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The Evaluation of Impact of Mergers on the Market Economic Activity: The Case of Lithuanian Telecommunication Sector

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## The Evaluation of Impact of Mergers on the Market Economic Activity: The Case of Lithuanian Telecommunication Sector

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## Abstract

This paper focuses on the merger and acquisitions valuation, the research aims to evaluate it's impact on the market economic activity. The research problem lays upon inconsistent valuation methodology of different economic subjects in these processes and the calibration of complex valuation methodology. Many researchers approach the evaluation of impact on the economic activity only by narrowing the valuation object by the firm, market or competitors, consumer and state. The aim of this paper is to show that mergers and acquisitions should not be evaluated from only one point of view because while one perspective gives a positive economic effect on the economic activity, the other perspective could show a negative effect. A valuation from only one perspective could result in a misleading understanding of mergers and acquisitions processes in the market economic activity. Therefore a valuation towards mergers and acquisitions should be constructed from separate valuations angles in the economic system. A practical case study with a designed research model is carried out to show the outcomes of the process by the different participants (firm; market and competitors; consumers; government) of the economic system. The method is constructed of financial valuation tools, economic indicators, forecast methods and mathematical-statistical calculations. This paper has shown that only a case study analysis could identify the real effect of mergers and acquisitions to the economic activity. Also, the paper suggests that there is a difference between national governments and European Union governance of these processes, therefore a member of the union should comply with these guidelines and even transpose them into national law.

**KEYWORDS:** mergers and acquisitions, ex-post analysis, economic activity and valuation, synergy, market, competition.

## Introduction



European Integration Studies No. 12 / 2018 pp. 64-76 DOI 10.5755/j01.eis.0.12.21731 The evaluation of mergers and acquisitions in today's economy became an increasingly important subject in today's economy. First of all empirical findings by Čiegis and Adriuškevičius (2016) suggest that economic cycles correlate with mergers and acquisitions transaction values. Plus Jensen (2010) states that these transactions are a proof of powerful economic forces of these processes, he also explains that not all of them are productive. The economic theory clearly shows signs that these processes lead to uncompetitive market and price changes (Farrell and Shapiro, 2010). The process of these strategic alliances has increased exponentially due to several reasons: from one point the national markets have become more open, also the regional monopolies markets have been transformed into international oligopolies, plus the technological advance and productivity have increased from additional value created from mergers and

acquisitions (Warf, 2003; Park, Yang, Nam and Ha, 2002; Stephen and Gantumur, 2011). Besides, the net value of foreign direct investments increases from mergers and acquisitions according to Nocke and Yeaple (2006), moreover, Jensen (2010) states that the companies involved in M&A activity are more attractive to the investors. The firms more often use these strategic alliances in order to acquire additional synergetic value from combined resources, new strategic position, market extension possibilities. Nevertheless, there is the other angle of these processes like market disruption and completion decrease factors, those according to Hsieh and Lin (2016) have a negative impact on the market. Also from the point of sustaining the effective market for goods and services, we can see that today's society is orientated to the consumption and the wellness of the society highly depends upon effective consumption. Some practical evidence suggests the negative impact to effective consumption and even to the quality (A. Krishnan and H. Krishnan, 2001; Steven, Yazdi, and Dresner, 2016). Therefore, many kinds of research have been made in the evaluation of mergers and acquisitions in the different scopes: from an enterprise view, from the market and concurrent view, from customer gains or losses, from government position. As an example Farrell and Shapiro (2010) analyses these processes only from the product market point in the change of market structure and price. European Commission in the light of this topic (2018) examines all mergers outside the boundaries of the national market and approves them only if a clear determination is made that merger has no potential harm to effective competition, the merger control in the national market boundaries are left independent to the local competition authorities. Taking into consideration that impact valuation on economic activity lays upon the valuation of several different economic objects it is reasonable to assume that additional valuation methodological approach is needed in order to evaluate the total impact of mergers and acquisitions. The problem of this paper lays on the combination of identification of possible economic activity objects on the market activity and in the adjusted complex valuation model creation which can evaluate the impact from different perspectives of subjects in the economic system. Therefore a unique valuation model has been designed and applied in the practical case study of Lithuanian telecommunication sector.

The concept of merger lays upon in the identification of the impact on different economic objects those are affected during the process. Therefore a theoretical analysis is performed from the separate analysis objects: firm; market and competitors, customers and state. On the side of the firm we can analyze the firm benefits, which can be listed as (Levišauskaitė and Stravinskaitė, 2006):

- 1. Technological advance a bigger entity is capable to reach greater results in innovations and technology.
- 2. New and effective finance source measure a situation where a company covered in losses is acquired by other company, where the acquirer becomes a capital source.
- 3. Optimization of taxes the acquisition or the merger can be treated as the investment and therefore the firm could pay fewer taxes.
- 4. Diversification of risk -the risk is shared and the bigger entity has fewer chances to bankrupt.
- 5. The acquisition of undervalued company in the process of acquisition undervalued company with a capability of rapid growth could rapidly increase the acquirer's value.
- 6. Company growth additional growth by using both companies resources.
- 7. Synergy effect additional value obtained from the merger process.

Having a discussion about the first benefit of the firm from merger and acquisition, we could always use the concept of the economies of scale that a bigger entity is always capable to reach The concept of mergers and impact on the economy

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greater goals. Also, Mester and Hughes (2008) support this concept, by their research in which they conducted that the mergers in the banking sector had an impact of the development of new technologies on the banking services. Besides Koskinen and Vanharanta (2002) explains that bigger entities with more employees could reach better results in the development of new technology and even do it cheaper. By looking at the second benefit we can clearly see a conditional case of this benefit and it works only when the conditions for the case are met. The third benefit to the firm is followed by the main business function – making a profit. Devos, Kadapakkam and Krishshmanmurthy (2009) agree with this line taking into consideration that mergers not only increase the value of the company but also helps to optimize tax obligations. Risk diversification benefit is an object of discussion because the acquisition and merger process is followed by the risk of the process which can be unsuccessful due to numbers of internal and external reasons which is stated by Cartwright and Schoenberg (2006). However, Lileikiene and Kovalčik (2014) in their case analysis of AB 'Šiaulių bankas' has found that liquidity risk decreases, also they give a clear statement that the risk aspect depends on the proportion of assets and obligations in the company. Vallascas and Hagendorff (2010) agree with this thought but gives an additional opinion on the risk increase due to the weak strategical management of the company. Besides Mukherjee, Kiymaz and Baker (2005) in their research of mergers and acquisitions motives explains that risk diversification is one of the most important motives because all companies seek to maintain stable income during recessions and the strategic alliance processes help fulfil this purpose. The fifth benefit of the acquisition of the undervalued company is connected to a condition that if the acguired company is undervalued the acquirer could receive an additional benefit from the process. The sixth motive for the firm is the growth effect, taking in consideration that a bigger company will grow more rapidly. Čiegis and Adriuškevičius (2016) identify this motive as the foundation of the mergers and acquisitions topic and explains it through the new entries to regional and global markets. Birkishaw, Bresman and Hakason (2000) give another opinion towards growth from new market and sector control perspectives. The most important reason for firms to initiate the process of merger or acquisition is synergy, which can be explained as additional value from the process, even though Catwright and Schoenberg (2006) claim that synergy is not always positive and highly depends on the management of the process. Sarrazin and West (2011) explain the synergy motive through the simple mathematical logic in which these processes are being optimized:

- 1. Lower IT infrastructure costs.
- 2. Optimization of functions, financial benefits from personnel costs.
- 3. Lower logistics costs.
- 4. Higher income from the larger assortment.
- 5. Optimization of administration costs.
- 6. Lower costs for finance sources.

From this point, we can see that synergy is truly the most important motive and the benefit to the firm that comes from the merger or acquisition process. Also, the synergy effect could be struck down into two points, there one point is followed by the cost optimization from synergy which helps to accomplish greater financial results. The other point is that the bigger assortment helps to expand the market share on the basis of increased revenue.

Impact on the market and impact on a competitor could be constructed from the table 1 area where the types of mergers are listed, depending on the merger type the market and competitor are affected more or less (for example the most harmful mergers to the effective market and

Company Mergers	Definition and the impact on the market A merger between firms that are involved in totally unrelated business activities. There are two types of conglomerate mergers: pure and mixed. Pure conglomerate mergers involve firms with nothing in common, while mixed conglomerate mergers involve firms that are looking for product extensions or market extensions.					
Conglomerate						
Horizontal	A merger occurring between companies in the same industry. A horizontal merger is a business consolidation that occurs between firms who operate in the same space, often as competitors offering the same good or service. Horizontal mergers are common in industries with fewer firms, as competition tends to be higher and the synergies and potential gains in market share are much greater for merging firms in such an industry.					
Vertical	A merger between two companies producing different goods or services for one specific finished product. A vertical merger occurs when two or more firms, operating at different levels within an industry's supply chain, merge operations. Most often the logic behind the merger is to increase synergies created by merging firms that would be more efficient operating as one.					
Market Extension	A market extension merger takes place between two companies that deal in the same products but in separate markets. The main purpose of the market extension merger is to make sure that the merging companies can get access to a bigger market and that ensures a bigger client base.					
Product Extension	A product extension merger takes place between two business organizations that deal in products that are related to each other and operate in the same market. The product extension merger allows the merging companies to group together their products and get access to a bigger set of consumers. This ensures that they earn higher profits.					

Source: Minority Business Development Agency U.S. Department of Commerce (2012).

competitor are horizontal). As stated by Prager (1992) horizontal mergers have a direct impact on competitors, a new entity created by the merger has a new strategic position and expands from the competitor's part. Gugler and Meuller (2002) state that there are two types of outcome and it depends on the new entities behavior if a new entity raise the price competitors will do the same and the profit will rise, the market structure will not change (the consumers will have the losses in this case) but if a new entity gets additional resources from the synergy and lowers the prices then the expansion comes from the competitors share of the market. Keeping a discussion in the field of impact on competitors according to Hsieh and Lin (2016) the effect of concentration change to competitors is clearly negative. Also, there is the acquisition process in the markets and alike merger there are three types of mergers horizontal, vertical and conglomerate, where horizontal and vertical acquisitions are focused on the market expansion and only the conglomerate acquisition aims to diversification of risk and does not focus on the increase of competition (Pearce and Robinson, 2013). The competitors' view of the merger and acquisition process is pretty clear and has only a negative effect, even though there are certain types of mergers and acquisition that do not have a direct impact on competition, the competitors could be touched indirectly as in value chain link by vertical merger or by the product extension or market extension mergers. The only type of merger or acquisition is conglomerate, that hasn't any impact on competition directly or indirectly, however, the future of conglomerate is held unclear because there is a high probability that in the future these companies could try to expand the market by acquiring or merging with some competitors.

## Table 1

Merger types and impact in the market

The point of the customer can be explained by the wellness of consumption, if the customer after a merger or acquisition has to pay more or receives less goods and services, then the losses occurs in his point of perspective. According to Mishra and Kumar (2011) mergers and acquisitions in India's sectors that are orientated to the export do not make harm to the customer, in fact, they can rapidly expand the growth in the economy and also innovations, however, the sectors orientated to import results as the customer losses. However, there is still uncertainty if the mergers and acquisitions orientated to export do not really harm the foreign markets, therefore Novickyte and Šileika (2010) in relation with mergers and acquisitions give a conditional statement according to which if mergers and acquisition lead to scale of economy and synergy, customer wellness goes up because price goes down due to these effects, but if the process were constructed to obtain a dominant position in the market price goes up and customer gains losses. Giving a consideration that the mergers and acquisitions commonly occur in oligopoly market structure, that is stated by Ginevičius and Kvirka (2009) is the most inefficient market on the customer's position, the mergers and acquisitions commonly will result in customer losses. Moreover, Steven, Yazdi, and Dresner (2016) widen this area of customer losses by giving the consideration that losses could occur not only from the price but also from the guality of goods and services which are provided to the customer.

The fourth object of mergers and acquisitions is the impact on the state. According to the European Commission (2018), the mergers and acquisitions are held positive if it leads to the effectiveness and innovations aside with technological development. However, Salleh, Mahmood, Sufian, Othman, Yaacob, Nai (2016) in their research have found that the smaller entities are capable to reach better technological advance results, which gives us an uncertainty whether the mergers and acquisitions gives a positive effect in this case. On the other hand, Stephen and Gantumur (2011) have found a positive relationship between mergers and acquisitions in the research and development field. Nocke and Yeaple (2006) expand the positive effect on the government by stating that mergers and acquisitions increase foreign direct investments. However, we also have to remember tax optimization benefit to the firm which occurs in the acquisitions and mergers processes (Devos, Kadapakkam and Krishshmanmurthy, 2009), that in the government case is a negative effect because fewer taxes will be collected to the budget.

# The research methodology

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The research methodology can be divided into two valuation parts: the valuation of forecast and fact difference and the valuation of ex-post analysis. The forecast valuation is a method proposed by Devos, Kadapakkam and Krishshmanmurthy (2009), where at the firm level they measure the impact of a merger by forecasting the situation for non-merged companies' and merged companies' fact, the difference between fact and forecast values is the synergy of the process. The authors have taken the forecast modelling method and applied it to other economic objects as well, these statement of simulation projection is also approved by the European Union methodology of M&A valuation (Official Journal of the European Union, 2008/C 265/07) and also by Farrell and Shapiro (2010). However, there are certain indicators that in the process those cannot be forecasted and one of them is Mester's and Hughes's (2008) technological advance and innovations indicator and the other is Steven's, Yazdi's, and Dresner's (2016) service quality indicator. There are two forecast methods those are being used in this model: the moving average method (proposed by C.-Y. Chen, Lee, Kuo, C.-W. Chen, K.-H. Chen, 2010) and the linear trend method (proposed by Gudaitis and Žagūnytė, 2013), both methods allow to make accurate forecasts in the short term periods.

- The firm valuation is constructed from FCFF forecast we use Hoover's (2006) methodology to forecast the firm's financial indicators (which are needed in order to calculate FCFF for the firm):
- \_ COGS (cost of goods and services), depreciation, other administration costs  $\rightarrow$  percentage of forecasted revenue;
- \_ Gross profit  $\rightarrow$  revenue COGS depreciation other administration costs;
- \_ Interest  $\rightarrow$  percentages of liabilities growth;
- \_ Equity, long-term debts, long-term assets, other financial variables  $\rightarrow$  additional historical assessment is needed if the dynamic in history changes significantly forecast from revenues is not accurate and the indicators should be forecasted separately.

For the market and the competitors' valuation part Hsieh's and Lin's (2016) proposed HHI index is used to determine whether the merger had an impact on market structure changes, also Cerasi, Chizzolini, Ivaldi (2009) proposed GINI index is used to determine whether the merger had an impact on revenue distribution inequality between the competitors. Plus, the sales revenue has been taken as an additional indicator in order to be able to identify if HHI or GINI have changed from merger impact or it was affected by competitors and merger had no relation with the changes of these indicators. (3) In the case of customer impact valuation, we use A. Krishnan and H. Krishnan (2001) proposed average changes in guantity and prices, those are calculated as the mathematical deltas. However, as we noticed previously customer gains losses in form of quality also, to evaluate this part we added service quality indicator and according to Steven, Yazdi, and Dresner (2016) we will measure this service quality change in relation with HHI change (the relation between concentration level in the market and the guality level show the negative/ positive impact on the customer). (4) The state valuation part in form of taxes is taken from the (1) part of firms valuation, where we measure the difference of paid taxes those according to the projection of non-merged companies' had to be paid and the fact of merged companies that was paid to the budget. Secondly the Mester's and Hughes's (2008) technological advance and innovations point is evaluated by ex-post change to see if the merger had any impact on this field. Finally, we evaluate the Nocke's and Yeaple's (2006) investment point by forecasting the sector's investments and evaluating the positive/negative impact from the difference between the fact and forecast. Gradually, authors perceive the concept of economic activity as a polynomial system of supply and demand which distributes the goods and services by interactions with various objects in the market and the conception of this economic activity is characterized by the financial. economic indicators listed above in the sections (1)-(4).

After applying all the steps in the research methodology we can generalize it all into one research model of merger and acquisition valuation (see figure 1).

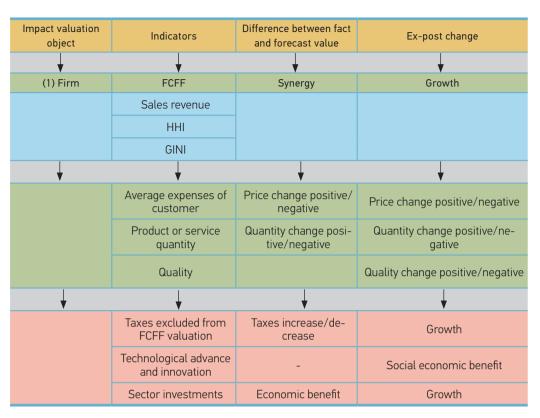
## A case study analysis of Lithuanian telecommunication merger using Merger and Acquisition valuation model

A merger between two telecommunication giants in Lithuania market was announced in 2015 and happened in 2016 III quarter. Before the merger AB 'Teo' was dominant in the 6 of 8 telecommunication markets in Lithuania (internet, fixed phone connection, etc.) and AB 'Omnitel' was a mobile connection service operator, both companies there fully controlled by 'Telia Sonera' Swedish capital telecommunication giant. 'Omnitel' was acquired in 2003 with a condition that it will never be merged with 'Teo' and they will be maintained as separate business objects. However, Competition Council of Lithuania Republic according to the decree No. 1S-122/2015 refused to open an investigation of this merger case and even refused to maintain their decision announced in 2003.



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Source: constructed by the authors.

**1 The evaluation of firm.** Firstly we take the macroeconomic environment forecast (GDP and inflation), depending on this forecast we evaluate possible firms growth and by using historical data from corporate reports we forecast balance and income statement for AB 'Teo" and AB "Omnitel" for 2016 and 2017 as if the merger did not occur in the market, and calculate FCFF using the financial valuation methods. Then we take the data from the reports of AB 'Telia' for 2016 and 2017 and calculate the difference between consolidated firms' forecasts and the merged firm's fact, the change is the effect of the merger.

The results listed in the table show that merger for the firm created a positive effect in three cases: first – the synergy in income, second – the benefits from fewer profit tax payments and finally – the asset turnover rate has increased which means that the new entity uses the assets more efficiently. For FCFF our main indicator we can see that the effect for the first two years in total is negative, however we have to look up into Investment in Working Capital line (which is marked by yellow) there the possible calculation error might occur due to use of external data (the authors were unable to eliminate merger investment from investment in Working Capital). On the other hand, Catwright and Schoenberg (2006) state that the synergy often is negative in the short-term period.

2 The evaluation of the market and the competitors. First, we examine the revenue data and changes, then calculate the HHI and GINI indexes (where GINI shows total revenue distribution inequality between firms). Upon this evaluation there was public data structure changes and B2B sector data for the mobile phone, fixed telephone and internet connection services are no longer available. The change in data structure does not allow to apply the forecast according to historical data, and we could only look into the ex-post change. In the valuation of the sales

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the	no		AB 'Omnitel' +AB 'TEO'		AB 'Telia Lietuva'		Merger effect	
Effect on the	equation	Indicator	Forecast		Fact			
Eff			2016 FR	2017 FR	2016 F	2017 F	2016	2017
EBIT	=	Sales (Profit and losses statement)	346 735	350 549	345 906	370 123	-829	19 574
	-	OPEX (Profit and losses statement)	-237 985	-239 051	-234 526	-247 932	3 459	-8 881
	-	Depriciation (Cash flow statement)	-60 510	-62 296	-63 233	-67 044	-2 723	-4 748
	+	Other operating income (Profit and losses statement)	4 062	4 108	1 415	1 949	-2 647	-2 159
	-	Other operating expenses (Profit and losses statement)	-945	-960	-2 485	-2 405	-1 540	-1 445
	+	Interest (Cash flow statement)	303	306	1 961	2 310	1 658	2 004
	+	Profit tax (Profit and losses state- ment) Eur	5 026	5 111	5 583	2 913	557	-2 198
	=	EBIT	56 686	57 767	54 621	59 914	-2 065	2 147
		Net profit	51 357	52 351	47 077	54 691	-4 280	2 340
		Profit tax, %	17,60%	17,60%	11,86%	54 691	-5,7%	-12,3%
		Net profit margin	14,8%	14,9%	13,6%	14,8%	-1,2%	-0,2%
		Asset turnover	0,45	0,46	0,59	0,65	0,14	0,19
ECFF		Net profit	51 357	52 351	47 077	54 691	-4 280	2 340
	+	Interest expenses*(1-T)	274	276	1 728	2 187	1 454	1 910
	+	Depriciation	60 510	62 296	63 233	67 044	2 723	4 748
	-	Investments in the long term assets	-62 551	-63 937	-41 976	-65 102	20 575	-1 165
	-	Investments in Working Capital	-6 339	-11 517	-40 912	-8 662	-34 574	2 855
		Net Working Capital	51 878	63 396	48 933	57 595	-2 945	-5 801
	=	FCFF	43 253	63 396	29 150	50 158	-14 102	10 689

## Table 2

The merger of AB 'Telia Lietuva' firm valuation

Source: evaluated by the author using financial reports of AB 'Teo', AB 'Omnitel' and AB Telia Lietuva' (2011-2017).

revenue where was a slightly positive change for the AB 'Telia Lietuva', however, the results in revenue showed that the merger had not given a greater position to the AB 'Telia Lietuva'. On the other hand GINI and HHI coefficient analysis has shown that internet connection services have changed significantly and this occurred after a merger.

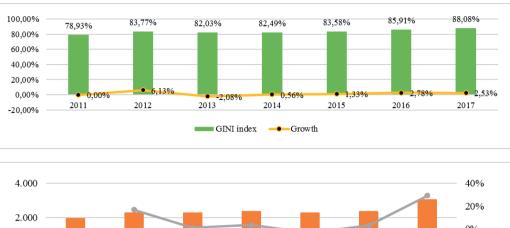
Taking a look into data from figure 3, we can see that the market structure has changed significantly after a merger, the distribution of revenue between the firms in the sector has also risen. Keeping in mind that AB 'Telia Lietuva' sales revenue had a slight change after the merger we can say that the change in the revenue distribution was made from a more aggressive concurrent position in the market, which implies a possibility of smaller companies' losses.

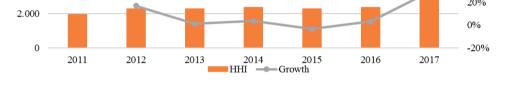
**3** The evaluation of the customer. First, we evaluate the changes in quantity and the changes in expenses for services. The changes in all sectors have not shown significant impact



## Figure 2

Internet service providers market concentration of Lithuania 2011-2017

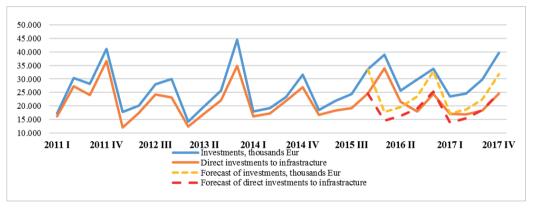


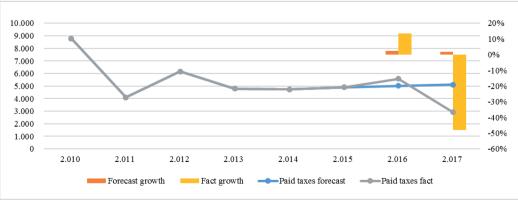


Source: evaluated by the authors using data from the Communications Regulatory Authority department of Lithuania Republic.

## Figure 3

Impact on AB 'Telia Lietuva' paid taxes and investments in communication sector 2011-2017





Source: evaluated and calculated by the authors with data from financial reports of AB 'Teo', AB 'Omnitel' and AB 'Telia Lietuva' (2011-2017) and the data from Communications Regulatory Authority department of Lithuania Republic.



from the merger on the market for the customer. Also, the data availability was only from 2015, therefore forecast element was not applied in this valuation section. The service quality indicator also has not been evaluated due to data availability. Therefore the customer valuation section is incomplete in this particular case analysis of AB 'Telia Lietuva' merger.

**The valuation of the state.** The valuation begins with the identification of the effects which we can evaluate, as for technological advances and innovations we cannot predict this indicator, therefore we are not capable to give a forecast analysis on it. In the case of 'Telia Lietuva' there was no additional value from technological advances or innovations in the merger process. Secondly, we evaluate the taxes and investments on the basis of the forecast method and evaluate the difference between the fact-value 2016 and 2017.

As we can see in figure 3 the state receive positive impact from 'Telia Lietuva' merger in a higher level of investments, on the other hand, there is a negative impact as the fewer taxes are paid to the budget. In this case, we have a zero effect and the government should consider what is more efficient allow discounts for taxes in exchange of investments from the private sector, or maintain tax collection level and do it by public investments.

The analysis of merger and acquisition processes theoretical side has shown that this process creates a great value from the firm perspective. However, in the market perspective, this process is harmful because it changes the market structure and competitor's position, the similar negative effect is delivered to the customer. Although, we have always to look at the cause of merger or acquisition because if the process is caused by aiming to efficiency, bigger assortment, technological innovations, research and development, this process is less harmful to the customers and competitors, and is positive to the economy. The government basis is constructed by the loss of taxes and the gains from technology and investments. Only a case study analysis could show the real effect of the merger. Therefore, a unique analysis tool is created which can be applied as a universal method for valuation of mergers and acquisitions cases. Practical research model application to 'Telia Lietuva' case has shown that a firm receives positive effect from the synergy of revenue, the market was affected negatively by the concentration change, the consumer basis was incompletely evaluated due to data availability (the analysis made with available data has not shown any significant damage to the customer). The state basis received a zero effect because as the government received losses from fewer taxes, it also receives positive effect from investment. The practical application of the mergers and acquisition valuation model also has shown its vulnerability to data availability. This case has also shown the inconsistency of Lithuania competition policy, because firstly 'Omnitel' was acquired only with a condition that it would not be merged with 'Teo' into one entity that after 13 years anyway happened. According to the Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings (Official Journal of the European Union, 2008/C 265/07) a case of 'Telia' merger was not compliant with these guidelines:

- \_ 'Non-horizontal mergers pose no threats to effective competition unless the merged entity has a significant degree of market power' – before a merger company had dominant positions in the 6 of 8 electronic communication sectors of Lithuania, including in the internet service providers market where 'Teo' and 'Omnitel' were competitors before;
- \_ 'The Commission is unlikely to find concern in non-horizontal mergers, be it of a coordinated or of a non-coordinated nature, where the market share post-merger of the new entity in each of the markets concerned is below 30 % (3) and the post-merger HHI is below 2 000' – after a merger HHI rate was higher than 2 000 in the internet service providers market.

## Conclusions

Keeping in touch with the European Union corporate governance of mergers as national competition authority should have not allowed the companies to be merged into one entity. Lithuania is a member of the European Union and also a member of the common goods and service market, therefore it should follow these guidelines and transpose them into national law in order to maintain homogenous corporate governance policy.

## References

AB 'Omnitel' financial reports (2011; 2013; 2015). Source: Register center, VĮ Kaunas department. AB 'Teo' and AB "Telia Lietuva (2010-2017). Financial reports. Retrieved May 12, 2017, from http://www.nasdaqbaltic.com/market/?instrument=LT0000123911&list=2&currency=EUR&pg=details&tab=reports

Birkishaw, J. Bresman, H., Hakason, L. (2000). Managing the post-acquisition integration process: how the human integration and task integration processes interact to foster value creation. Journal of management studies, Volume37, Issue3, 395-425. http://onlinelibrary.wiley.com/doi/10.1111/1467-6486.00186/epdf

Cartwright, S., Schoenberg, R. (2006). 30 years of mergers and acquisitions research: recent advances and future opportunities. British Journal of Management, Volume 17 Issue S1, S1-S5. Retrieved from https://dspace.lib.cranfield.ac.uk/bitstream/ handle/1826/3570/Thirty\_Years\_of\_Mergers\_ and\_Acquisitions\_Research2006.pdf?sequence=1 https://doi.org/10.1111/j.1467-8551.2006.00475.x Cerasi, V. Chizzolini, B. Ivaldi, M. (2009). The im-

pact of mergers on the degree of competition in the banking industry. Presentations from the 16th CCRP workshop. Retrieved from https://www.city. ac.uk/\_\_data/assets/pdf\_file/0005/194792/Vittoria-Cerasi-Impact-of-Mergers.pdf

Chen, C.-Y. Lee, W. I. Kuo, H.-M. Chen, C.-W. Chen, K.-H (2010). The study of a forecasting sales model for fresh food. Expert Systems with Applications Volume 37, Issue 12, , 7696-7702 Retrieved from https://www.sciencedirect.com/science/article/ pii/S0957417410003726 https://doi.org/10.1016/j. eswa.2010.04.072

Čiegis, R. and Adriuškevičius, K. (2016). Interrelationship between M&A and development of national economies. Applied Economics: Systematic Research. Vol. 10 Issue 1, 85-106. Retrieved from http://web.b.ebscohost.com/ehost/pdfviewer/ pdfviewer?vid=0&sid=2b4d7b38-fd9c-41ba-8c2aa 4bb0b3a6932%40sessionmgr103

Competition Council of Lithuania Republic (2015). Decree No.: 1S-122/2015. Retrieved 11 May 2018, from https://www.kt.gov.lt/lt/dokumentai/delatsisakymo-pradeti-tyrima-del-lietuvos-respublikos-konkurencijos-tarybos-2003-m-gruodzio-11-d-nutarimo-nr-1s-140-del-leidimo-em-teliasonera-ab-em-vykdyti-koncentracija-per-dukterine-imone-em-amber-mobile-teleholding-abem-isigyjant-iki-90-proc-uab-omn

Devos, E. Kadapakkam, P. Krishshmanmurthy, S. (2009). How Do Mergers Create Value? A Comparison of Taxes, Market Power, and Efficiency Improvements as Explanations for Synergies. Oxford Journals, the Review of Financial Studies, Vol. 22, No. 3, 1179-1211. Retrieved from http://www.jstor.org/stable/pdf/30225689.pdf https://doi.org/10.1093/rfs/hhn019

European Commission (2018). Merger Control in the EU. Retrieved May 12, 2018, from http://ec.europa.eu/competition/consumers/merger\_control\_lt.html

European Commission (2018). Regulation if competition Retrieved May 12, 2018, from http://ec.europa.eu/competition/mergers/overview\_en.html

Farrell, J., Shapiro, C. (2010). Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition. The B.E. Journal of Theoretical Economics Policies and Perspectives, Volume 10, Issue 1, 2010 Article 9. Retrieved from http://faculty.haas.berkeley.edu/Shapiro/alternative.pdf

Ginevičius, R. Kvirka, A. (2009). Konkurencinės aplinkos oligopolinėje rinkoje daugiakriterinis vertinimas. Verslas: Teorija ir Praktika, Business: Theory and Practice, 10(4): 247–258. Retrieved from http:// web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=056cee40-0d8e-4e4d-85e0-8676d42bb-5f4%40sessionmgr101 https://doi.org/10.3846/1648-0627.2009.10.247-258

Gudaitis, T. Žagūnytė, U., (2013). Įmonių pelningumo vertinimo sistemos teoriniai aspektai. ISSN 2424-399X, 2013 Journal of Management, No. 2(23), 89. Retrieved from https://www.ltvk.lt/file/ zurnalai/Vadyba\_2013\_23.pdf#page=89

Gugler, K. Meuller, D.C. (2001).The effects of mergers: an international comparison. Discussion papers // WZB, Wissenschaftszentrum Berlin für Sozialforschung, Forschungsschwerpunkt Markt und Politische Ökonomie, No. FS IV 01-21. Retrieved from http://www.jostbraukmann.com/wp-content/uploads/2012/11/InternationalerVergleich Mergers.pdf

Hoover, A. S. (2006). Stock Valuation: An Essential Guide to Wall Street's Most Popular Valuation Models. New York & other: McGraw-Hill Library of Investment and Finance.

Hsieh, L. Lin, S. M. (2016). Exploring the market concentration and the market dominance of international tourist hotels in Taiwan. Journal of Statistics and Management Systems, ISSN: 0972-0510, 2169-0014. Retrieved from http://www.tandfonline.com/doi/pdf/10.1080/09720510.2015.110344 9?needAccess=true

Jensen, M. (2010). Active Investors, LBOs, and the Privatization of Bankruptcy. Journal of Applied Corporate Finance, Volume 22, Number 1, A Morgan Stanley publication. Retrieved from https:// onlinelibrary.wiley.com/doi/pdf/10.1111/j.1745-6622.2010.00263.x

Koskinen, K. Vanharanta, H. (2002). The role of tacit knowledge in innovation processes of small technology companies. International Journal of Production Economics Volume 80, Issue 1, 57–64. Retrieved from http://www.sciencedirect.com scence/article/pii/S0925527302002438

Krishnan A., Krishnan H., (2001). Effects of hospital mergers and acquisitions on prices. Journal of Business Research 56, 647 – 656. Retrieved from https://freescholar.yolasite.com/resources/Effects%20of%20hospital%20mergers%20and%20 acquisitions%20on%20prices.pdf https://doi. org/10.1016/S0148-2963(01)00309-5

Lxvišauskaitė, K. ir Stravinskaitė, G. (2006). Susijungimų ir įsigijimų tikslingumo ir galimybių tekstilės pramonėje analizė ir vertinimas. ISSN 1392-1142 Organizacijų vadyba: sisteminiai tyrimai. Retrieved from http://etalpykla.lituanistikadb.lt/fedora/get/LTLDB0001:J.04~2006~1367180059408/ DS.002.0.01. ARTI

Lileikienė, A. Kovalčik, A. (2014). Komercinių bankų veiklos riziką ribojančių normatyvų vykdymo analizė (AB Šiaulių Banko pavyzdžiu). Journal of Management (ISSN: 1648-7974) Issue: Volume 24, 77-93. Retrieved from Retrieved from http://www.ltvk. lt/file/zurnalai/Vadyba\_2014\_24.pdf

Mester, J. P. Hughes, L. J. (2008). Efficiency in Banking: Theory, Practice, and Evidence. FRB of Philadelphia Working Paper No. 08-1. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1092220 Minority Business Development Agency U.S. Department of Commerce (2012). Retrieved 24 March 2018 from https://www.mbda.gov/news/ blog/2012/04/5-types-company-mergers

Mishra, P. Kumar, P.V.K., (2011). Impact of Mergers and Acquisitions on Consumers' Welfare: Experience of Indian Manufacturing Sector. World Academy of Science, Engineering and Technology International Journal of Mechanical and Industrial Engineering Vol: 5, No: 8. Retrieved from http:// waset.org/publications/15468/impact-of-mergers-and-acquisitions-on-consumers-welfare-experience-of-indian-manufacturing-sector

Mukherjee, T.K. Kiymaz, H. Baker, H.K. (2005). Merger Motives and Target Valuation: A Survey of Evidence from CFOs. Journal of Applied Finance, Vol. 14, No. 2 Retrieved from https://papers.ssrn. com/sol3/papers.cfm?abstract\_id=670383

Nocke, V., Yeaple, S. (2006). Cross-border mergers and acquisitions vs. Greenfield foreign direct investment: The role of firm heterogeneity. Journal of International Economics, 72, 336–365 Retrieved from http://nocke.vwl.unimannheim.de/fileadmin/ user\_upload/nocke/papers/NockeYeaple1JournalOfInternationalEconomics-July2007.pdf https:// doi.org/10.1016/j.jinteco.2006.09.003

Novickytė, L. Šileika, T. (2010). Įmonių susiliejimų ir įsigijimų teoriniai ir praktiniai aspektai. Business, management and education, ISBN: 9789955287575. Retrieved from http://leidykla.vgtu.lt/conferences/ BME\_2010/001/pdf/Art-Novickyte-Sileika.pdf

Official Journal of the European Union (2008). Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2008/C 265/07). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008XC1018(03)&from=LT

Park, M.-C., Yang, D.-H., Nam, C. Ir Ha, Y.-W. (2002). Mergers and Acquisitions in the Telecommunications Industry: Myths and Reality. ETRI Journal, Volume 24, Number 1. Retrieved from http://onlinelibrary.wiley.com/doi/10.4218/etrij.02.0102.0106/pdf

Pearce, J. A., Robinson, R. B. (2013). Strategic management: Planning for domestic & global competition. Published by McGrow-Hill Education (Asia), printed in Singapore.

Prager, R. A, (1992). The Effects of Horizontal Mergers on Competition: The Case of the Northern Securities Company. The RAND Journal of Economics, Vol. 23, No., 123-133. Retrieved from https://www.



jstor.org/stable/pdf/2555436.pdf?refreqid=excelsior%3Ac8a6b23b283f7837be17ca745eb588ed

Salleh, W. A. Mahmood, W. M. W. Sufian, F. Othman, M. H. Yaacob, N. Nai, G. K. S. (2016). Efficiency of Telecommunication Companies in ASEAN: Corporate Mergers and Acquisitions. J. Appl. Environ. Biol. Sci., 6(1S) 1-6. Retrieved from https://www. researchgate.net/publication/311487488\_Efficie ncy\_of\_Telecommunication\_Companies\_in\_ASE-AN\_Corporate\_Mergers\_and\_Acquisitions

Sarrazin, H. West, A. (2011). Understanding the strategic value of IT in M&A. McKinsey & Company, Strategy & Corporate finance. Retrieved from https://www.mckinsey.com/business-functions/ strategy-and-corporate-finance/our-insights/understanding-the-strategic-value-of-it-in-m-and-38a

Stephen, A. Gantumur, T. (2011) Mergers & acquisitions and innovation performance in the telecommunications equipment industry. Industrial and Corporate Change, Volume 21, Issue 2, 277–314. Retrieved from https://academic.oup.com/icc/article-abstract/21/2/277/828467

Steven, A. B., Yazdi, A. A., Dresner, M. (2016). Mergers and service quality in the airline industry: A silver lining for air travelers? Transportation Research Part E: Logistics and Transportation Review, Volume 89, 1-13. Retrieved from https:// www.sciencedirect.com/science/article/pii/ S1366554515300697 https://doi.org/10.1016/j. tre.2016.02.005

Vallascas, F. Hagendorff, J. (2010). The Impact of European Bank Mergers on Bidder Default Risk. Journal of Banking & Finance 35 (4), 902-915. Retrieved from http://orca.cf.ac.uk/76285/1/MergerDefaultRisk.pdf https://doi.org/10.1016/j.jbankfin.2010.09.001

Warf, B. (2003). Mergers and Acquisitions in the Telecommunications Industry. Growth and ChangeVol. 34 No. 3, 321-344. Retrieved from http://onlinelibrary. wiley.com/doi/10.1111/1468-2257.00221/epdf

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