

# **Thesis Evaluation Report**

| Author:  | Bc. Chinara Akmatalieva                    |
|----------|--|
| Advisor: | doc. PhDr. Martin Gregor Ph.D.             |
| Title:   | Corporate Governance and M&A Effectiveness |
| Opponent | Jiří Novák                                 |

### Summary

The author studies the impact of (i) corporate board size, (ii) corporate board independence, and (iii) CEO tenure on the announcement returns of merger and acquisition (M&A) deals in Germany, Netherlands and Austria between 2010 and 2019. She concludes that out of the three considered measures only CEO tenure has a positive association with the M&A announcement returns.

#### Contribution

Overall, M&As are important corporate events that may have a significant impact on firm value. Unsurprisingly, extensive research exists in this area, which makes it challenging for any new study to add to our understanding of how M&As impact on firm value. In the Thesis, I do not find a strong motivation of how the study extends what we already know about M&As from prior research other than the use of a specific data sample.

I presume the Thesis' contribution would be greater if the author exploited changes in corporate governance regulation in Europe. This regulation may have been adopted in different European countries at different times, which would give some opportunities for the staggered-adoption difference-in-differences estimation of the impact of corporate governance quality on value created by M&A. Furthermore, the author could have exploited some corporate governance features that are specific for European countries, such as the substantial representation of employees on corporate boards. I presume that in M&A employees may have different agendas than simply maximizing firm value. Therefore, it could be interesting to investigate whether corporate boards with significant employee representation are associated with less value-creating M&As.

"In Europe, independence is based on the definition specified by the European Commission guidelines of 2005. It has a peculiarity of favoring stakeholders over independent members of the board. As an example, in 2000-2010, supervisory boards in Germany consist of employees (49%), other non-independent executive (24%), and truly independent members of the board (29%) favoring professional experience of management and stakeholder contribution over independent members (Block et al., 2016)."

#### Literature

On the one hand, I appreciate that the author reviews a large number of prior studies on M&As. On the other hand, I do not think that the literature review offers a sufficient synthesis of what we already know from prior research. The literature review makes an impression of being a collection of individual results documented in prior research. The author does not sufficiently highlight the interconnections between the individual studies and the conclusions we can draw from prior research. From the literature review it is not clear to me what remaining areas of controversy remain in the research area and how the author aims to help resolving some of these controversies.

I find some of the formulations rather problematic. For example, I would argue that one of the most fundamental questions in corporate governance research is to ascertain the extent to which firms maximize shareholder value and to examine what mechanisms can facilitate shareholder value maximization. I find it rather simplistic (if not incorrect) to argue that growth automatically maximizes shareholder value. Especially when some research shows that the managerial tendency to grow at the expense of profitability ("empire-building") may be one of the manifestations of the agency conflict between the managers and the owners.

"The businesses tend to maximize their value (Jensen and Meckling, 1976) organically by firm growth and radically through various type of mergers and acquisitions (Barkema and Schijven, 2008)." [...] As the previous studies reveal, there are several reasons explaining this growth strategy. The main motive is that acquiring firms strive higher performance (Sirower, 1997; Bergh, 2001)."

### Methodology

The author of fails to report the number of observations in her regression tables. However, if I understand correctly, the regressions are based on 41 observations described in table 3.1. Thus, I find it confusing that in the Abstract the author refers to 426 transactions. I would welcome more information on how the 426 transactions were reduced to 41 observations.

"In order to address, it collects 41 deals from 426 chosen transactions from the 1st of January 2010 to 31st of December 2019."

The author claims that her analysis involves Germany, Netherlands, and Austria. However, 36 out of 41 observations (88%) are based on Germany. Given that the bulk of the data sample is based on German M&As, I wonder how beneficial it is to include the few additional observations from the other two countries.

"We will focus on countries such as Germany, Netherlands, and Austria where firms have a mandatory or predominantly two-tier boards"

I would welcome a stronger motivation for the condition that the target company must also be located in Germany, Netherlands or Austria. Why not to include deals that involve target firms in other countries? If a German company obtains an Austrian company it is a cross-border M&A, is

not it? In contrast, restricting the location of the acquiring and target company to a given country may create selection problems because some countries are larger than others and therefore they contain more potential target companies.

"Both acquiring and target companies must be located in Germany, Netherlands or Austria. First of all, it is required to have only domestic deals because the selected companies act in compliance with local corporate legislature and regulations."

I would welcome a more detailed motivation of the first inclusion condition. If I understand correctly, on the announcement date investors do not know whether the announced translation will eventually be completed. This condition may thus introduce a look-ahead bias.

"The deal/transaction must be completed. Lots of companies announce a deal and only part of the announced M&A deals are finally completed because of different reasons."

I have a number of objections concerning the way the regressions are estimated. The author acknowledges that there may be an optimum in the number of directors on the board. Furthermore, the optimum may depend on firm characteristics. In such a setting it is problematic to assume a simple linear relationship between board size (X) and announcement returns (Y) because the predicted association is likely different for companies that are above or below their optimal board size. Furthermore, if the optimum varies with some company characteristics there might be important omitted correlated variables. One can formulate a similar argument regarding board independence.

"Eventually, most of studies have shown that an optimum board size has positive effect on a firm performance varying with firm characteristics. So, one might expect a general negative dependence of the larger boards' size on performance of an M&A deals. To conduct a linear regression analysis, it is necessary to introduce hypotheses confirming or refuting the impact of a board size on the effectiveness of M&A transactions."

I consider the CEO tenure measure problematic. First, I do not think that CEO tenure can be reasonably interpreted as a measure of corporate governance quality. Firms may decide to have larger or smaller boards. They can also have policies to appoint more or less of independent directors. However, firms can scarcely have a policy concerning CEO tenure. I consider CEO tenure a consequence of executive characteristics and realization of past events (e.g. the degree of success, his/her outside options, etc.) rather than a designed feature of corporate governance mechanisms. Second, CEO tenure is highly endogenous. Executives who are more successful in conducting M&As are likely to have longer tenures. This creates a risk for reverse causality (see below for further details).

I believe that the methodology section includes a number of technical details that are not quite essential to explicitly discuss. In contrast, it lacks more detailed discussion of the most fundamental methodology features and limitation. I would expect the author to discuss the assumptions that should be met for the event study methodology to work. For example, adjusting for risk is one of the challenges researchers encounter when measuring abnormal returns. How is this question handled in the study? Or why can it be ignored in this setting? I would also expect a more detailed discussion of how the results should be interpreted and how the interpretation depends on the degree of stock market efficiency.

In terms of specific method choices, I presume one of the key challenges in this kind of research is to identify correctly the M&A announcement dates. The author provides little guidance as to how the announcement dates are identified. This makes it difficult for the reader to evaluate how comprehensive the coverage is.

"The main dependent variable is 'M&A deal Performance' measured by the cumulative abnormal returns on the shares of the acquiring company."

Some formulations are incorrect. For example, event study returns represent changes in the firm's value as perceived by investors not changes in profits (these may occur only over longer time horizons). Changes in value may be due to changes in expected cash flows or profits but also due to changes in risk.

"Thus, the primary objective of the event study is to determine additional profits or losses of shareholders in relation to the event in which they are engaged."

On page 34, I find the discussion of the expected and realized returns confusing. Besides, the author should explain that the E(Ri,t) "the expected regular return" is proxied by realized returns.  $\beta i$  and Rm,t should be defined separately not as a product of two variables. On page 35, conventionally hats ("^") are used for estimated measures.

"While measuring the value of an abnormal return considering its essence, firstly, it is necessary to estimate the actual return, and afterwards the expected return should be calculated. It is comparatively easy to make calculation of the actual return than the expected one that might cause certain problems."

I find it peculiar that in the conclusion (p. 64) the author acknowledges the importance of considering measures such as the deal size or prior experience with M&A transactions but she does not include these as control variables in her regressions. I find the statement on page 39 concerning control variables highly controversial. If the author argues that the majority of researchers suggest that it is not necessary to include many control variables in regressions she should at least give examples of references of authors who actually makes a statement.

"The potential factors that might have influence on M&A deals performance could be size of a deal, experience of a company in M&A transactions, and post-deal performance to achieve long-term sustainability in business activity." (p. 64)

. . .

"However, majority of researchers presume that it is not necessary to include a large number of control variables in the regression equation." (p. 39)

The author should motivate why the proportion of independent directors is defined in four categories rather than a continuous variable. Especially when she refers to the "the board independence ratio" (rather than "category") in the abstract.

"Based on the results of the study, the optimum number of directors on the board, the board independence ratio and the length of the CEO's tenure have a positive relation to the effectiveness of mergers and acquisitions at the current level of corporate governance."

Given that CEO tenure can only be positive, is the measure log-transformed, i.e.  $\ln(\#ceo\_tenure\_years)$ ?

The author should motivate why she uses an asymmetric event window of -5 to 15 days. Is this based on some prior studies? M&A announcements are typically rather salient events and therefore I would expect them to be reflected in stock prices relatively quickly. If anything, I would expect the event window to go possibly deeper into the past rather than the future because some of these announcements may be anticipated by investors and therefore their effect may be partly reflected in stock prices even before the announcement is made.

"And the event window is taken as -5 to 15 days."

I would consider it better to show a histogram of CAR instead of Table 5.1.

In Table 5.2, in wonder how meaningful are the mean and the standard deviation for a categorical variable.

In Table 5.3, I wonder how insightful is to report descriptive statistics for individual years.

The author uses numerous fixed effects for years and acquirer groups. Given the sample size of 41, using these fixed effects greatly reduces the degrees of freedom.

In Table 5.4, values for the fixed effects are typically not tabulated.

In Table 5.4, it is not clear what measures are reported in the brackets below the regression coefficients. This information should be provided in table notes. Judging based on the asterisks denoting statistical significance of the CEO tenure results I presume these may be p-values. If so, statistical significance is not labeled consistently, e.g. a result with a p-value of 0.0023 is not for  $Board\_Independence\_Category\_1$  is not denoted as significant. If the numbers in the brackets are standard errors (SE) then the asterisks are not reported correctly either.

I find the significance of tabulated results to be at odds with the formulation in the abstract that seems to suggest that all three considered measures matter for M&A announcement returns. I consider the following formulation confusing (if not incorrect).

"Based on the results of the study, the optimum number of directors on the board, the board independence ratio and the length of the CEO's tenure have a positive relation to the effectiveness of mergers and acquisitions at the current level of corporate governance."

The only statistically significant result relates to the positive impact of CEO tenure on M&A announcement CAR. However, the direction of causality is highly questionable concerning this measure. CEOs who turn out to be successful in conducting M&A are likely to stay in the company longer than those who are not successful. Therefore, I do not think there is much we can learn in terms of corporate policy implications from this result.

"Hence, one could conclude that CEO tenure has a positive impact on M&A deal performance supporting the hypothesis 3."

#### **Form**

I do not think that all parts of the thesis conform well with academic style of writing. For example, I would advise against using bulleted text and lists.

I find it incorrect to state that research data "proves" anything, especially when the results are not statistically significant. In fact, research data do not "prove" anything even when the results are significant. The best we can hope for is that the results are "consistent" with an alternative hypothesis or they "fail to reject" the null hypothesis.

"Although the study does not show significant results, still the research data proves that more numbers of independent members on the board would lead to better M&A deal performance."

Some formulations do not add value for the reader and one can consider them trivial (see below for an example).

"The positive result of abnormal return on the deal is defined as being good whereas the negative market reaction can be identified as bad (Jensen, 2001)."

I also have objections on how the text is structured. Some sections are repetitive. For example, I find sections 5.6 and 5.7 repetitive and redundant. Descriptive statistics are typically not reported in the results section.

I do not think it is necessary to repeat the hypotheses and the literature motivating these hypotheses on page 55 and onwards.

I find the quality of academic English better in some places than others for example in the introduction. I believe that further language refinements would benefit the quality of the Thesis.

I believe the tables could be formatted in a neater fashion. They should also be accompanied with explanatory notes. The notes should provide a clear explanation of the measures that are reported in the brackets below regression coefficients.

### Conclusion

Overall, even though I have reservations about the innovativeness of the research question, as well as about how research is conducted and reported in the text, I believe that the Thesis meets the requirements for a Master's Thesis stipulated by the Faculty of Social Sciences, Charles University. I recommend the Thesis for an oral defense.

The results of the Turnitin analysis do not indicate significant text similarity with other sources. Some shorter sections of the Thesis coincide with texts from scientific articles and economic reports. These, however, represent factual statements that, if reformulated (as they should be), would not change the essence of the Thesis. Therefore, I do not consider these duplicities particularly problematic. Nevertheless, it would have been advisable for the author to make sure to always include corresponding references and, wherever applicable, to explicitly label relevant parts of text as quotations from other sources.

### Questions

I recommend the examination committee to consider asking the author the following questions:

- What original contribution does the Thesis make relative to prior research? What should firm managers or policy makers learn from the Thesis?
- To what extent is it fair to argue that CEO tenure is a proxy for the quality of a firm's corporate governance?
- Why did the author decide to include Austria and the Netherlands in the sample when they include only a few additional observations relative to Germany?
- How should statistical significance be evaluated from the reading of the tabulated regression results? Discuss the relationship between the (i) standard errors (SE), (ii) t-statistics, and (iii) p-values that may be reported as alternative measures to indicate the level of statistical significance.

#### Awarded Points and Grade

| Contribution (max 30)         | 22 |
|-------------------------------|----|
| Methods (max 30)              | 19 |
| Literature (max 20)           | 12 |
| Form (max 20)                 | 9  |
| Total (max 100)               | 62 |
| Grade (A – B – C – D – E – F) | D  |

| Referee's Signature |
|---------------------|
| <br>Jiří Novák      |
| Referee's Name      |

## **Grading Scale**

LITERATURE REVIEW: The thesis demonstrates author's full understanding and command of recent literature. The author quotes relevant literature in a proper way.

Strong Average Weak 20 10 0

**METHODS:** The tools used are relevant to the research question being investigated, and adequate to the author's level of studies. The thesis topic is comprehensively analyzed.

Strong Average Weak 30 15 0

**CONTRIBUTION:** The author presents original ideas on the topic demonstrating critical thinking and ability to draw conclusions based on the knowledge of relevant theory and empirics. There is a distinct value added of the thesis.

Strong Average Weak 30 15 0

**MANUSCRIPT FORM:** The thesis is well structured. The student uses appropriate language and style, including academic format for graphs and tables. The text effectively refers to graphs and tables and disposes with a complete bibliography.

Strong Average Weak 20 10 0

#### **OVERALL GRADING:**

| Total Points | Grade |
|--------------|-------|
| 91 – 100     | A     |
| 81 – 90      | В     |
| 71 - 80      | С     |
| 61 - 70      | D     |
| 51 – 60      | E     |
| 0 – 50       | F     |