

## Capital Structure Choice - Does Ceo Experience Matter on Riskier Ventures?

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### Abstract

It is stated by many that the primary driver of most debts is growth - firms borrow to grow and create shareholder value. The question is, how far should firms plunge into debt before they put too much at stake? Naturally, firms that operate in riskier ventures will not jeopardize themselves by leveraging too much. Yet on the other side of the argument, researches have pointed out that experienced CEOs are more capable of maximizing the benefits of debt. As of now, no research has pointed out what happens when CEOs worth their salt lead firms in riskier ventures. Therefore, this research aims to find the causality between CEO's experience and operational risk towards leverage ratio. Operational risk is measured using product uniqueness, a variable that is measured in previous researches as selling expenses per sales. CEO experience is defined by the length of service of a CEO in x company for y years, as long as the CEO holds any managerial role. Using time-series regression model and samples from 180 companies over 5 years, the findings explain almost 90% of the variability of leverage and firms' risk averseness, which is derived from operational risk, is weakened with experienced CEO.

**Keywords:** Leverage, Operational Risk, Management

### Abstrak

Banyak orang menyatakan bahwa pendorong utama sebagian besar utang adalah pertumbuhan - perusahaan meminjam untuk tumbuh dan menciptakan nilai pemegang saham. Pertanyaannya adalah, seberapa jauh perusahaan harus terjerumus ke dalam utang sebelum mereka mempertaruhkan terlalu banyak? Secara alami, perusahaan yang beroperasi dalam usaha yang lebih berisiko tidak akan membahayakan diri mereka sendiri dengan memanfaatkan terlalu banyak. Namun di sisi lain, penelitian menunjukkan bahwa CEO yang berpengalaman lebih mampu memaksimalkan manfaat dari utang. Sampai sekarang, tidak ada penelitian yang menunjukkan apa yang terjadi ketika CEO menghargai perusahaan pemimpin garam mereka dalam usaha yang lebih berisiko. Oleh karena itu, penelitian ini bertujuan untuk menemukan hubungan kausalitas antara pengalaman CEO dan risiko operasional terhadap rasio leverage. Risiko operasional diukur dengan menggunakan keunikan produk, variabel yang diukur dalam penelitian sebelumnya sebagai biaya penjualan per penjualan. Pengalaman CEO ditentukan oleh masa kerja seorang CEO di x perusahaan selama y tahun, selama CEO tersebut memegang peran manajerial. Dengan menggunakan model regresi deret waktu dan sampel dari 180 perusahaan selama 5 tahun, temuan ini menjelaskan hampir 90% variabilitas leverage dan risk averseness perusahaan, yang berasal dari risiko operasional, melemah dengan CEO yang berpengalaman.

**Kata kunci:** Leverage, Risiko Operasional, Manajemen

### INTRODUCTION

Profit-oriented firms by nature are opportunistic, yet firms have limited resources. It is widely believed that the opportunity of growth urges firms to embrace the risk of debt, and according to Faulkender, is the primary driver of debt (Faulkender et al., 2011). Among the

clearest evidences is mature firms with limited possibilities of growth are more generous and more consistent to give dividends (Castro et al., 2016). Such firms, according to pecking order theory do not need debt because of limited possibilities of growth. In other words, they don't need so much capital expense. Over time, such firms will usually sit in excess capital.

Further evidences can be observed from leverage fluctuations during economic cycles (Halling et al., 2016). During periods of faster growth, the benefits of debt outweigh the costs and as a result, firms are willing to accept a higher cost of debt to capture as much opportunity as possible. On the other hand, during periods of recession the cost of debt outweighs the benefits. Firms prioritizing their survival will try to get rid of debt, to minimize the risk of bankruptcy. Because macroeconomic and microeconomic conditions always fluctuates over time, it is widely believed that optimal leverage ratio also fluctuates over time, and is subject to the trade-off between benefits and risks of debt.

Maybe equally important is the fact that multiple cross-studies have pointed out that risk is not universally equal across firms within the same industry. Each product made by firms possesses product risk - an innate operational risk that is derived from the product profile itself and is added on top of the risk of debt. Among the clearest examples are Titman's monumental research which shows that firms that produce unique or specialized products are exposed to higher bankruptcy costs in case they liquidate (Titman & Wessels, 1988). Such firms will not jeopardize themselves further with excessive leverage and are widely expected to bear a lower debt to equity ratio compared to firms with generic products aimed at the mass market.

If two firms produce two unique products, both products being perfect substitutes to each other, both firms will still operate at a different level of operational risk because both firms cater to different sets of customers. Multiple researches have pointed out that product profile and segment affect customers and suppliers in multiple ways, such as public debt price (Gençay, et. al., 2015) and cost of debt (Kim et al., 2015). Following Titman and Wessels' research, the link is found to be amplified when the counterparty is a significant contributor to the firm's income, the product or service is unique, and the counterparty is in financial distress (Lian, 2017).

Moving on from operational risk, according to the upper echelon theory, the performance of firms is mostly derived from the performance of the most influential employees within the firm. Naturally, the most influential employees are top management and key employees. When it comes to managing risk, stakeholders widely rely on the guidance of top management, whose position is usually is styled as Chief Executive Officer, abbreviated as CEO. Researches have pointed out that the CEO's experience has a positive correlation with leverage ratio (Ting, et. al., 2015). On average, inexperienced CEOs tend to be more conservative than their more-experienced peers. As the CEO's experience increases, the CEO's debt aversion decreases. It is also interesting to mention that the CEO's experience has been proven to be negatively correlated with the cost of debt (Matemilola et al., 2017). Additionally, the CEO's experience also affects corporations in multiple ways, such as international expansion. It is believed that experienced CEOs are more capable of predicting the economic cycles and taking advantage of them. As a result, firms which are being led by CEOs with more experience has a higher probability to expand internationally, regardless of CEO's risk preference, gender, industry, market, technology, and whether CEO is controlling shareholder/relative of controlling shareholder (Ramon-Llorens et al., 2017).

However as of now no research attempts to explain whether more experienced CEOs leading firms in riskier ventures are less risk-averse. So this paper aims to observe, analyze, and explain the missing link.

According to Titman and Wessels (1988), product uniqueness is defined by three factors. The first one is Research development expenses over sales (RD/S). Unique products have higher research expenses to differentiate itself from its substitutes.

The second factor is Selling expenses over sales (SE/S). Unique products require more effort to be sold, because it is not being made as mass-market products.

Last, the third factor is Quit rates (QR). Unique products require workers with specific talent or skills which is harder to find, may require specialized training. As a result, those workers are costlier to replace. Because of those reasons, firms with unique products have a lower turnover ratio.

As suggested by prior researches, this research will use product uniqueness to measure product risk.

Since the aim in this research is to explain the link between CEO experience and product risk, our first three hypotheses are as follows :

H1: Higher CEO experience will result in a higher leverage ratio

H2: Higher product uniqueness will result in a lower leverage ratio

H3: Higher CEO experience \* product uniqueness will result in a higher leverage ratio

To further increase the coefficient of determination and assure the reliability of the study, this research will include a handful of variables, which according to multiple cross-studies, affect leverage ratio.

The first variable is firm size, which has been empirically proven to affect leverage ratio for a lot of reasons (Dang et.al., 2018). Larger firms are almost always more diversified compared to their smaller counterparts, and as a result, possess more assets which may be utilized as collaterals. Largest firms in most cases operate multi-nationally (Benito-Osorio et.al., 2016) and therefore have lower geographical and political risk compared to firms that operate in a single segment within a country.

However, larger firms do have their negative vices. Firm size is positively correlated with risk-taking. It is found that larger firms possess the propensity to assume excessive risk to obtain profit in the short term (Boyd & Heitz, 2016). Furthermore, larger firms are prone to pursuing more questionable investment opportunities with negative net present value (Bhagat et al., 2015).

Interestingly, that firm size is exempt as a significant contributor towards leverage ratio after the crisis period (Jermias & Yigit, 2019). It is discovered that after a crisis, firms are mostly at their recovery phase and are less aggressive when compared to periods of high growth. Not only that, but debtors are also much more selective during and after the crisis period. These findings support Halling's research which concludes that during periods of faster growth, the benefits of debt outweigh the cost, and vice versa (Halling et al., 2016). Therefore, based on all these researches above the fourth hypothesis is :

H4: Higher firm size will result in higher leverage ratio

Cash flow is the firms' ability to produce cash internally. Cashflow is one of the important financial metrics for investors, creditors, and management. For controlling shareholders the importance of cash flow is paramount to diminish, complement, substitute, or even eliminate the reliance on external financing (Rezaei & Jafari, 2015). Prospective investors as well as non-controlling shareholders use discounted cash flow analysis to measure the firm's net worth to make investment decisions. Creditors use cashflow analysis to make financial decisions, more specifically to analyze firms' ability to repay the debt. Management wants to create and ensure a steady cash flow to cover daily expenses.

Because of the importance of cash flow in an environment where cash flow is highly volatile, higher volatility leads to lower leverage (Memon et al., 2018). Without steady cash flow, firms possess higher operational risks, and since firms want to ensure their survival, they will not jeopardize themselves further with overleveraging. This is why firms with highly volatile cashflow almost always try to carry a higher amount of cash compared to their opposite counterparts.

The link between operational cash flow and leverage ratio is originally explained by the pecking order theory. Pecking order theory states that firms almost always use internal cash first to finance capital expenses because no risk is involved by using internal cash, only opportunity cost. If internal cash is found to be insufficient, firms will attempt to raise debt to fulfill capital expenses. If by any means leverage is not enough, the third and final option would be equity raising, i.e. selling stocks, IPO, private placement. Equity raising is generally less preferred compared to debt raising because by equity raising, controlling shareholders

part with a fraction of their controlling rights and their claim to the hard-earned profits. Therefore, based on all the researches above the fifth hypothesis is :

H5: Higher cash flow will result in a lower leverage ratio

Since it has been stated before that the primary driver of the debt is growth (Faulkender et al., 2011), naturally growth is included as one of the controlling variables. Among the most extreme and clear examples are found in China, a country that has enjoyed double-digit growth in the past three decades. Rapidly growing firms in China have no other choice but debt to finance their growth (Chang et al., 2014). Even though their natural cashflow could suffice, they would leverage themselves anyway out of fear of losing their market share to their competitors.

Growth creates traction. Similar to a car, when it is not moving no traction is created. When the car starts moving, initially it would have to exert a great amount of effort and resources to resist the status quo. When it has started moving, it only needs to exert a sufficient amount of effort and resources to overcome traction and move at a steady pace. However, if it tries to move much faster, the faster it moves, the greater the traction would be, and the greater the effort and resources it would need. Additionally, the faster it moves, the odds of crash increases.

The traction is the law of supply and demand itself. When the majority of industries grow rapidly the demand for capital would increase and outpace the supply. As a result the cost of borrowing will rise. And as most of you have presumed, the risk of bankruptcy is the odds of a crash. Both the risk of bankruptcy and the availability of capital is the bottleneck of rapid growth. However, if only a handful of industries grow faster than others, the cost of borrowing stays mostly constant. In this case, firms tend to be overleveraged if their industry enjoys significant growth (Li & Islam, 2018). The same research also discovered that firms within the same industry might not enjoy equal opportunities.

Another one of the greatest detractors of leverage is competition. Firms can and will engage in price wars by increasing advertising expenses if their rival is heavily indebted, to bankrupt their rival, and subsequently gain market share, yet only if their products are substitutable (Billett et al., 2018). Since shreds of evidence have pointed out that industrial growth may not result in a uniform increase of opportunities and leverage, firm growth is used instead of industry growth, which is defined by capital expense divided by sales. Therefore, the sixth hypothesis is :

H6: Higher growth will result in a higher leverage ratio

Within the agency theory (Jensen & Meckling, 1976), the agency conflict is not limited between management and owner, but also includes conflict of interest between creditor and debtor (Lugo, 2017). If the majority owner's ownership is relatively low, the majority owner might have the incentives to exploit their firms to achieve personal gain at the firm's expense – which affects all stakeholders, including the firm's creditors. On the other side, if the majority owner's ownership is very high, the majority will always attempt to lower the cost of debt and will never exploit their firms. As a result, the relationship between ownership of majority owner and the cost of debt is a U-shaped chart where the maximum cost of debt is attained when ownership is between 42.8% to 48.3%. So it is a given that level of ownership affects leverage ratio.

Additionally, investors, by their nature, are inclined to support their firms whenever possible so that they may gain from the increase of shareholder value. However, institutional investors' presence in the Indonesian equity market is relatively smaller than the equity market in developed countries (Utama & Jatmiko, 2015). Therefore, majority ownership is included as a variable and choose not to include institutional ownership. The seventh hypothesis is :

H7: Higher majority ownership will result in a higher leverage ratio

The relationship between profitability and debt goes both ways in both directions. While a high leverage ratio mostly have a strong negative impact on profitability, profitability may result in a wide array of leverage ratios.

The goal of firms is to maximize shareholder value, and there could be no shareholder value without profit. Which is why among all corporate goals, profit is the most sought-after. Profitable firms have no need to go deep down into debt (Ngoc Vy, 2016), yet another group of firms feel debts are obligatory to multiply the profits over the long run (Filipovic & Demirovic, 2016). On the other side, with low profitability, usually most firms avoid debt whenever possible. However, very few firms may still go into debt for whatever reasons or strategy they have.

Leverage ratio varies regardless of profitability because of other multitudes of factors, such as firms goals, industries, competition, controlling shareholder interests, and management strategies (Eriotis, 2011). Based on other researches, the last hypothesis is higher profitability will result in a lower leverage ratio as the eight and last hypothesis.

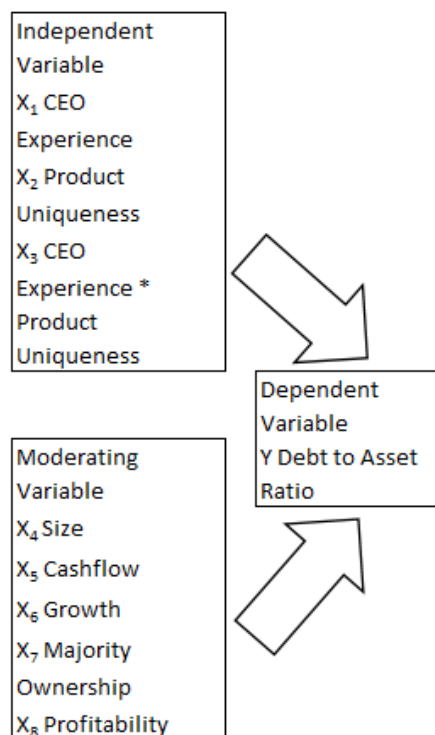
H8: Higher profitability will result in a lower leverage ratio

## RESEARCH METHODS

This research uses time-series regression model, adopting the model used by Titman and Wessels, with the latest researches included in the literature review, albeit with small modifications. In Titman's research, eight variables were used: the collateral value of assets, tax-shields, growth, uniqueness, industry, size, volatility, and profitability.

Among those eight, six variables are retained. The collateral value of assets and tax shields are essentially represented by the leverage ratio, which is the sole dependent variable in this research. Growth, size, and profitability remains as moderating variable. Volatility is harder to measure because the Indonesian stock market is less transparent and less efficient compared to its American counterpart. Additionally, since the Indonesian stock market is mostly dominated by family-controlled corporations, majority ownership is more prevalent as controlling variable and institutional ownership is less prevalent.

Uniqueness retains its place as an independent variable alongside CEO experience. Furthermore, to measure the link between uniqueness and CEO experience, the product of both variables is introduced as the third independent variable. Finally, one additional controlling variables are introduced into the research: operational cashflow.



Picture 1. Conceptual Model.

Based on the conceptual model of this research, two empirical models are calculated in this research :

$$DEBT = \alpha + \beta_1EXP + \beta_2UNIQ + \beta_4SIZE + \beta_5CASH + \beta_6GRWT + \beta_7PRFT + \beta_8OWNR + \varepsilon$$

(Equation 1)

$$DEBT = \alpha + \beta_1EXP + \beta_2UNIQ + \beta_3EXP \times UNIQ + \beta_4SIZE + \beta_5CASH + \beta_6GRWT + \beta_7PRFT + \beta_8OWNR + \varepsilon$$

(Equation 2)

$\alpha$  is alpha.  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8,$  and  $\beta_9$  are coefficients. EXP is the CEO experience, which is measured by total years of CEO's managerial experience across industries and companies (Matemilola, et.al.; 2017). UNIQ is product uniqueness which is measured from sales divided by selling expenses (Titman & Wessels; 1988). SIZE is firm size, measured from the log of total assets (Rezaei & Jafari, 2015). CASH is operational cashflow, measured by operating cash flow divided by total assets from the previous year (Faulkender, et.al.; 2011). GRWT is the firm growth rate, measured by capital expenditures divided by total assets (Titman & Wessels; 1988). PRFT is profitability, which is measured by operating income divided by total assets (Titman & Wessels, 1988). OWNR is the total shares owned by controlling shareholder divided by outstanding shares (Lugo; 2017). DEBT is leverage, which is measured by debt to assets ratio.  $\varepsilon$  is error

There are several limitations to this study. First, it's based only on firms publicly listed on the Indonesian Stock Exchange. Furthermore, a good number of firms listed in the Indonesian Stock Exchange do not have research expenses, so the proposed variable "Uniqueness" cannot be measured from RD/S, as it will greatly reduce the number of samples. Additionally, since Indonesia is a developing economy almost all of the firms listed have nothing to do with being high-tech. It means that Quit Rates cannot be used to measure "Uniqueness", as a nonspecialized workforce is easily replaceable.

This research filters data between 2012 to 2017 from over 500 publicly listed firms in Jakarta Stock Exchange. Out of 567 firms, 180 samples is selected. Some firms are listed before 2012, and does not experience a change in CEO leadership, which is necessary otherwise EXP cannot be measured. Some firms have positive debt, which unables DEBT to be measured. Some firms have negative equity, and negative equity will result in outliers. Some firms do not have sales income, and thus UNIQ cannot be measured. Some firms do not book sales expenses, and as such UNIQ cannot be measured. Some firms have change in leadership (CEO). Also, CEO experience must be able to be confirmed through the corporate website and/or Bloomberg and/or Thomson Reuters database. Some firms has exercised any corporate actions which result in a change of the number of shares outstanding or a change of the controlling shareholder during the period of analysis.

**Table 1. Data Sample and Selection Criteria.**

CRITERIA	N
#firms listed in JSE as of 2017	567
#firms listed after 2012	96
#firms without debt	30
#firms with negative equity	29
#firms without sales	25
#firms without selling expenses	21
#firms which changed CEO	133
#firms whose CEO career cannot be verified reliably	31
#firms who undergone corporate action	22
#total samples	180

Selected data sample will be winsorized and tested using kurtosis test, multicollinearity test, heteroscedasticity test, and stationarity test. Finally, F-Test will be used to determine the outcome

## RESULTS AND DISCUSSIONS

Table 2 reports the descriptive statistics (mean, median, maximum, minimum, and standard deviation). It is found out that the greatest standard deviation is derived from EXP variable, in agreement with Utama's findings that most listed companies in Indonesia is family-controlled.

**Table 2. Descriptive Statistics.**

	Mean	Median	Max	Min	Std. Dev.
<b>EXP</b>	22.448	21.000	37.000	11.000	8.209
<b>UNIQ</b>	0.157	0.123	0.367	0.044	0.105
<b>SIZE</b>	28.474	28.463	30.560	26.443	1.354
<b>CASH</b>	0.050	0.041	0.176	-0.069	0.075
<b>GRWT</b>	0.047	0.034	0.124	0.004	0.040
<b>OWNR</b>	0.409	0.434	0.728	0.000	0.227
<b>PRFT</b>	0.131	0.096	0.365	-0.013	0.119
<b>LVRG</b>	0.299	0.282	0.587	0.063	0.170

It is shown in Table 3 that multicollinearity is not a problem in this research, because none of the variables shows result greater than 0.8.

**Table 3. Multicollinearity Test.**

	EXP	UNIQ	SIZE	CASH	GRWT	OWNR	PRFT	LVRG
<b>EXP</b>	1.000							
<b>UNIQ</b>	0.006	1.000						
<b>SIZE</b>	-0.019	-0.182	1.000					
<b>CASH</b>	-0.062	-0.144	0.082	1.000				
<b>GRWT</b>	-0.069	-0.127	0.142	0.268	1.000			
<b>OWNR</b>	-0.050	0.002	-0.100	0.094	0.032	1.000		
<b>PRFT</b>	-0.002	0.172	0.185	0.201	0.000	-0.062	1.000	
<b>LVRG</b>	0.023	-0.187	0.155	-0.216	0.003	-0.089	-0.123	1.000

Applying time-series regression model, the findings show that the highest contributors towards leverage ratio are size, followed by experience, and growth while the highest detractors are cashflow and profitability. All variables are significant, but one of our primary hypothesis is rejected because product uniqueness increases leverage ratio by a little (t-Stat is 2.4263).

**Table 4. 1st Regression Model Result.**

No	Variable	Std. Error	t-Stat	Result
H1	EXP	0.0002	14.0920	Significant, hypothesis accepted
H2	UNIQ	0.0206	2.4263	Significant, opposite effect
H4	SIZE	0.0014	22.1214	Significant, hypothesis accepted
H5	CASH	0.0325	-7.5095	Significant, hypothesis accepted
H6	GRWT	0.0122	9.3501	Significant, hypothesis accepted
H7	OWNR	0.0050	4.9622	Significant, hypothesis accepted
H8	PRFT	0.0069	-4.4103	Significant, hypothesis accepted

However, after including the moderating variable in the second regression model, all hypothesis is both accepted and significant.

**Table 5. 2nd Regression Model F-test Result.**

No	Variable	Std. Error	t-Stat	Result
H1	<b>EXP</b>	0.0004	3.7333	Significant, hypothesis accepted
H2	<b>UNIQ</b>	0.0419	-3.4303	Significant, hypothesis accepted
H3	<b>EXP*UNIQ</b>	0.0020	4.5957	Significant, hypothesis accepted
H4	<b>SIZE</b>	0.0011	26.0858	Significant, hypothesis accepted
H5	<b>CASH</b>	0.0365	-7.3517	Significant, hypothesis accepted
H6	<b>GRWT</b>	0.0113	8.5249	Significant, hypothesis accepted
H7	<b>OWNR</b>	0.0058	3.9730	Significant, hypothesis accepted
H8	<b>PRFT</b>	0.0047	-8.8783	Significant, hypothesis accepted

This leaves me with a question to address, which is why H2 is rejected in the first model, but accepted in the second. Based on several other pieces of research it can reasonably deduced that the causes are intense competition, price war, maximizing sales. Yet when moderating variable is present, the actual link between experience, product uniqueness, and leverage becomes clear.

Both models are sufficiently reliable, having narrowly missed on producing  $R^2$  of 0.9. The first model has  $R^2$  of 0.8869 whereas the second model fared slightly better at 0.8876.

Within both models, SIZE is the single highest contributor towards leverage ratio. The findings agree with Dang that SIZE functions as the enabler of leverage. Debt is inherently risky for firms and it is risky as well for creditors. Because of that, almost every creditor will demand any form of collateral to protect their interests in case of bankruptcy. Without assets, there would be no collateral, and assets increase SIZE. Ultimately, it is the primary reason why SIZE stays as the most prevalent variable across multiple models and researches. Additionally, the larger the SIZE is, usually, the firm is more diversified, operates multi-nationally, enabling those firms to afford more risks, and engage in more opportunities.

It interesting that GRWT, which is stated as the primary driver of debt misses the spot for the most prevalent variable. SIZE with t-Stat of 26.0858 as an enabler of debt takes the most prominent spot. However, it does not dismiss the importance of GRWT with t-Stat of 8.5249. There are grains of wisdom found in the researches conducted by Bhagat, et. al. (2015) and Li & Islam (2018). Bhagat, et. al. (2015) stated that in periods of recession firms tend to have significantly lower leverage because the risk of debt outweighs the benefits. Additionally, liquidity is scarcely rare in periods of recession. Li & Islam (2018) stated that firms are prone to overleveraging themselves when their industry enjoys significant growth, because growth requires capital, and those firms are not capable of funding their capital requirement with their cashflow. Yet, at the same time, those firms do not want to lose their market share against their competitors.

The second most prevalent variable in the first model is EXP with t-Stat of 14.0920, while the third most prevalent variable in the second model is GRWT with t-Stat of 8.5249. With the addition of the moderating variable, the position of GRWT and EXP becomes reversed. EXP with t-Stat of 3.733 becomes the third most prevalent variable while GRWT with t-Stat of 8.5249 becomes the second most prevalent variable. In these findings, it can be concluded that in redder oceans, CEOs rely more on growth opportunities.

The fourth most prevalent variable is OWNR with t-Stat of 3.9730. Within both models, a higher share of ownership from majority shareholder slightly increases leverage ratio regardless. The findings support Lugo's research that firms with greater owner controls indeed enjoy a significantly lower risk of exploitation and less conflict of interest with creditors.



In the first model, UNIQ with t-Stat of 2.4263 is the fifth and least prevalent contributor towards LVRG, but in the second model, UNIQ with t-Stat of -3.4303 becomes the third and least prevalent detractor. This findings means that it is aligned with the research that states firms may and will engage in debt to maximize sales regardless. However, considering the second model, it is shown that CEOs become more risk-averse towards operational risk compared to their less experienced counterparts. Therefore, firms led by more experienced CEOs are on average better off in times of recession when the cost of debt outweighs the benefits.

Across both models, CASH with t-Stat of -7.3517 is a constant prevalent detractor of LVRG. The presence of an abundant amount of cashflow naturally overrides the need for leverage regardless of other factors. However, in the second model, the t-stat of PRFT is doubled from -4.4103 to -8.8783 and PRFT becomes the most prevalent detractor. Both variables are intertwined but fundamentally different. Whereas PRFT is mark-up value for every cost, CASH is simply cash earned versus assets. In layman's terms, CASH is the bulk of sales, while PRFT is the bottom line. The findings align with Titman's research that firms with specialized products usually rely on capitalizing higher-margin rather than increasing sales, because increasing sales would almost always result in higher capital expenses to set up more factories and higher working cashflow to fund day to day operations. Both of those increases capital requirement, and if it is not met, such firms will have to resort to even more leverage, driving the risk even further.

## CONCLUSIONS

Based on the findings, the first conclusion is not all firms within the same industry can be operated equally. In the simplest analogy possible, firm A produces your everyday chocolate but firm B produces sugar-free chocolate. Since not everyone has diabetes, firm B requires a specialized workforce, such as nutrition scientists, and pays higher compensation to reduce employee turnovers. Furthermore, firm B requires a more categorized approach in advertisement. Firm A pays ads on TVs and gets several times of sales compared to firm B who pay ads for pamphlets to be put in hospital and insurance firms. It is clear that even though both firms operate in the same industry and produce perfectly substitutable chocolate, firm B has greater operational risk compared to firm A.

The second conclusion, which is derived from the first conclusion, is that firms with specialized products require CEOs with greater know-how. Since other researches have suggested that CEOs with greater experience delivers more shareholder value, knowledgeable leaders are more crucial in specialized firms.

The third conclusion is the role of profitability becomes twice as prevalent in the presence of specialized products. Firms with specialized products will have to resort to having a greater profit margin to grow without leverage. Since those firms cannot employ mass-market strategies, they can ensure their continual growth by having a larger margin and maintaining customer loyalty.

The fourth conclusion is in times of recession, firms are better off if they are led with CEOs with higher experience. In the second model, it is shown that the prevalence of PRFT is doubled. It means that with higher experience, CEOs will rely on PRFT which is crucial towards the survival of specialized firms.

The fifth conclusion is growth is not the primary driver of debt. The size of the firm as an enabler to leverage is the most prevalent, and the second most prevalent is experience. In the presence of bankers and having no collaterals, who are CEOs to disagree if they have neither credibility nor accomplishment?

The sixth and final conclusion is firms that operate in riskier venture are much better off under leadership of experienced CEO. The findings in the second model shows that GRWT overrides EXP. It means that more experienced CEO rely less on experience, and more on growth opportunities.

However, it is true that this research has limitations. One of the biggest limitations is most of the corporations listed in Jakarta Stock Exchange is controlled by families, and with

so very few samples of institutionally controlled firms, it is not possible to decipher whether firms operate better if CEOs are picked from professionals, or from family members, something that could be explained further by future researches.

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