)

To present full results, we can also compare the situation when the relationship is negative according to inequality (4), i.e. the dissolved companies are larger than the successor one. Again, three temporal series described by regression power function are created using the database of companies merging in 2001–2010. We obtain three regression curves capturing the trend of the development of assets of the dissolved companies, the successor company and the excess of assets of the

dissolved companies over the successor one as seen in the graph in Figure 5. The graph presents equations of development curves:

$$y = 1688,3x^{0,5541}; R^2 = 0,0732$$

(value of assets of acquired companies) (20)

$$y = 205,51x^{1,0687}; R^2 = 0,0366$$

(value of assets of successor company) (21)

$$y = 1246,6x^{0,4133}; R^2 = 0,2906$$

(the surplus assets of successor company) (22)

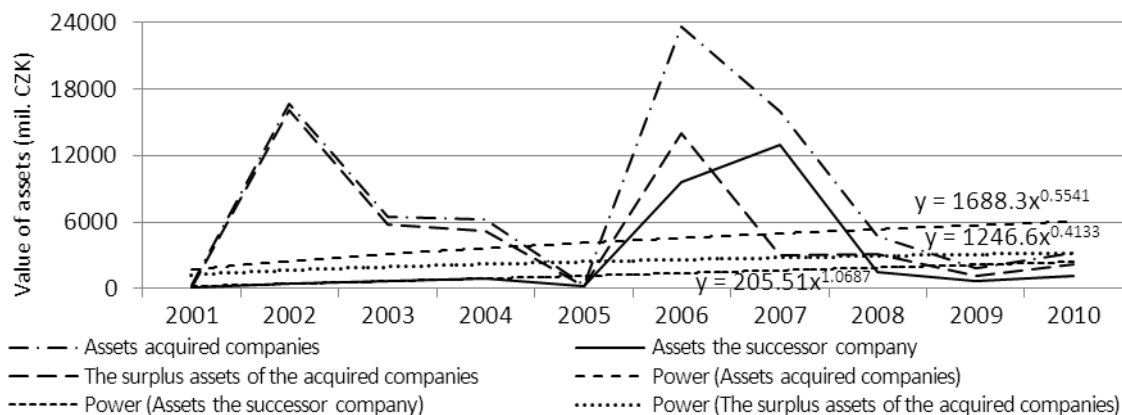


Figure 5. Development of Mergers in the Czech Republic (assets of the acquired companies are larger)

Also in the case of negative relationship we can see a growing trend for all three curves; the assets of merging companies achieved their maximum in 2006, i.e. the year before the financial crisis. Coefficient of correlation between the curves of assets of dissolved companies and the successor company shows a high dependence $r_{xy} = 0.731475$. Comparing the developments of mergers in the negative and positive relationships (Figures 4 and 5), the absolute value of assets of companies entering mergers in the positive relationship is approximately five times higher than in the negative relationship. Also this fact confirms the second hypothesis.

Conclusions

Our study has monitored activities at the Czech merger market during the past ten years. Empirical analyses were based on the database of all companies which implemented a merger in the Czech territory in the monitored period and published their financial statements digitally in the collection of documents of the Trade Register. The analyses have confirmed that the maximum activity in the field of mergers appears at the beginning of every new accounting and taxation period regardless of the size of the company. The companies are thus not forced to perform extra finalization of their accounting and provide a financial statement as of the day preceding, the decisive

day of the merger (Mukherjee *et al.*, 2003). From the point of view of the value of assets entering mergers, the period was dominated by large companies although from the point of view of the number of transactions they implemented fewer mergers than the other categories (Tun *et al.*, 2012). Polynomial regression functions indicate an increase in activities at the merger market until the year when the financial and economic crisis came. Negative effect of the crisis is also obvious when the development trend is measured by the volume of assets of companies entering mergers. Comparing the development within the particular size categories of the companies, we can see the same results as Weitzel and McCarthy's from August 2009: a slight increase in the number of mergers during the monitored period also for small and medium companies.

The positive relationship between the size of the successor company and all dissolved companies has been confirmed, both from the perspective of the number of implemented transactions and the volume of assets entering mergers. The value of assets of the successor companies within the positive relationship exceeded the value of assets of all dissolved companies many times. Therefore, we can assume regarding the definition of a merger that the company which has a higher value of assets is considered more important within the process of a merger.

References

- Allen & Overy (2011). *The Allen & Overy M&A Index, Q4 2010 Insight Report*. Retrieved from: <http://www.allenoverly.com/AOWeb/binaries/60916.PDF>.
- Boateng, A., Naraidoo, R., & Uddin, M. (2011). An Analysis of the Inward Cross-Border Mergers and Acquisitions in the U.K.: A Macroeconomic Perspective. *Journal of International Financial Management & Accounting*, 22(2), 91–113. <http://dx.doi.org/10.1111/j.1467-646X.2011.01046.x>
- Bobenic-Hintos, A. (2009). Waves of mergers and acquisitions. *Acta oeconomica cassoviensia*, 2(1), 13–21.
- Bohusova, H., Svoboda, P., & Nerudova, D. (2012). Biological assets reporting: is the increase in value caused by the biological transformation revenue? *Agricultural Economics*, 18(11), 520–532.
- Brealey, R. A., Myers, S. C., & Allen, F. (2006). *Principles of corporate finance*. 8th ed. Boston: McGraw-Hill.
- Bruner, R. F. (2004). *Applied mergers and acquisitions*. Hoboken: John Wiley & Sons Inc.
- Cassiman, B., & Colombo, M. G. (2006). Mergers & acquisitions: the innovation impact. Cheltenham: Edward Elgard. <http://dx.doi.org/10.4337/9781847201584>
- Cheung, Y. L., Stouraitis, A., & Tan, W. (2011), Corporate Governance, Investment, and Firm Valuation in Asian Emerging Markets. *Journal of International Financial Management & Accounting*, 22(3), 246–273. <http://dx.doi.org/10.1111/j.1467-646X.2011.01051.x>
- European Commission (2005). The New SME Definition. Retrieved from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF>.
- Gimzauskiene, E., & Kloviene, L. (2010). Research of the Performance Measurement system: Environmental Perspective. *Inzinerine Ekonomika-Engineering Economics*, 21(2), 180–186.
- Gole, W. J., & Hilger, P. J. (2008). *Corporate Divestitures: A Mergers and Acquisitions Best Practices Guide*. Hoboken: John Wiley & Sons Inc.
- Kocmanova, A., & Simberova, I. (2011). Modelling of Corporate Governance Performance Indicators. *Inzinerine Ekonomika-Engineering Economics*, 23(5), 485–495.
- Kraftova, I., Mateja, Z., & Prasilova, P. (2011). Economic Performance: Variability of Business within Each Industry and Among Industries. *Inzinerine Ekonomika-Engineering Economics*, 22(5), 459–467.
- Levy, H., & Sarnat, M. (1999). *Capital Investment and Financial Decision*. Prague: Grada Publishing.
- Lipton, M. (2006). *Merger Waves in the 19th, 20th and 21st Centuries*. York University: Osgoode Hall Law School.

Retrieved from: <http://tiny.cc/8qd1u>. <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=966294.

- Malikova, O., & Brabec, Z. (2012). The Influence of a Different Accounting System on Informative Value of Selected Financial Ratios. *Technological and Economic Development of Economy*, 18(1), 149–163. <http://dx.doi.org/10.3846/20294913.2012.661193>
- Martynova, M., & Rennebook, L. (2008). *The Performance of the European Market for Corporate Control: Evidence from the 5th Takeover Wave*. Sheffield University: Management School. Retrieved from: <http://ssrn.com/abstract=941731>.
- Moeller, S. B., Schlingemann, F. P. & Stulz, R.M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73(2), 201–228. <http://dx.doi.org/10.1016/j.jfineco.2003.07.002>
- Mukherjee, T. K., Kiyamaz, H., & Baker, H. K. (2003). Merger Motives and Target Valuation: A Survey of Evidence from CFO's. *Journal of Applied Finance*, 14, 7–24.
- Mykolaitiene, V., Vecerskiene, G., Jankauskiene, K., & Valanciene, L. (2010). Peculiarities of Tangible Fixed Assets Accounting. *Inžinerine Ekonomika-Engineering Economics*, 21(2), 142–150.
- Picot, G. (2008). *Handbook of International Mergers and Acquisitions*. New York: Palgrave Macmillan.
- Sedlacek, J., Hyblova, E. & Křižova, Z. (2011). The Analysis of the Development of Ownership Structure in the Czech Merger Market. In Proceedings of the 13th International Conference on Finance and Banking. Karvina: OPF SLU, 566–574.
- Sedlacek, J. (2010). The Methods of Valuation in Agricultural Accounting. *Agricultural Economics*, 56(2), 59–66.
- Sedlacek, J., & Valouch, P. (2009). Fair Value in the Price Regulation of Natural Monopoly. *E&M Economics Management*, 16(2), 6–14.
- Strumiskas, M., & Valanciene, L. (2009). Research of Management Accounting Changes in Lithuanian Business Organisations. *Inžinerine Ekonomika-Engineering Economics*, 3(63), 26–32.
- Stunguriene, S. (2010). Optimization of the Ratio of the Bank Payment Cards Price and Change. *Inžinerine Ekonomika-Engineering Economics*, 21(1), 12–18.
- Trade Register (2011). Retrieved from: <http://ov.ihned.cz/index.php?p=302000>.
- Tun, Y., Azman Saini, W. N. W., & Law, S. (2012). International Evidence on the link between Foreign Direct Investment and Institutional Quality. *Inžinerine Ekonomika-Engineering Economics*, 23(4), 379–386.
- Weitzel, U., & McCarthy, K. J. (2009). Theory and Evidence on Mergers and Acquisitions by Small and Medium Enterprises. Retrieved from: <http://www.uu.nl/rebo/economie/discussionpapers>.
- West's Encyclopedia of American Law (2011). Retrieved from: <http://answers.com/library/LawEncyclopedia-cid-3554923>.
- Zilinske, A. (2010). Incoming Foreign Investment: holly water or menu of potential troubles? *Inžinerine Ekonomika-Engineering Economics*, 21(5), 518–524.
- Act no. 125/2008 Coll. (2008) on transformations of trading companies and cooperatives.

Jaroslav Sedlacek, Petr Valouch, Eva Hyblova, Zuzana Křižova

Įmonių turto ir nuosavybės pokyčiai Čekijos Respublikoje dėl įmonių susijungimo

Santrauka

Plėčiantis pasaulio ekonomikai, investicijos turi didžiulę reikšmę. Didesnių verslo investicijų poreikis ir pastangos sustiprinti, kai kurių įmonių pozicijas rinkoje, vertė įmones susijungti ir taip kurti stipresnius ekonominius vienetus tiesioginių investicijų arba *susijungimų ir įsigijimo* forma (M&A). Veikla M&A rinkoje nevyksta tolygiai. Atvirkščiai, ji svyruoja priklausomai nuo ekonominės aplinkos, finansų rinkų raidos, o ypač nuo dalyvių ir tikslinių bendrovių perėmimo finansinių lūkesčių. Todėl, kai kurie autoriai diskutuoja apie masiškus įmonių susijungimus ir įsigijimus, kurie atsiranda tam tikrame ekonomikos plėtos etape (Levy ir Sarnat, 1994; Bobenic-Hintosova, 2009; Bruner, 2004; Martynova ir Rennebook, 2008; Lipton, 2006). Transformuojant įmonę galima pasiekti didesnį ekonominį potencialą konkurencingumo atžvilgiu, nei reinvestavus pajamas į vidinius įmonės pokyčius, naujų įmonių įstatymą, naujų pažangių technologijų įdiegimą ir pan. Ekonominis motyvas yra akivaizdžiai susietas su augančiomis rinkomis, kuriose pirkimų daugėja. Nors, jei ir negalima argumentuoti paaiškinti/nustatyti susijungimų ir įsigijimo masiškumo laiko (Brealey, Myers ir Allen, 2006), tačiau galima daryti prielaidą, kad yra tam tikra priklausomybė tarp ekonominio ciklo ir įvykių rinkoje. Mūsų ankstesni empiriniai tyrimai įrodė (Sedlacek, Hyblova, Křižova, 2011; Sedlacek, 2010), kad Čekijos rinka M&A elgiasi panašiai kaip rinkos išsivysčiusiose šalyse (Allen, Overly, 2011). Jeigu makroekonominiai rodikliai teigiamai veikia įmonės efektyvumo augimą, o ekonomikos augimo tempo lėtėjimas veikia verslą negatyviai, tai logiška, kad tarp jų turėtų egzistuoti ryšys (Zilinskė, 2010; Kocmanova, Šimberova, 2011; Kraftova, Mateja ir Prasilova, 2011). Pasitikėjimo verslu mažėjimas, kapitalo investicijų, importo paklausos mažėjimas, finansų rinkų nuosmukis ir didelės nuolaidos atspindi veiklos M&A rinkoje mažėjimą. Tačiau kita vertus, nuvertintos finansinės rinkos tampa patraukliu investicijų ir verslo plėtos galimybe. Šiame straipsnyje norima sutelkti dėmesį į sujungiamų bendrovių elgseną išsiaiškinant/įvertinant susijungimų laiko pasirinkimą, turto ir nuosavybės struktūros transformacijas Čekijos teritorijoje. Tyrimų rezultatus palyginsime su paskelbtomis studijomis, kurios pateikia netolygų sujungimų paskirstymą per finansinius metus ir mokestinį laikotarpį. Tyrimuose tikimasi susijungusių įmonių reikšmingesnio veikimo ir mažesnių įmonių išnykimo. Reikšmingesne įmone yra laikoma stambesnė įmonė.

Tyrimo buvo nagrinėjami pagrindiniai dokumentai, kuriuose atsispindėjo visi, nuo 2001 iki 2010 m šalyje vykę sujungimai. Buvo naudotasi finansinių ataskaitų duomenimis, saugomais elektronine forma *Įmonių registre* (2011). Duomenų bazėje yra saugomi jungiamų bendrovių identifikaciniai duomenys, taip pat laiko, teisinė ir ekonominė informacija. Pagrindiniuose dokumentuose teoriškai nustatyti sujungimai atitinka prekybinės teisės dokumentų reikalavimus. Sujungimų plėtra Čekijos rinkoje buvo vertinama pagal užbaigtų procedūrų kiekį 2001-2010 m. ir dalyvaujančių įmonių aktyvų vertę. Įmonių skirstymui pagal dydį buvo naudojamos keturios kategorijos remiantis ES kriterijais (*European Commission*, 2005). Pagal pasirinktą metodiką pirmiausia buvo analizuojamas sujungimų laikas per finansinius metus. Buvo manoma, kad daugiausia susijungimų vyksta finansinių metų ciklo pradžioje. Grafinė keturių laiko eilučių analizė rodo, kad didžiausias judėjimas sujungimų srityje numatytas naujų finansinių metų ir mokestinio

laikotarpio pradžioje, nepriklausomai nuo įmonės kategorijos dydžio. Tokiu būdu įmonėms nebūtina atlikti neeilinės veiklos ataskaitų susijungimo dieną ir nereikia rengti neeilinių finansinės atskaitomybės dokumentų (Mukherjee, Kiyamaz ir Baker, 2003). Polinominė regresinė analizė rodo rinkoje sujungimų daugėjimą iki finansinės ir ekonominės krizės pradžios. Taigi pirmoji hipotezė, vertinant sujungimo laiko pasirinkimą per visus metus, pasitvirtino.

Dominuojantį vaidmenį sujungiamo turto atžvilgiu viso laikotarpio metu turėjo stambiosios įmonės, nors palyginus operacijų skaičių, jų realizuota buvo mažiau nei kitose kategorijose. Neigiamas krizės poveikis yra akivaizdus ir vertinant sujungiamų bendrovių aktyvų apimtį. Lyginant atskirų kategorijų dydžių įmonių raidą, galime pastebėti atitiktį su 2009 m. rugpjūčio mėn. empirinės studijos Weitzel ir McCarthy išvadamis: mažų ir vidutinių įmonių sujungimų stebimu laikotarpiu pagausėjimą. Antroje hipotezėje teigiama, kad svarbesne bendrove yra stambesnė bendrovė. Tam išsiaiškinti buvo surinkti duomenys ir suskirstyti į dvi grupes. Jie buvo stebimi, fiksuojamas jų sujungimų kiekis per nurodytą laikotarpį. Pirmajai grupei priskirti surinkti duomenys atspindėjo tuos sujungimus, kuriuose svarbesne (perimančia) bendrove yra stambesnė bendrovė, nei ta, kuri išnyksta. Antrajai grupei priskirti surinkti duomenys atskleidžia tuos sujungimus, kuriuose išnykstančia bendrove yra stambesnė bendrovė. Šiam, abiejų eilučių palyginimui pasirenkama konkreti regresinė funkcija, tinkama dviejų kintamųjų priklausomybei apibūdinti. Logaritminės regresijos funkcijų eiga patvirtino didesnį sujungimų aktyvumą tose perimančiose įmonėse, kurios yra stambesnės nei tos, kurios išnyksta.

Antrosios hipotezės patikrinimui grafinė analizė buvo papildyta perimančios bendrovės ir išnykstančios bendrovės santykio stebėjimu, vertinant dalyvaujančių bendrovių turto dydį. Kaip teigiamas yra nurodomas ryšys, kai bendras perimančios bendrovės (A_S) turtas yra didesnis už išnykstančios bendrovės (A_D) turtą. Šiuo atveju buvo patvirtintas antrosios hipotezės galiojimas, nes regresinė tiesė, rodanti perimančios bendrovės turtą buvo gerokai aukštesnė už išnykstančios bendrovės bendrąjį turtą. Dėl tikslumo buvo palyginama situacija, kai susidaro neigiamas santykis dėl nelygumo $A_S < A_D$. Regresinė funkcija vėl rodo augimą visose trijose kreivėse, kai sujungiamų bendrovių turtas buvo didžiausias būtent 2006 m., t. y. metus prieš finansinės krizės pradžią.

Remiantis empiriniais duomenimis, įrodytas teigiamas santykis tarp perimančios bendrovės dydžio ir visų išnykstančių bendrovių, tiek realizuotų operacijų atžvilgiu, tiek ir sujungiamo turto atžvilgiu. Perimančios bendrovės turto vertė, esant pozityviems santykiams, net kelis kartus viršijo visų išnykstančių bendrovių turtą. Atsižvelgiant į sujungimo apibūdinimą, galime daryti išvadą, kad didesnė reikšmė sujungimo proceso metu atitenka bendrovei, kuri turi didesnį turtą. Daugiau nei 70 % bendrovių, sujungimo įsigaliojimo dieną pasirinko būtent naujų finansinių metų ir mokesstinio laikotarpio pradžią. Tai sumažino sujungimo procedūros administracijos našumą ir su tuo susijusias išlaidas.

Raktažodžiai: *bendrovės transformacija, sujungimas ir įsigijimas, perimanti bendrovė, išnykstanti bendrovė, makroekonominė aplinka, regresinė ir koreliacinė analizė.*

The article has been reviewed.

Received in April, 2013; accepted in April, 2014.