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ABSTRACT

This study empirically investigates the effect of managerial experience on capital structure and the role of fixed assets as the moderating variable in this relationship. Our research sample is all firms in the infrastructure, utilities, and transportation sectors listed at the Indonesian Stock Exchange in 2014-2018 based on the purposive sampling method. We analyze the research data with the ordinary least square (OLS) method. The results of our regression analysis show that managerial experience negatively
affects capital structure. However, we find that fixed assets do not moderate the relationship between managerial experience and capital structure. Further analysis indicates that fixed assets moderate the relationship between managerial experience (MANXEP) and capital structure when MANEXP is measured with internal experience but not with the external one. Besides, the relationship between managerial experience and capital structure is significant when the fixed asset ratio is moderate or high. Overall, these findings indicate that studies on the effects of top managers/CEOs’ characteristics on firms’ policies or performance should obtain and analyze more detailed measures of the CEOs’ characteristics or the context variables.

INTRODUCTION

Capital structure, commonly known as financial leverage, is a fundamental property of corporate finance resulting from managers’ funding decisions in selecting and combining funding sources to support their firms’ investment activities. Chang et al. (2019); Yildirim et al. (2018) define capital structure as a combination of debts and equities related to firms’ capabilities to meet stakeholders’ needs. Ross et al. (2016) define financial leverage as firms’ dependence on debt-based funding sources.

Capital structure represents an essential form of firms’ financial decisions. Brown et al. (2019) conclude that capital structure is crucial that institutional investors consider this factor when making investment decisions. Gan et al. (2021); Li & Islam (2019); Sharma (2017) suggest that capital structure is strategic in managing corporate funds that arguably affects the cost of capital, profitability, and firm valuation. Badruzaman (2019); Ibrahim & Zulkafli (2018); Matias et al. (2018) argue that capital structure reflects shareholders and creditors’ contributions in financing firms’ assets that affect firms’ financial and social performance.

Funding decisions are closely related to Chief Executive Officers’ (CEOs) roles in firms’ strategic decision-making processes and fixed asset availability as debt collaterals (Matemilola et al., 2018). Table 1 below explains this argument by highlighting firms’ capital structures in the infrastructure, utilities, and transportation sectors. These firms rely more on debts than equities, as indicated by the 2014-2018 debt to capital ratio values that range from 41.05 to 44.94 percent. Similarly, the debt to asset ratio values (33.86 to 37.04 percent) indicate the low use of debts to finance firms’ assets. Furthermore, the data offers an early indication that firms with more experienced CEOs and higher fixed asset ratios (in 2017) tend to have lower debt proportions. Firms in these sectors obtain debts from various sources, including bond issuances. News from CNBC Indonesia (2019) informs that the infrastructure sector dominated bond issuance in the second semester of 2019. Infrastructure firms have significantly issued bonds mainly due to the presidential policy to encourage infrastructure development.
Table 1
Average Debt to Asset, Debt to Capital, Fixed Assets, and Managerial Experience of Firms in the Infrastructure, Utilities, and Transportation Sectors, 2014-2018

| Year | DTA  | DTC  | Fixed Assets | Experience |
|------|------|------|--------------|------------|
| 2014 | 34.29| 44.88| 50.27        | 24         |
| 2015 | 35.16| 43.72| 46.50        | 25         |
| 2016 | 37.04| 44.94| 64.20        | 25         |
| 2017 | 34.91| 42.02| 64.78        | 26         |
| 2018 | 33.86| 41.65| 62.87        | 24         |

Source: Secondary data processed (2020)

Ardalan (2017); M’ng et al. (2017) reveal that excessive debt levels increase bankruptcy risks that firms need to make debt decisions more cautiously. Higher debts increase costs (interests) that remain payable regardless of firms’ profits. Hence, firms that select suboptimal funding source compositions exhibit higher bankruptcy risks.

The pecking order and trade-off theories can explain funding decisions. The pecking order theory explains that firms have preferences in making decisions about funding sources (Myers, 1984; Myers & Majluf, 1984). Managers will prioritize internal financing sources. However, they will rely on external financing sources (debts and equities) when internal sources are insufficient (Hang et al., 2018; Haron, 2016) because of information asymmetry (managers have better firm-specific information than investors and creditors as external stakeholders). Information asymmetry increases transaction costs that firms have to incur higher costs of capital (Halim et al., 2019).

The trade-off theory highlights how firms take tax savings and interest costs into consideration when they strategically determine the debt and equity levels. Managers seek to preserve their investment plans by maximizing tax shields. Hence, they tend to rely on more debts (Matemilola et al., 2018). However, prior studies of Ahsan et al. (2016); Alipour et al. (2015); Chadha & Sharma (2015); Harris & Roark (2019); Kiraci & Aydin (2018); Li & Islam (2019); Vo (2017); Yousef (2019) have still shown inconsistent results on capital structure and focused on firm-level characteristics.

In this respect, Hambrick & Mason (1984) upper echelon theory suggests that managers’ cognitive aspects are crucial in explaining firms’ strategic decisions, including those related to capital structure. Kauer (2008) cognitive theory defines cognitive aspects as the accumulation of knowledge obtained by managers based on their managerial experience.

Firms’ higher debt levels raise the question of whether managers exploit their skills to maximize firm values. Several proxies measure managerial skills, including managerial experience (Matemilola et al., 2018). Managerial experience represents firms’ knowledge accumulation strategy to achieve competitive advantage (Kang et
More experienced managers (longer tenure) arguably can make better decisions because they know how to exploit their firms’ resources more effectively (Dong, 2016).

Borgia & Newman (2012); Loan, et al. (2020); Matemilola et al. (2018) conclude that more experienced managers use higher debts in capital structure policies. However, Ting et al. (2016) demonstrate that more experienced managers tend to be more careful and use lower debt levels in their firms’ capital structure. The inconsistent results highlight the importance of further studies on this issue by incorporating other variables. However, prior studies largely have not discussed which variables potentially moderate the relationship between managerial experience and capital structure.

According to the trade-off theory, firms need fixed assets as collateral to obtain external funding sources (debts). Besides, firms with higher fixed asset values arguably have lower credit risks that their debt utilization ratio increases (Matemilola et al., 2018). Thus, we argue that fixed assets likely moderate the effect of managerial experience on capital structure.

To our best knowledge, the role of managerial experience and fixed assets on capital structure is relatively understudied (Borgia & Newman, 2012; Loan, et al., 2020; Matemilola et al., 2018; Ting et al., 2016). Thus, our paper extends the capital structure literature by investigating fixed assets’ moderating role on the relationship between managerial experience and capital structure.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Managerial Experience

Various managerial characteristics affect managers’ decisions (Tarus & Ayabei, 2016), including managerial experience. Dong (2016); Kang et al. (2019) emphasize that experience represents knowledge accumulation (depth and breadth). More experienced managers have better knowledge about their firms’ strengths and weaknesses and formulate better strategies and decisions.

Upper Echelon Theory

Hambrick & Mason (1984) propose the upper echelon theory suggesting that firms’ more complex and strategic decisions highly involve managerial cognitive aspects. Consequently, managers’ characteristics play a crucial role in explaining firms’ various decisions and outcomes. They argue further that several managerial characteristics can measure the cognitive aspects, including experience. Accordingly, it is potentially insufficient to explain capital structure decisions only with firm-specific variables.
Dynamic Capability Theory

This theory explains how firms integrate, build, and reconfigure their resources and competencies (Mostafiz et al., 2019) to create and maintain competitive advantages competitors by responding to and creating environmental changes (Miles, 2012). The dynamic capability theory integrates three specific ideas: individual capabilities, strategic actions, and company performance. This theory enables managers to respond to strategic change and optimally allocate resources, including physical, human, and organizational assets.

Management as human resources is a driving factor for developing firms’ capabilities and competencies, including using their experience (Castanias & Helfat, 1991; Mostafiz et al., 2019). Management capabilities involve cognitive aspects (including knowledge and mindsets as the basis for decision making) to create new investment opportunities (Mostafiz & Goh, 2018). Thus, management capabilities help firms create values through strategic decision-making.

Pecking Order Theory

This theory explains that firms have ordered funding preferences to meet their investment needs. Particularly, firms prioritize internal financing sources. However, when internal sources are insufficient, they tend to use debt-based external funding sources. If debts remain inadequate, firms will eventually turn to share-based external funding sources (Hang et al., 2018; Haron, 2016). According to this theory, highly profitable firms have low debt ratios because they can rely on internal funding sources (from their retained profits) to finance their investment projects sufficiently.

Trade-off Theory

This theory illuminates how firms consider the costs and benefits of debt financing in their capital structure. Debts help firms save taxes because interest costs are usually tax-deductible (Baker & Martin, 2011). However, firms cannot fully finance their investments with debts because higher debt levels increase bankruptcy risks (Karugu et al., 2018).

Managerial Experiences and Capital Structure

Hambrick & Mason (1984) upper echelon theory implies that capital structure decisions highly involve managers’ cognitive aspects as the strategic decision-makers. The cognitive aspects represent managers’ depth and breadth of knowledge and abilities based on their experience (Kauer, 2008). More experienced managers have better knowledge about their firms’ weaknesses and strengths and make appropriate decisions based on their knowledge (Dong, 2016). Consequently, they tend to be more cautious and maintain lower debt levels (Ting et al., 2016) because they know that higher debts will increase bankruptcy risks. Consequently, prior studies show that managerial experience positively affects capital structure (Borgia & Newman, 2012; Matemilola et al., 2018). Thus, this study proposes the following hypothesis:
H1: Managerial experience positively affects firms’ capital structure.

Fixed Assets, Managerial Experiences, and Capital Structure

Bonds represent external debt-based funding sources with several sectors (mainly infrastructure) rely heavily on bonds due to massive infrastructure projects initiated by the government in recent years. The trade-off theory argues that firms try to balance the benefits and costs of debt issuance. Firms continue using debts as long as their benefits exceed the costs. Palliam et al. (2013) argue that firms need to consider their fixed assets when formulating capital structure policies.

Among various asset types, firms usually rely on their (tangible) fixed assets as collateral to obtain external fundings (Panda & Nanda, 2020). Panda & Nanda (2020) reveal that firms with high fixed asset levels are easier to generate more debts. Higher fixed assets also motivate firms to use more debts. Alipour et al. (2015) document that firms use debt-financed fixed assets as collateral for other debts. Consequently, they need more fixed assets to pay debts in the event of bankruptcy and firms with more fixed assets have better access to debts. However, higher fixed asset levels also potentially increase financial risks by increasing operating leverage.

Assets are a fundamental element in achieving firms’ competitive advantages. The dynamic capability theory reveals that high capabilities enable firms to integrate, build and rebuild internal and external resources (Lee et al., 2021). Management as a human resource is a driving factor for developing firms’ capabilities and competencies (Castanias & Helfat, 1991; Mostafiz et al., 2019), including allocating resources (such as physical, human, and organizational assets) optimally. The dynamic capability theory reveals that management facilitates firms to identify and seize opportunities by integrating and reconfiguring assets (Lee et al., 2021).

Managerial experience represents managerial abilities that include knowledge and mindsets in supporting firms’ profit-seeking activities (Mostafiz & Goh, 2018). More experienced managers can evaluate their firms’ weaknesses and strengths (Dong, 2016), including those related to capital structure decisions. In this respect, the role of managerial experience in capital structure decisions depends on firms' fixed assets. Firms with more fixed assets are better able to generate debt fundings to support their investment decisions financially (Haron, 2016). Thus, the following is the second hypothesis:

H2: Fixed assets moderate the effects of managerial experience on the company's capital structure

RESEARCH METHODS

We use the following model to illustrated the predicted relationships between
the research variables. The secondary data is generated from *Bloomberg* and firms’ annual reports.

![Figure 1](image)

**Figure 1**
**Research Theoretical Framework**

**Population and Sample**

This study's population is all firms in the infrastructure, utilities, and transportation sectors listed at the Indonesia Stock Exchange in 2014-2018. These three sectors are selected because they have shown significant developments in recent years due to the Indonesian government’s policies (Rahayu & Rahmawati, 2019). We use the purposive sampling method to obtain sample firms based on the following criteria: 1) firms in these sectors that have been continuously listed at the Indonesian Stock Exchange in 2014-2018, 2) firms in these three sectors that have published annual reports consistently in this period, 3) firms with no missing data, 4) firms with no negative or zero values for the selected variables. The criteria result in 18 sample firms and 90 firm-year observations.

**Research Variable and Operational Definition**

Our dependent (independent) variable is capital structure (managerial experience). Meanwhile, firms’ fixed assets represent the moderating variable. Lastly, we include several control variables (CEO’s education level, profitability, and firm size).

This study measures capital structure with the debt to asset ratio that indicates debt-based financing sources' role to finance firms' assets. We operationalize this ratio by dividing total debts with total assets (Ting et al., 2016). As an alternative proxy, this research also employs the debt to capital ratio representing firms’ prior capital structure policies (Baker et al., 2010).

Managerial experience is measured with the CEO’s working experience in the current firm and her prior firms’ working experience (Matemilola et al., 2018). Further, the fixed asset variable is operationalized with the ratio of net fixed asset value to total assets where net fixed assets consist of property, plant, and equipment – depreciation and total assets contain current and net fixed assets (Matemilola et al., 2018).

This study uses several control variables to mitigate the risk of spurious relationships between the independent and dependent variables (Miller & Brewer,
We operationalize profitability with the ratio between net income and total assets (Panda & Nanda, 2020). The trade-off theory explains that profitability is positively associated with debts because highly profitable firms can repay their debts and interests more easily and thus are motivated to rely on larger debts (Matemilola et al., 2018). Firm size is measured with the natural logarithmic value of net sales. The trade-off theory explains that larger firms are more stable and have lower bankruptcy risks that they can obtain more debt fundings (Matemilola et al., 2018). Lastly, the CEO’s education level is measured with a seven-point ordinal scale representing the highest educational level attained by the CEO with the following scale: one (lower than high school), two (high school), three (attended undergraduate school), four (earned undergraduate degree), five (attended graduate school), six (earned master degree), and seven (earned Ph.D./doctorate) (Ting et al., 2016).

**Analytical Tools**

Initially, the descriptive statistics explain the characteristics of the research variables. This study does not employ the (firm and year) panel elements because it assumes that the effects of the independent and moderating variables are firm and time-invariant.

The data is analyzed with the ordinary least square (OLS) method with SPSS 25 and Stata 14. This study utilizes Process Macro on SPSS 25 provided by Hayes (2018) to capture fixed assets’ moderating effect. Thus, the regression model of this study is as follows:

\[
CAPS = \beta_0 + \beta_1 MEXP + \beta_2 ASSET + \beta_3 (PMEXP \ast ASSET) + \beta_4 PROF + \beta_5 FSIZE + \beta_6 EDUC + \varepsilon
\]

where CAPS is capital structure, MEXP refers to managerial experience, ASSET is fixed assets, PROF represents profitability, SIZE is firm size, EDUC is education, and \(\varepsilon\) is the error term.

We also run an additional analysis by classifying managerial experience into the internal and external experiences to investigate whether the effect of MANEXP on capital structure depends on the sources of managerial experience. We also investigate the conditional effect of fixed assets by classifying the observations into three categories based on fixed asset values (low, medium, and high).

**ANALYSIS AND DISCUSSION**

**Results**

Table 2 presents the descriptive statistics (mean and standard deviation) of the research variables. The statistics suggest that our observation firms rely more on equities than debts (the CAPS value is lower than 0.5) and have highly experienced
CEOs (the average managerial experience is about 25 years). Further, the sample firms have a great proportion of fixed assets and are relatively profitable, with an average total sales of about Rp 500 billion. Meanwhile, the median value of the education variable (*EDUC*) is six, indicating that sample firms’ CEOs mostly earn a master’s degree.

| Table 2 | The Estimation Result Of Descriptive Statistics |
|---------|-----------------------------------------------|
| Variable | N    | Mean  | Std. Deviation |
| CAPS     | 90   | 35.05 | 15.63          |
| MEXP     | 90   | 24.66 | 12.91          |
| ASSET    | 90   | 0.58  | 0.30           |
| PROF     | 90   | 5.80  | 3.94           |
| SIZE     | 90   | 20.04 | 3.86           |

Source: Secondary data, processed (2020)

Initially, we run the successive interval method to transform the non-metric data (*EDUC* – measured in ordinal scale) to metric data. Sarwono (2012) highlights that statistical techniques such as regression analysis assume that the research variables are measured on a ratio or interval scale. We also mean-center the research variables to mitigate the risk of high correlation between interacted independent variables (Hamilton, 2013). We use Microsoft Excel and SPSS to run these two methods.

This study uses the Newey-West procedure or robust standard error to overcome the autocorrelation and heteroscedasticity problems in the regression model (Gujarati & Porter, 2009; Wooldridge, 2016), although this method does not eliminate the problems. This procedure works by adjusting the regression model’s standard errors to facilitate statistical conclusions.

| Table 3 | The Regression Results |
|---------|------------------------|
| Variable | Coefficient | Standard Error | t   | p     |
| MEXP     | -0.599       | 0.119           | -5.028 | 0.000* |
| ASSET    | 4.413        | 5.371           | 0.822  | 0.414 |
| MEXP*ASSET | -0.050     | 0.445           | -0.112 | 0.911 |
| PROF     | -1.585       | 0.341           | -4.645 | 0.000* |
| SIZ      | -0.077       | 0.316           | -0.242 | 0.809 |
| EDUC     | -7.035       | 1.658           | -4.244 | 0.000* |
| p-value of F-Statistic | 0.000   | R-square   | 0.411 |

Source: Secondary data, processed (2020)

*Significant at α = 0.05

Table 3 above displays the results of the regression analysis to test the hypotheses. The F-statistic p-value is significant (<0.05), indicating that the regression model is feasible to predict the dependent variable. Further, the t-statistic values suggest that *MEXP* negatively affects capital structure (-0.599, *p*=0.00<0.05), implying that the first hypothesis is empirically supported. However, the second hypothesis is not empirically supported, as indicated by the insignificant regression coefficient of *MEXP*ASSET (-0.050, *p*=0.910>0.05). For the control variables,
profitability \((PROF)\) and CEO’s education level \((EDUC)\) have significantly negative impacts on capital structure.

\[
\begin{array}{cccc}
\text{Table 4} \\
\text{The Results of the Robustness Test} \\
\hline
\text{Variable} & \text{Coefficient} & \text{Standard Error} & t & p \\
\hline
\text{MEXP} & -0.679 & 0.153 & -4.449 & 0.000* \\
\text{ASSET} & 0.399 & 6.942 & 0.058 & 0.954 \\
\text{MEXP*ASSET} & 0.727 & 0.512 & 1.415 & 0.161 \\
\text{PROF} & -1.922 & 0.416 & -4.622 & 0.000* \\
\text{SIZ} & -0.542 & 0.570 & -0.951 & 0.345 \\
\text{EDUC} & -6.843 & 2.309 & -2.963 & 0.004* \\
\text{p-value of F-Statistic} & 0.000 \\
\text{R-square} & 0.326 \\
\hline
\end{array}
\]

Source: Secondary data, processed (2020)

*Significant at \(\alpha = 0.05\)

As an alternative test, we use a different proxy of \(CAPS\). The results of the robustness test are qualitatively similar to the main analysis. Specifically, \(MEXP\) negatively affects firms’ capital structure, although the interaction between managerial experience and fixed assets has no significant impact on \(CAPS\). For the control variables, \(PROF\) and \(EDUC\)’s regression coefficients remain significant.

We also run additional analyses by dividing managerial experience into internal and external experiences (Matemilola et al., 2018). Table 5 presents the regression results with internal and external managerial experiences (models 2 and 3).

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\begin{array}{cccc}
\text{Table 5} \\
\text{The Estimation Result of Additional Analysis} \\
\hline
\text{Model 2} & \text{Model 3} \\
\hline
\text{MEXP (INTERNAL)} & -0.440 (0.000)* & \text{MEXP (EXTERNAL)} & -0.446 (0.008)* \\
\text{ASSET} & -1.955 (0.723) & 2.417 (0.649) & \text{MEXP*ASSET} & -1.093 (0.003)* & 0.629 (0.301) \\
\text{PROF} & -1.314 (0.000)* & -1.276 (0.001)* & \text{SIZ} & 0.361 (0.319) & -0.337 (0.351) \\
\text{EDUC} & -7.182 (0.000)* & -5.309 (0.001)* & \text{p value of F-Statistic} & 0.000 & 0.000 \\
\text{R-square} & 0.313 & 0.267 \\
\hline
\end{array}
\]

Source: Secondary data processed (2020)

*Significant on \(\alpha = 0.05\)

Similar to the main analysis, Table 5 suggests that managerial experience negatively affects firms’ capital structure in both models. However, \(MEXP*ASSET\) negatively affects capital structure in model 2, but not in model 3.

We also analyze the conditional effect of fixed assets as the moderating variable (interaction effect). Table 6 below displays the estimation results:
Table 6 shows that for firms with low fixed assets (-0.3002, the effect of internal managerial experience on capital structure is negative (-0.112) but insignificant (p=0.382). For firms with moderate fixed asset values, the effect of internal managerial experience on \textit{CAPS} is negative (-0.440) and significant (p=0.000). Similarly, for firms with high fixed asset ratios, the effect of internal managerial experience on \textit{CAPS} is negative (-0.769) and significant (p=0.000).

**Discussion**

The main results suggest that \textit{MEXP} negatively affects \textit{CAPS}. This finding is consistent with (Borgia & Newman (2012); Loan, et al. (2020); Matemilola et al. (2018); Ting et al. (2016). Hence, firms with more experienced CEOs have lower debt levels. Thus, the empirical evidence supports the upper echelon theory and Kumar et al. (2017), who underscore the role of cognitive aspects in firms’ capital structure decisions. The negative impact of managerial experience on capital structure also supports the pecking order theory and Ting et al. (2016), who reveal that more experienced managers tend to be more careful that their firms use lower debt levels in their capital structure policies. In this respect, debts increase costs (interests payable to creditors regardless of firms’ profitability) that reliance on excessive debt financing increases bankruptcy risks.

Our analysis demonstrates that fixed assets do not moderate the effect of managerial experience on firms’ capital structure. However, further analyses highlight that fixed assets moderate the effect of internal managerial experience on capital structure. Fixed assets crucially enable firms to obtain external fundings that the effect of managerial experience on capital structure depends on firms’ capital structure. Hence, our results support the dynamic capability theory. Management as human resources helps firms optimally integrate, build and rearrange internal and external resources (such as physical, human, and organizational assets) (Castanias & Helfat, 1991; Lee et al., 2021; Mostafiz et al., 2019). Thus, managers facilitate firms to create competitive advantages by integrating and reconfiguring company-owned assets (Lee et al., 2021).

More experienced managers can better evaluate their firms’ strengths and weaknesses (Dong, 2016), including capital structure decisions. However, the role of fixed assets in moderating the effect of managerial experience on capital structure depends on from which CEOs accumulate their experience. For firms where CEOs
accumulate their experience from their current firms, fixed assets moderate the impact of managerial experience on capital structure likely because these CEOs have better knowledge about firm-specific conditions related to fixed assets and capital structure. Consequently, higher fixed asset levels will motivate these CEOs further to have lower debt-based external financing. Further, the role of fixed assets in moderating the impact of managerial experience on capital structure depends on fixed asset levels. Specifically, low fixed asset levels cannot moderate the relationship significantly, while moderate and high fixed asset levels significantly moderate the relationship. Hence, our results do not support (Alipour et al., 2015; Panda & Nanda, 2020), who reveal that firms with higher asset levels will use more debt levels.

CONCLUSIONS, LIMITATION, AND RECOMMENDATION

Our empirical study finds the effect of managerial experience on capital structure. However, fixed assets fail to moderate the relationship. Further analysis reveals that both internal and external managerial experiences affect capital structure, and fixed assets moderate the effect of internal managerial experience only. Besides, fixed assets' moderating role on this relationship is only significant when firms have moderate or high fixed assets levels. Thus, this study offers a more nuanced perspective on the role of certain CEOs’ characteristics (managerial experience) on firms’ outcomes. More specifically, studies on the role of CEOs’ characteristics should analyze these characteristics in a more detailed way to identify certain relationship patterns.

This study focuses on firms in certain sectors (infrastructure, utility, and transportation) that arguably rely on more fixed assets than other sectors. Future studies can use firms in many sectors and analyze the industry-level variables on these issues.

REFERENCES

Ahsan, T., Wang, M., & Qureshi, M. A. (2016). Firm, industry, and country level determinants of capital structure: Evidence from Pakistan. South Asian Journal of Global Business Research, 5(3), 362–384. https://doi.org/10.1108/SAJGBR-05-2015-0036

Alipour, M., Mohammadi, M. F. S., & Derakhshan, H. (2015). Determinants of capital structure: An empirical study of firms in Iran. International Journal of Law and Management, 57(1), 53–83. https://doi.org/10.1108/IJLMA-01-2013-0004

Ardalan, K. (2017). Capital structure theory: Reconsidered. Research in International Business and Finance, 39, 696–710. https://doi.org/10.1016/j.ribaf.2015.11.010
Badruzaman, J. (2019). Effect of capital structure on return on equity: A survey on issuers of categories JII70 of the Indonesia Stock Exchange. *Russian Journal of Agricultural and Socio-Economic Sciences*, 89(5), 242–246. https://doi.org/10.18551/rjoas.2019-05.30

Baker, H. K., & Martin, G. S. (2011). *Capital structure and corporate financing decisions*. John Wiley & Sons, Inc. https://doi.org/10.1002/9781118266250

Baker, H. K., Singleton, J. C., & Veit, E. T. (2010). Survey research in corporate finance. In *Survey Research in Corporate Finance*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195340372.001.0001

Borgia, D., & Newman, A. (2012). The influence of managerial factors on the capital structure of small and medium-sized enterprises in emerging economies. *Journal of Chinese Entrepreneurship*, 4(3), 180–205. https://doi.org/10.1108/1756139121262148

Brown, S., Dutordoir, M., Veld, C., & Veld-Merkoulova, Y. (2019). What is the role of institutional investors in corporate capital structure decisions? A survey analysis. *Journal of Corporate Finance*, 58(February), 270–286. https://doi.org/10.1016/j.jcorpfin.2019.05.001

Castanias, R. P., & Helfat, C. E. (1991). Managerial resources and rents. *Journal of Management*, 17(1), 155–171. https://doi.org/10.1177/014920639101700110

Chadha, S., & Sharma, A. K. (2015). Determinants of capital structure: An empirical evaluation from India. *Journal of Advances in Management Research*, 12(1), 3–14. https://doi.org/10.1108/JAMR-08-2014-0051

Chang, C. C., Batmunkh, M. U., Wong, W. K., & Jargalsaikhan, M. (2019). Relationship between capital structure and profitability: Evidence from four Asian Tigers. *Journal of Management Information and Decision Science*, 22(2), 54–65. https://doi.org/10.2139/ssrn.3411977

Dong, J. Q. (2016). On the contingent rent-generating potential of firm-specific managerial experience. *Journal of Business Research*, 69(10), 4358–4362. https://doi.org/10.1016/j.jbusres.2016.04.066

Gan, L., Lv, W., & Chen, Y. (2021). Capital structure adjustment speed over the business cycle. *Finance Research Letters*, 39(May), 101574. https://doi.org/10.1016/j.frl.2020.101574

Gujarati, N. D., & Porter, C. D. (2009). *Basic Econometrics* (5th ed.). The McGraw-Hill.

Halim, Z. A., How, J., Verhoeven, P., & Hassan, M. K. (2019). The value of certification in Islamic bond offerings. *Journal of Corporate Finance*, 55(February 2018), 141–161. https://doi.org/10.1016/j.jcorpfin.2018.09.002
Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review, 9*(2), 193–206. https://doi.org/10.2307/258434

Hamilton, L. C. (2013). *Statistics with STATA* (12th ed.). Cengage Learning.

Hang, M., Geyer-Klingebel, J., Rathgeber, A. W., & Stöckl, S. (2018). Measurement matters—A meta-study of the determinants of corporate capital structure. *The Quarterly Review of Economics and Finance, 68*, 211–225. https://doi.org/10.1016/j.qref.2017.11.011

Haron, R. (2016). Do Indonesian firms practice target capital structure? A dynamic approach. *Journal of Asia Business Studies, 10*(3), 318–334. https://doi.org/10.1108/JABS-07-2015-0100

Harris, C., & Roark, S. (2019). Cash flow risk and capital structure decisions. *Finance Research Letters, 29*, 393–397. https://doi.org/10.1016/j.frl.2018.09.005

Hayes, A. F. (2018). *Introduction to mediation, moderation and conditional process analysis: A regression based approach* (2nd ed.). The Guilford Press.

Ibrahim, H. A., & Zulkafli, A. H. (2018). Corporate governance mechanisms and capital structure adjustment: A conceptual model. *Global Business and Management Research: An International Journal, 10*(3), 392–402. https://doi.org/10.1108/09675421211254849

Kang, T., Baek, C., & Lee, J.-D. (2019). Effects of knowledge accumulation strategies through experience and experimentation on firm growth. *Technological Forecasting and Social Change, 144*(July), 169–181. https://doi.org/10.1016/j.techfore.2019.04.003

Karugu, C., Achoki, G., & Kiriri, P. (2018). Capital adequacy ratios as predictors of financial distress in Kenyan commercial banks. *Journal of Financial Risk Management, 07*(03), 278–289. https://doi.org/10.4236/jfrm.2018.73018

Kauer, D. (2008). *The Effect of Managerial Experiences on Strategic Sensemaking*. Gabler. https://doi.org/10.1007/978-3-8349-9632-9

Kiraci, K., & Aydin, N. (2018). Determinants of capital structure: Empirical evidence from traditional airlines. *International Journal of Economic and Administrative Studies, 21*, 173–186. https://doi.org/10.18092/ulikidince.363126

Kumar, S., Colombage, S., & Rao, P. (2017). Research on capital structure determinants: A review and future directions. *International Journal of Managerial Finance, 13*(2), 106–132. https://doi.org/10.1108/IJMF-09-2014-0135

Lee, J. M., Narula, R., & Hillemann, J. (2021). Unraveling asset recombination
through the lens of firm-specific advantages: A dynamic capabilities perspective. *Journal of World Business*, 56(2), 101193. https://doi.org/10.1016/j.jwb.2021.101193

Li, L., & Islam, S. Z. (2019). Firm and industry specific determinants of capital structure: Evidence from the Australian market. *International Review of Economics & Finance*, 59, 425–437. https://doi.org/10.1016/j.iref.2018.10.007

Loan, B. T. T., Thang, N. X., Mai, D. P., Phuong, L. T. M., & Anh, P. T. (2020). The determinants of capital structure: A case study. *Journal of Security and Sustainability Issues*, 9(M), 5–17. https://doi.org/10.9770/jssi.2020.9.M(1)

M’ng, J. C. P., Rahman, M., & Sannacy, S. (2017). The determinants of capital structure: Evidence from public listed companies in Malaysia, Singapore and Thailand. *Cogent Economics & Finance*, 5(1), 1418609. https://doi.org/10.1080/23322039.2017.1418609

Matemilola, B. T., Bany-Ariffin, A. N., Azman-Saini, W. N. W., & Nassir, A. M. (2018). Does top managers’ experience affect firms’ capital structure? *Research in International Business and Finance*, 45, 488–498. https://doi.org/10.1016/j.ribaf.2017.07.184

Matias, F., Salsa, L., & Afonso, C. M. (2018). Capital structure of Portuguese hotel firms: A structural equation modelling approach. *Tourism & Management Studies*, 14(SI1), 73–82. https://doi.org/10.18089/tms.2018.14si108

Miles, J. A. (2012). *Management and organization theory*. John Wiley and Sons.

Miller, R. L., & Brewer, J. D. (2003). *The A-Z of social research*. SAGE Publications.

Mostafiz, I., & Goh, S. K. (2018). International women entrepreneurs and international opportunity recognition skills for start-up ventures. *J. for International Business and Entrepreneurship Development*, 11(3), 201. https://doi.org/10.1504/JIBED.2018.095171

Mostafiz, M. I., Sambasivan, M., & Goh, S. K. (2019). Impacts of dynamic managerial capability and international opportunity identification on firm performance. *Multinational Business Review*, 27(4), 339–363. https://doi.org/10.1108/MBR-09-2018-0061

Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information the investors do not have. *Journal of Finance Economics*, 13(2), 187–221. https://doi.org/10.1016/S0040-4069(00)91429-1

Palliam, R., Sbeiti, W., & Ghosh, D. K. (2013). Corporate debt and equity: Another look at their determinants. *Frontiers in Finance and Economics*, 10(2), 31–62.
Panda, A. K., & Nanda, S. (2020). Determinants of capital structure: A sector-level analysis for Indian manufacturing firms. *International Journal of Productivity and Performance Management*, 69(5), 1033–1060. https://doi.org/10.1108/IJPPM-12-2018-0451

Rahayu, A. C., & Rahmawati, W. T. (2019). Infrastruktur, utilitas, & transportasi paling unggul, ini rekomendasi selanjutnya. *Kontan.Co.Id*. https://investasi.kontan.co.id/news/infrastruktur-utilitas-transportasi-paling-unggul-ini-rekomendasi-selanjutnya

Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D. (2016). *Corporate finance* (11th ed.). McGraw-Hill Education.

Sarwono, J. (2012). *Path analysis dengan SPSS: Teori, aplikasi, prosedur analisis untuk riset skripsi, tesis dan disertasi*. Elex Media Komputindo.

Sharma, P. (2017). Long-term persistence in corporate capital structure: Evidence from India. *Research in International Business and Finance*, 42, 249–261. https://doi.org/10.1016/j.ribaf.2017.07.094

Tarus, D. K., & Ayabei, E. (2016). Board composition and capital structure: Evidence from Kenya. *Management Research Review*, 39(9), 1056–1079. https://doi.org/10.1108/MRR-01-2015-0019

Ting, I. W. K., Lean, H. H., Kweh, Q. L., & Azizan, N. A. (2016). Managerial overconfidence, government intervention and corporate financing decision. *International Journal of Managerial Finance*, 12(1), 4–24. https://doi.org/10.1108/IJMF-04-2014-0041

Vo, X. V. (2017). Determinants of capital structure in emerging markets: Evidence from Vietnam. *Research in International Business and Finance*, 40, 105–113. https://doi.org/10.1016/j.ribaf.2016.12.001

Wareza, M., & CNBC Indonesia. (2019). Obligasi baru di semester-II diramal Rp 80 T, ini pemicunya. *CNBC Indonesia*. https://www.cnbcindonesia.com/market/20190716141555-17-85313/obligasi-baru-di-semester-ii-diramal-rp-80-t-ini-pemicunya

Wooldridge, J. M. (2016). *Introductory econometrics* (6th ed.). Cengage Learning.

Yildirim, R., Masih, M., & Bacha, O. I. (2018). Determinants of capital structure: Evidence from shari’ah compliant and non-compliant firms. *Pacific Basin Finance Journal*, 51, 198–219. https://doi.org/10.1016/j.pacfin.2018.06.008

Yousef, I. (2019). The determinants of capital structure: Evidence from GCC and UK real estate sectors. *Real Estate Management and Valuation*, 27(2), 108–125. https://doi.org/10.2478/remav-2019-0019