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The Relationship Between Firm Diversification and Firm Performance: Empirical Evidence from Indonesia*

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Abstract

This extended study aims to analyze empirically the influence of firm diversification on firm performance moderated by the stages of the firm life cycle, which consists of introduction, growth, maturity, and decline. The target population of this study is the firms listed on the Indonesian Stock Exchange. The sampling method uses purposive sampling in the multi-business firm in Indonesia; it includes as many as 127 firms over the period from 2011 to 2017, totaling 889 firm-year observations. The firm performance is measured using a return of equity while the level of firm diversification with the minimum number of two operating segments is proxied by the Herfindahl index. The analysis method used in this study is the estimator model of the Generalized Method of Moment (GMM). The main findings show that the firm life cycle at the stage of growth and maturity significantly strengthens the influence of firm diversification on firm performance. On the other hand, the stage of decline fails to moderate the relationship between firm diversification and firm performance. This study discusses the implications and contributions of the findings theoretically, and provide some policy justifications for potential investors before they invest their money in the capital market.

Keywords: Life Cycle, Diversification, Firm Performance, Indonesia

JEL Classification Code: G34, M14, M21

1. Introduction

Firm diversification is a growth strategy to pursue a level of profit in the future. Firm diversification can be defined as a firm that operates on a variety of business lines in different industries (He, 2009; Maksimovic & Phillips, 2013). The financial literature has focused on the discussion of the relationship between firm diversification and firm value, a topic that has not yet reached a common view. An issue that arises is that firm diversification has an impact on firm value (Martin & Sayrak, 2003; Erdorf, Hartmann-Wendels, Heinrichs, & Matz, 2013). However, several studies found that firm diversification decreases firm value (Berger & Ofek, 1995; Rajan, Servaes, & Zingales, 2000; Mitton & Vorkink, 2010; Ammann, Hoechle, & Schmid, 2012; Hartzell, Sun, & Titman, 2014; Volkov & Smith, 2015; Ushijima, 2016; Phung & Mishra, 2016). On the contrary, others found that firm diversification increases firm value (premium) (Santalo & Becerra, 2008; He, 2009; Yan, Yang, & Jiao, 2010; Hovakimian, 2011; Tate & Yang, 2015; Kuppuswamy & Villalonga, 2016). The results of these studies in general provide evidence that the influence of firm diversification on firm value still has not shown valid and consistent results.

In general, these prior studies have assumed a direct relationship between diversification and firm value: the diversification is related to the manager achievement that is measured by firm performance. Lee and Li (2012) suggest that the right measurement of firm performance to

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assess manager performance achievement is accounting-based measurement such as return on equity (ROE). The inconsistency of prior research is also because it does not include other variables that may explain the characteristics of the relationship. Previous studies have suggested the influence of firm diversification on firm performance by using the moderating variable of growth opportunity (Stowe & Xing, 2006; De Andrés, de la Fuente, & Velasco, 2014) as well as capital structure (Fuente & Velasco, 2019). However, these previous empirical studies have not yet placed the firm life cycle as a moderating variable, thus it is still required to do further studies to strengthen the understanding of the relationship of these variables. Therefore, the relationship between firm diversification and firm value is not a direct relationship but is a conditional relationship.

This study complements the previous studies that questioned whether there is a diversification value in the firm life cycle (Martin & Sayrak, 2003; Shyu & Chen, 2009). The previous studies directly examined the firm life cycle on firm diversification (Shyu & Chen, 2009; DeAngelo, DeAngelo, & Stulz, 2006). In contrast to the previous studies, this study uses the firm life cycle as a moderating variable in the influence of firm diversification on firm performance. This study aims to analyze the influence of firm diversification on firm performance moderated by the stages of the firm life cycle, which consists of introduction, growth, maturity, and decline.

The remainder of this article is structured in the following manner. The second section describes the literature review and hypothesis development. The third section contains the research methodology, which consists of data sampling, variable measurement, and analysis of the model. The final section contains the results and discussion of the study.

2. Literature Review and Hypothesis Development

Numbers of empirical studies have been carried out to examine the influence of firm diversification on firm performance using the agency theory framework (Amihud & Lev, 1981; Jensen, 1986; Shleifer & Vishny, 1989; Jensen & Murphy, 1990; Stulz, 1990), internal capital market theory (Stein, 1997; Scharfstein & Stein, 2000; Rajan et al., 2000), co-insurance theory (Lewellen, 1971), and value maximization theory (Matsusaka & Nanda, 2002; Maksimovic & Phillips, 2002; Gomes & Livdan, 2004). The results of these studies have not been able to provide similar evidence regarding the influence of firm diversification on firm performance. The following sections describe the relationship between diversification and firm performance and show the moderating effect of the life cycle on that relationship.

2.1. The Influence of Firm Diversification on Firm Performance

In general, firms that diversify will be more profitable than single-segment firms. This condition is supported by the benefits obtained from firm diversification in the form of economies of scale. Firms that produce various types of products in large quantities will be able to reduce fixed production expenses. Diversified firms can use shared facilities in the form of technology and resources, and can reduce transaction costs on the scale of firm activities (Gomes & Livdan, 2004).

The competitive market specifically assumes that firm diversification can create both benefits and costs from the allocation of capital in the firm environment. The benefits of firm diversification can be in the form of cross-subsidized financings, such as the allocation of capital from the head office to each division. Stein (1997) stated that the allocation of capital to divisions that is done appropriately can reduce the dependence on external sources of capital by evaluating winner picking projects. Cross-subsidized financing creates a cheaper source of financing on the assumption that external sources of funding are more expensive. Several research has found evidence that the internal capital market is more efficient (Akhigbe & Whyte, 2015; Kuppuswamy & Villalonga, 2016; Jung, Rhee, & Shin, 2019).

Previous studies have examined the influence of firm diversification on firm performance. Tate and Yang (2015) tested the difference in work productivity between diversified firms and a single segment firm in the internal labor market. The results of the study found that higher labor productivity and incentives significantly increases performance. It also examined the behavior of labor that often moved to other firms with lower compensation. In this case, the internal labor market can contribute to improving firm performance.

In addition, Selçuk (2015) investigated the value of diversification using a sample of emerging market firms from 2005 through 2009. The results of the study found that firms that are diversified in the same industry have a higher value than a single segment firm. According to this study, there are differences in findings between markets in developing and developed countries, which pointed out that diversified firms reduce firm value. Furthermore, Nazarova (2015) conducted a study at the Unilever Group by examining the merger and acquisition strategy of a multi-international company by measuring the effectiveness of company portfolios. This study uses the method of return-on-investment capital. The results showed that firms diversification at the multi-international level increased firm value.

Kuppuswamy and Villalonga (2016) proved that firms that implemented a diversification strategy during the 2007–2009 financial crisis periods have increased firm value.

Diversification during the crisis period provides an excess of value and investment opportunities. This condition can be achieved by unrelated diversification. Besides, internal capital market practices also become more efficient during the crisis periods. The results of the study also provide new findings that diversification is valuable and varied due to funding constraints during the crisis period as well as a guarantee for investors.

Hovakimian (2016) examined the restructuring strategy decisions made by diversified firms that are related to the firm's surplus-value. The results of the study found that the number of diversified farms that are measured by the number of business segments has a significant impact on the excess firm value. Other findings also proved that excess value at a low level of firm diversification can turn it into a focused strategy. Similarly, the excess value at a high level of company diversification can increase the number of existing business segments. The overall findings of excess value vary and are meaningful as a restructuring policy.

Xiao and Xu (2019) tested the influence of heterogeneity, firm characteristics, and firm diversification on firm value. The study uses a two-step panel regression method using a sample of diversified firms in US public firms from 1975 to 2015. The results of this study provide implications for managers in the form of corporate strategy alternatives. In this case, the researcher found that managers are lacking in their supervision, both when the firm value is increasing and decreasing.

The study carried out by Volkov and Smith (2014) found that type of diversification reduces firm value with the observation period from 1999–2011. The diversification value decreased significantly as indicated by the firms that entered the global diversification industry. An increase in diversification of 5.8 percent during the recession period is accompanied by a reduction in the amount of corporate debt, which had an impact on firm value. Other findings also prove that the internal capital market is more efficient in allocating capital during economic recessions. This condition is different from single segment firms that experience financial constraints during the recession period.

Phung and Mishra (2016) investigated the influence of firm diversification on firm performance using a sample of 2,744 observations from 2007 to 2012 on the Vietnam Stock Exchange using the general method of Heckman's model, namely, instrumental and fixed-effect variables. The results indicate that firm diversification strategy reduced firm performance. This is because in general, firms in Vietnam have weaknesses in an inefficient corporate governance system that has an impact on reducing firm performance. With these explanations, the first proposed hypothesis as follows:

H1: *Firm diversification increases its performance.*

2.2. Moderation of Firm Life Cycle

Firm life cycle theory can be used to explain firm diversification policy by linking diversification value on the condition of the firm that will experience the stage of introduction, growth, maturity, and decline. The stages of the firm life cycle can be described using the firm's cash flow patterns, which are grouped based on cash flow criteria from operating, investing, and financing (Dickinson, 2011). The cash flow pattern is the process of allocating firm resources and operational capabilities, thus it can be adjusted according to the alternative strategic choices that have been set. The characteristics of cash flows at each stage of the firm life cycle are different. Therefore, cash flow can explain the components of operating, investing, and financing cash flow during the stage of the firm life cycle.

According to Dickinson (2011), firms at the stage of the growth life-cycle are characterized by positive cash flow, negative investment, and positive funding. Firms implement strategies by maximizing the level of firm profits, namely, optimizing investment activities and increasing operations (Spence, 1979). It is expected that the operating cash flow will be positively similar to the previous stages of the life cycle. The stage of the growth life cycle of the firm undertakes large-scale investment activities to create an efficient scale of production. Firms with adequate capacity might be able to create barriers for the entry of firms into a new industry, which may cause the industry to not get any advantages (Spence, 1977). The condition of investing cash flows at the stage of growth is expected to be significantly negative, although cash inflows from operations can be used to cover further investment activities. In the stage of growth, firms usually require greater external funding to maintain high investment capacity, which can be done with funding sources from banks (Myers, 1984; Diamond, 1991). In addition, at the stage of growth, the growth of investing cash flow also becomes positive.

Dickinson (2011) suggested that firms in the stage of the maturity life cycle are characterized by positive cash flow, negative investment, and negative funding. At the stage of maturity, firms are more efficient in operational activities that can increase profits. Operational efficiency can be achieved through industry experience that is oriented toward production inputs and outputs (Spence, 1981). In the stage of the maturity life cycle, firms are very limited in time to carry out investment activities. This is because investment in the firm's assets is currently not profitable, thus this condition will have an impact that investment will decrease (Jovanovic, 1982; Wernerfelt, 1985). However, at this stage, firms are expected to be able to maintain their capital position, resulting in negative cash flows from the investment during the stage of the maturity life cycle. Therefore, high rates of return and lack of investment opportunities minimize the

need for external funding. At this stage, what is expected is that there is a financial excess, thus the company at the stage of maturity life cycle makes payments to creditors and dividends (Myers, 1977; Barclay & Smith, 2005). The firm's liabilities to external parties are reduced so that the financing cash flow becomes negative.

In the stage of the decline life cycle, firms are experiencing a decline in earning profits. The increase in costs gives financial pressure, which will further reduce the firm's income as a result of the decreasing selling price of the product (Wernerfelt, 1985). A firm in the stage of decline shows a negative operating cash flow and a positive investing cash flow. Positive investing cash flow is caused by the company selling assets and making debt payments and/or updating the loan schedule, so that the financing cash flow becomes positive (negative) (Dickinson, 2011). Based on the above explanation, the following hypotheses are proposed;

H2: *Firm diversification in the stage of growth life cycle increases firm performance.*

H3: *Firm diversification in the stage of maturity life cycle increases firm performance.*

H4: *Firm diversification in the stage of decline life cycle decreases firm performance.*

3. Research Method

The target population of this study is non-financing firms that diversify their companies from 2011 to 2017. The sampling method used in this study is purposive sampling with the sample criteria of firms that have at least two operating segments and have managerial ownership. The number of samples used for the analysis is 127 firms with 889 observations.

All data to measure research variables are sourced from firms' annual reports. Firm performance is measured based on the results that have been achieved through a process in a firm for a certain period and are measured by adopting the model developed by Lee and Li (2012), namely, using a return of equity (Kusuma & Ayumardani, 2016). The level of firm diversification is measured using the number of operating segments owned by the company, with the minimum number of two operating segments. To measure firm diversification, this study uses the Herfindahl index (Lang & Stulz, 1994; Huynh & Dang, 2020; Moudud-Ul-Huq et al., 2020; Pisedtasalasai & Edirisuriya, 2020; Sarwar et al., 2020). The level of diversification is measured using the index value with an interval of 0 up to 1. Diversification (Divers) is equal to (1 – Herfindahl Index, HI). The lower the value of HI, the higher the level of diversification.

The firm life-cycle is the stage of the diversified company, which consists of introduction, growth, maturity, and decline. The determination of firm life-cycle in this study adopted the model developed by Dickinson (2011), which is then grouped into five stages and adjusted with the condition of a public firm. This adjustment is done since firms that implement diversification strategy did not go through the introduction and intermediate stage, thus it was excluded from the model. The dummy variable in the stage of the introduction life cycle is neglected because it is assumed as a constant value, while the explanation of the intermediate stage is beyond the theory (Dickinson, 2011).

The stage of a firm life-cycle in this study is categorized in the stages as indicated in Table 1. In order to determine the life cycle criteria and firm cash flows, the firms that become the sample of this study are grouped as follows:

1. Introduction stage: The stage of introduction of the firm life cycle is characterized by negative cash flows (−), negative investing cash flows (−), and positive financing cash flows (+);
2. Growth stage: The stage of growth of a firm life cycle is characterized by positive cash flows (+), negative investing cash flows (−), and positive financing cash flows (+);
3. Maturity stage: The stage of maturity of the firm life cycle is characterized by positive operating cash flows (+), negative investing cash flows (−), and negative financing cash flows (−); and
4. Decline stage: The stage of decline of the firm life cycle is characterized by negative operating cash flows (−), positive investing cash flows (−), and positive/negative financing cash flows (+).

Table 1: Classification of Life Cycle Stage and Cash Flow Pattern

No.	Cash Flow	Stages of the Life Cycle			
		Introduction	Growth	Maturity	Decline
1	Operating	−	+	+	−
2	Investing	−	−	−	+
3	Financing	+	+	−	+/−

Source: Dickinson, (2011).

The life cycle of the firm then is measured by using dummy variables as follow:

SH_0 = 1 if the firm is at the stage of an introduction life cycle, otherwise 0;

SH_1 = 1 if the firm is at the stage of a growth life cycle, otherwise 0;

SH_2 = 1 if the firm is at the stage of a maturity life cycle, otherwise 0;

SH_3 = 1 if the firm is at the stage of a decline life cycle, otherwise 0.

To test the hypothesis, this study uses the 1 equation that is run using the Generalized Method of Moment (GMM) (Hansen, 1982), with the formula as follows:

$$\text{RoE} = \beta_0 + \beta_1\text{DIVERS} + \beta_2\text{DIVERS}*\text{SH}_1 + \beta_3\text{DIVERS}*\text{SH}_2 + \beta_4\text{DIVERS}*\text{SH}_3 + e_i \quad (1)$$

Details:
RoE = Firm performance
B_0 = Constant
DIVERS = Firm diversification
SH_1 = Growth stage life cycle
SH_2 = Maturity stage life cycle
SH_3 = Decline stage life cycle
$B_1 - \beta_4$ = Regression coefficient
e_i = Residual error

Based on the model equation, the coefficient β_1, β_2, and β_3 are expected to be positive and significant, while the coefficient β_4 is expected to be negative and significant.

4. Results and Discussions

This section shows the result of the study involving descriptive data and hypothesis test. Descriptive data is used to understand the characteristic pattern of the observed data, which is presented in Table 2. Table 2 shows the main central tendency of the data. Firm diversification has an average value of 0.7338, th it can be known that the diversification level is moderate. Firm performance that is measured using a return on equity shows the average value of 8.49 percent, which implies that the performance is quite good.

Table 3 presents the estimated results of the Generalized Method of Moments, statistic test, and significance statistics. As it is shown, two hypotheses are not supported. First, firm diversification does not have any influence on firm performance. The results of this study are following prior research (Christensen & Montgomery, 1981; Delios & Beamish, 1999; Jandik & Makhija, 2005). However, this finding is not consistent with the prediction of diversification theory, but it is in line with the previous research, which stated that diversification decreases firm performance (Berger & Ofek, 1995; De Andrés, Fuente, & Velasco, 2014; Volkov & Smith, 2014; Ushijima, 2016; Phung & Mishra, 2016).

Two variables of the firm life cycle, namely, the stage of introduction and decline, do not moderate the influence of firm diversification on firm performance significantly. Firms that carried out diversification at the stage of decline with the characteristics of negative operating cash flow, positive investing cash flow, and positive/negative financing cash flow does not support the prediction of life cycle theory (Dickinson, 2011). The role of the life cycle at the stage of decline does not moderate the influence of firm diversification on firm performance. The coefficient of interaction direction at the stage of the decline life cycle is positive, and it is consistent and in line with the Neoclassical theory (Maksimovic & Phillips, 2013). This theory explains that firms that diversify at the old stage take advantage of rare (idle) assets and are supported by a good growth opportunity that can create value through diversification. The results of this study support the findings investigated by Arikan and Stulz (2016), which stated that firms in the old life cycle increase diversification.

The important results that can be known from Table 3 are that the second (H2) and third (H3) hypotheses are supported by the data. This study proves that firms that diversify at the stage of the growth life cycle with the characteristics of positive operating cash flow, negative investing cash flow, and positive financing cash flow is supported by the prediction of life cycle theory (Dickinson, 2011). The role of the life cycle at the growth stage moderates the influence of firm diversification on firm performance. The influence of significant and positive interaction between firm diversification, life cycle, and firm performance implies that firm diversification increases firm performance. The results of this study are in line with the previous studies (Suyono, Yarram, & Riswan, 2017; Matemilola, Bany-Ariffin, Nassir, & Azman-Saini, 2017).

In addition, firms that diversify at the stage of the maturity life cycle with the characteristics of positive operating cash flow, negative investing cash flow, and negative financing cash flow is supported, following the prediction of life cycle theory (Dickinson, 2011). The role of the life cycle at the maturity stage moderates the influence of firm diversification on firm performance. The influence of significant and positive interaction between firm diversification, life cycle, and firm performance implies that firm diversification increases firm performance. The results of this study are in line with the previous studies (Matemilola et al., 2017; Zhou, Chen, & Cheng, 2016; Sridharan & Joshi, 2018; Fuente & Velasco, 2019).

5. Conclusions

This study contributes to the literature regarding firm diversification by examining the influence of firm diversification on firm performance, as the topic still has no common view. The results of this study contribute to that

Table 2: Summary of the Results of Descriptive Statistics Analysis

Variable	Average	S.D	Minimum	Maximum
RoE	8,4928	21,4967	−88,7000	135,4000
DIVERS	0,7338	0,1720	0,0367	0,9772
SH_1	NA	NA	0,0000	1,0000
SH_2	NA	NA	0,0000	1,0000
SH_3	NA	NA	0,0000	1,0000

Table 3: Hypothesis Testing Results

Variable	Coefficient (*t*-statistics)	Hypothesis
C	2,2257 (3,4679)	
DIVERS	−0,1366 (4,8280)	H1 is not supported
DIVERS*SH_1	9,1127 (2,1012)*	H2 is supported
DIVERS*SH_2	13,3989 (2,4093)*	H3 is supported
DIVERS*SH_3	3,9927 (6,8202)	H4 is not supported

*Significant on 1% level.

by placing the role of the firm life cycle as a moderating variable improves the influence of firm diversification on firm performance. This result has theoretical implications. The firm that carried out diversification at the stage of the growth life cycle would be able to increase firm performance with the assumption of positive operating cash flow, negative investing cash flow, and positive financing cash flow. The pattern of positive cash flow provides a signal that firms that carried out diversification at the stage of the growth life cycle can increase firm performance.

The role of the firm life cycle at the stage of maturity as a moderating variable can significantly and positively explain the relationship between firm diversification and firm performance. The firm that carried out diversification at the stage of the maturity life cycle will be able to increase firm performance with the assumption of positive operating cash flow, negative investing cash flow, and negative financing cash flow. The pattern of positive cash flow provides a signal that firms that carried out diversification at the stage of the maturity life cycle can increase firm performance.

This study also provides important implications both for the managers and investors. The manager of the firm makes a diversification policy to increase firm performance at the stage of growth and maturity life cycle. At this stage, it is proven that firm diversification can increase firm performance, which has an impact on the level of firm profits. In addition, investors can invest their funds by purchasing shares of firms that carried out diversification, especially firms that are currently at the stage of growth and maturity life cycle. This condition will enable investors to obtain a more favorable rate of return.

The limitation of this study is that the samples that are examined are based on non-financial firms that carried out both types of diversification: related and unrelated diversification. Further studies can be extended into a certain kind of diversification. Focusing on and comparing different proxies of firms' life cycles are other interesting extensions of this study.

References

Akhigbe, A., & Whyte, A. M. (2015). SEO announcement returns and internal capital market efficiency. *Journal of Corporate Finance*, *31*, 271–283. https://doi.org/10.1016/j.jcorpfin.2015.02.006

Amihud, Y., & Lev, B. (1981). Risk Reduction as a Managerial Motive for Conglomerate Mergers. *The Bell Journal of Economics*, *12*(2), 605–617. https://doi.org/10.2307/3003575

Ammann, M., Hoechle, D., & Schmid, M. (2012). Is there Really No Conglomerate Discount? *Journal of Business Finance and Accounting*, *39*(1–2), 264–288. https://doi.org/10.1111/j.1468-5957.2011.02261.x

Arikan, A. M., & Stulz, R. M. (2016). Corporate Acquisitions , Diversification , and the Firm 's lifecycle. *Journal of Finance*, *71*(1), 139–194. https://doi.org/10.1111/jofi.12362.

Barclay, M. J., & Smith, C. W. (2005). The Capital Structure Puzzle: The Evidence Revisited. *Journal of Applied Corporate Finance*, *17*(1), 8–17. https://doi.org/10.1007/978-1-4614-9173-6

Berger, P. G., & Ofek, E. (1995). Diversification's effect on firm value. *Journal of Financial Economics*, *37*(1), 39–65. https://doi.org/10.1016/0304-405X(94)00798-6

Christensen, H. K., & Montgomery, C. A. (1981). Corporate economic performance: Diversification strategy versus market structure. *Strategic Management Journal*, *2*(4), 327–343. https://doi.org/10.1002/smj.4250020402

De Andrés, P., de la Fuente, G., & Velasco, P. (2014). Growth opportunities and the effect of corporate diversification on value. *Spanish Review of Financial Economics*, *12*(2), 72–81. https://doi.org/10.1016/j.srfe.2014.02.001

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, *81*(2), 227–254. https://doi.org/10.1016/j.jfineco.2005.07.005

Delios, A., & Beamish, P. W. (1999). Ownership strategy of Japanese firms: Transactional, institutional, and experience influences. *Strategic Management Journal*, *20*(10), 915–933. https://doi.org/10.1002/(SICI)1097-0266(199910)20:10<915::AID-SMJ51>3.0.CO;2-0

Diamond, D. W. (1991). Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt. *Journal of Political Economy*, *99*(4), 689–721. https://doi.org/10.1086/261775

Dickinson, V. (2011). Cash flow patterns as a proxy for firm life cycle. *Accounting Review*, *86*(6), 1969–1994. https://doi.org/10.2308/accr-10130

Erdorf, S., Hartmann-Wendels, T., Heinrichs, N., & Matz, M. (2013). Corporate diversification and firm value: A survey of recent literature. *Financial Markets and Portfolio Management*, *27*(2), 187–215. https://doi.org/10.1007/s11408-013-0209-6

Fuente, G. de la, & Velasco, P. (2020). Capital structure and corporate diversification: Is debt a panacea for the diversification discount? *Journal of Banking and Finance*, *111*, 105728. https://doi.org/10.1016/j.jbankfin.2019.105728

Gomes, J., & Livdan, D. (2004). Optimal diversication: Reconciling theory and evidence. *The Journal of Finance*, *59*(2), 507–535. https://doi.org/10.1111/j.1540-6261.2004.00641.x

Hansen, L. P. (1982). Large Sample Properties of Generalized Method of Moments Estimators. *Econometrica*, *50*(4), 1029–1054. https://doi.org/10.2307/1912775

Hartzell, J. C., Sun, L., & Titman, S. (2014). Institutional investors as monitors of corporate diversification decisions: Evidence from real estate investment trusts. *Journal of Corporate Finance*, *25*, 61–72. https://doi.org/10.1016/j.jcorpfin.2013.10.006

He, X. (2009). Corporate Diversification and Firm Value: Evidence from Post-1997 Data. *International Review of Finance*, *9*(4), 359–385. https://doi.org/10.1111/j.1468-2443.2009.01096.x

Hovakimian, G. (2011). Financial constraints and investment efficiency: Internal capital allocation across the business cycle. *Journal of Financial Intermediation*, *20*(2), 264–283. https://doi.org/10.1016/j.jfi.2010.07.001

Hovakimian, G. (2016). Excess value and restructurings by diversified firms. *Journal of Banking and Finance*, *71*, 1–19. https://doi.org/10.1016/j.jbankfin.2016.04.020

Huynh, J., & Dang, V. D. (2020). A risk-return analysis of loan portfolio diversification in the Vietnamese banking system. *Journal of Asian Finance, Economics and Business*, *7*(9), 105–115. https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.105

Jandik, T., & Makhija, A. K. (2005). Can diversification create value? Evidence from the electric utility industry. *Financial Management*, *34*(1), 61–93. https://doi.org/10.1111/j.1755-053X.2005.tb00092.x

Jensen, M. C., & Murphy, K. J. (1990). Performance Pay and Top-Management Incentives. *Journal of Political Economy*, *98*(2), 225–264. https://doi.org/https://www.jstor.org/stable/2937665

Jovanovic, B. (1982). *Selection and the Evolution of Industry*. *50*(3), 649–670. https://doi.org/10.2307/1912606

Jung, B., Lee, D., Rhee, S. G., & Shin, I. (2019). Business Group Affiliation, Internal Labor Markets, External Capital Markets, and Labor Investment Efficiency. *Review of Pacific Basin Financial Markets and Policies*, *0*, 1–34. https://doi.org/10.1111/ajfs.12245

Kuppuswamy, V., & Villalonga, B. (2016). Does diversification create value in the presence of external financing constraints? evidence from the 2007-2009 financial crisis. *Management Science*, *62*(4), 905–923. https://doi.org/10.1287/mnsc.2015.2165

Kusuma, H., & Ayumardani, A. (2016). the Corporate Governance Efficiency and Islamic Bank Performance : an Indonesian Evidence. *Polish Journal of Management Studies*, *13*(1), 111–120. https://doi.org/10.17512/pjms.2016.13.1.11

Lang, L. H. P., & Stulz, R. M. (1994). Tobin's q, Corporate Diversification, and Firm Performance. *Journal of Political Economy*, *102*(6), 1248–1280. https://doi.org/https://www.jstor.org/stable/2138786

Lewellen, W. G. (1971). A Pure financial rationale for the conglomerate merger. *The Journal of Finance*, *26*(2), 521–537. https://doi.org/10.1111/j.1540-6261.1971.tb00912.x

Maksimovic, V., & Phillips, G. (2002). Do conglomerate firms allocate resources inefficiently across industries? Theory and evidence. *Journal of Finance*, *57*(2), 721–767. https://doi.org/10.1111/1540-6261.00440

Maksimovic, V., & Phillips, G. M. (2013). Conglomerate firms, internal capital markets, and the theory of the firm. *Annual Review of Financial Economics*, *5*, 225–244. https://doi.org/10.1146/annurev-financial-110112-120933

Martin, J. D., & Sayrak, A. (2003). Corporate diversification and shareholder value: a survey of recent literature. *Journal of Corporate Finance*, *9*(1), 37–57. https://doi.org/10.1016/S0929-1199(01)00053-0

Matemilola, B. T., Bany-Ariffin, A. N., Nassir, A. M., & Azman-Saini, W. N. W. (2017). Moderating Effects of Firm Age on the Relationship between Debt and Stock Returns. *Journal of Asia-Pacific Business*, *18*(1), 81–96. https://doi.org/10.1080/10599231.2017.1272999

Matsusaka, J. G., & Nanda, V. (2002). Internal capital markets and corporate refocusing. *Journal of Financial Intermediation*, *11*(2), 176–211. https://doi.org/10.1006/jfin.2001.0333

Michael C. Jensen. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, *76*(2), 323–329.

Mitton, T., & Vorkink, K. (2010). Why do firms with diversification discounts have higher expected returns? *Journal of Financial*

and Quantitative Analysis, *45*(6), 1367–1390. https://doi.org/10.1017/S0022109010000566

Moudud-Ul-Huq, S., Biswas, T., Chakraborty, B., & Amin, M. Al. (2020). Effect of Ownership Structure on Bank Diversification and Risk-Taking Behavior in Bangladesh. *Journal of Asian Finance, Economics and Business*, *7*(11), 647–656. https://doi.org/10.13106/jafeb.2020.vol7.no11.647

Myers, C. (1977). Determinants of corporate borrowing. *The Journal of Financial Economics*, *5*(2), 147–175. https://doi.org/10.1016/0304-405X(77)90015-0

Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, *XXXIX*(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x

Nazarova, V. (2015). Corporate Diversification Effect on Firm Value (Unilever Group Case Study). *Annals of Economics and Finance*, *16*(1), 173–198.

Phung, D. N., & Mishra, A. V. (2016). Corporation Diversification and Firm Performance: Evidence from Vietnamese Listed Firms. *Australian Economic Papers*, *55*(4), 386–408. https://doi.org/10.1111/1467-8454.12083

Pisedtasalasai, A., & Edirisuriya, P. (2020). Diversification and performance of Sri Lankan banks. *Journal of Asian Finance, Economics and Business*, *7*(9), 1–10. https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.001

Rajan, R., Servaes, H., & Zingales, L. (2000). The cost of diversity: The diversification discount and inefficient investment. *Journal of Finance*, *55*(1), 35–80. https://doi.org/10.1111/0022-1082.00200

Santalo, J., & Becerra, M. (2008). Competition from Specialized Firms and the Diversification – Performance Linkage. *The Journal of Finance*, *LXIII*(2), 851–883. https://doi.org/10.1111/j.1540-6261.2008.01333.x

Sarwar, B., Muhammad, N., & Zaman, N. U. (2020). Diversification, industry concentration, and bank margins: Empirical evidence from an emerging south Asian economy. *Journal of Asian Finance, Economics and Business*, *7*(7), 349–360. https://doi.org/10.13106/jafeb.2020.vol7.no7.349

Scharfstein, D. S., & Stein, J. C. (2000). The dark side of internal capital markets: Divisional rent-seeking and inefficient investment. *Journal of Finance*, *55*(6), 2537–2564. https://doi.org/10.1111/0022-1082.00299

Selçuk, E. A. (2015). Corporate diversification and firm value: Evidence from emerging markets. *International Journal of Emerging Markets*, *10*(3), 294–310. https://doi.org/10.1108/IJoEM-12-2012-0180

Shleifer, A., & Vishny, R. W. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics*, *25*(1), 123–139. https://doi.org/10.1016/0304-405X(89)90099-8

Shyu, J., & Chen, Y.-L. (2009). Diversification, Performance, and the Corporate Life Cycle. *Emerging Markets Finance and Trade*, *45*(6), 57–68. https://doi.org/10.2753/REE1540-496X450604

Spence, A. M. (1977). Entry, Capacity, Investment and Oligopolistic Pricing. *The Bell Journal of Economics*, *8*(2), 534. https://doi.org/10.2307/3003302

Spence, A. M. (1979). Investment Strategy and Growth in a New Market. *The Bell Journal of Economics*, *10*(1), 1. https://doi.org/10.2307/3003316

Spence, A. M. (1981). The Learning Curve and Competition. *The Bell Journal of Economics*, *12*(1), 49. https://doi.org/10.2307/3003508

Sridharan, S., & Joshi, M. (2018). Impact of Ownership Patterns and Firm Life-Cycle Stages on Firm Performance: Evidence From India. *Journal of Corporate Accounting & Finance, 29*(1), 117–13615. https://doi.org/10.1002/jcaf.22315

Stein, J. C. (1997). Internal Capital Markets and the Competition for Corporate Resources. *The Journal of Finance*, *52*(1), 111. https://doi.org/10.2307/2329558

Stowe, J. D., & Xing, X. (2006). Can growth opportunities explain the diversification discount? *Journal of Corporate Finance*, *12*(4), 783–796. https://doi.org/10.1016/j.jcorpfin.2005.05.001

Stulz, R. M. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*, *26*(1), 3–27. https://doi.org/10.1016/0304-405X(90)90011-N

Suyono, E., Yarram, S. R., & Riswan, R. (2017). Capital structure, corporate performance, and life cycle: Evidence from Indonesia. *Corporate Ownership and Control*, *14*(4), 449–461. https://doi.org/10.22495/cocv14i4c2art10

Tate, G., & Yang, L. (2015). The Bright Side of Corporate Diversification: Evidence from Internal Labor Markets. *Review of Financial Studies*, *28*(8), 2203–2249. https://doi.org/10.1093/rfs/hhv012

Ushijima, T. (2016). Diversification, Organization, and Value of the Firm. *Financial Management*, *45*(2), 467–499. https://doi.org/10.1111/fima.12108

Volkov, N. I., & Smith, G. C. (2015). Corporate diversification and firm value during economic downturns. *Quarterly Review of Economics and Finance*, *55*, 160–175. https://doi.org/10.1016/j.qref.2014.08.002

Wernerfelt, B. (1985). The Dynamics of Prices and Market Shares Over the Product Life Cycle. *Management Science*, *31*(8), 928–939. https://doi.org/10.1287/mnsc.31.8.928

Xiao, Z., & Xu, L. (2019). What do mean impacts miss? Distributional effects of corporate diversification. *Journal of Econometrics*, *213*(1), 92–120. https://doi.org/10.1016/j.jeconom.2019.04.007

Yan, A., Yang, Z., & Jiao, J. (2010). Conglomerate investment under various capital market conditions. *Journal of Banking and Finance*, *34*(1), 103–115. https://doi.org/10.1016/j.jbankfin.2009.07.006

Zhou, H., Chen, H., & Cheng, Z. (2016). Internal control, corporate life cycle, and firm performance. *International Finance Review*, *17*, 189–209. https://doi.org/10.1108/S1569-376720160000017013

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