

# The Effect of Financial Market Frictions to Firm's Diversification Level in Indonesia

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## ABSTRACT

New interesting facts had emerged within the last few decades. Diversification behavior of firms are believed to increase in parallel with the pattern of external market frictions. Firms with high level of diversification can alter the cost of tight financial market frictions by reallocating capital internally between divisions. Several facts are argued and demonstrated in determining whether diversification creates higher value and benefit for firms during times of distress. Using data provided by the Indonesian Stock Exchange (IDX) and the Indonesian Bond Pricing Agency (IBPA), it is verified that well-diversified firms in Indonesia can mitigate the shocks in the external market. This research is conducted under a time period of 10 years, from 2008 to 2017.

**Keywords:** *Diversification, Financial market, Conglomerates, Market friction, Internal market.*

## 1. INTRODUCTION

Evidences suggest that most firms expand its scope and market reach in building their empire by diversifying into different segments [1]. Diversification of segment reach is conducted to reallocate resources for better efficiency and productivity. However, reallocation of resources seldom happens within firms instead of markets, and is not exclusive to a single industry [2]. Matvos, Seru, and Silva (2017) identifies the benefit of diversification in providing a wider market scope, allowing firms to reallocate resources more efficiently [3]. Because the aim of diversifying to different segments is to build empire, diversification is expected to happen and dominate mostly in good times. Under this condition, firms are believed to be oversupplied with cash and capital market are loose at the same time. However, Matvos, Seru and Silva in 2017 [3], suggest that firms diversification aligned closely with the increase of external market frictions. The increasing situation of external market frictions implies a tightening capital market. This idea is strongly supported by [2], [4], [5].

External market frictions are believed to be the frictions undergone in the market. These frictions often include the asymmetric information and agency problems [6]. It also causes the access to the external financing

market to be costlier. Financial frictions is the shocks that are transmitted to the broader economy, where funds may not flow to the highest value use without incurring additional significant cost [2]. Hovakimian (2010) explains market frictions as constraints in the market. It is the restriction of the amount of capital under the manager's discretion. This restrains the potential of good investment, as the capital allocation could not be maximized [4].

It is believed that firms do not change its scope in isolation [3]. Yet, firms tend to react to evolvment of scope in times of high external market frictions (i.e. global financial crisis). Evidences prove that large scope of publicly traded firms tends to widen their scope during these times [2]–[5]. Matvos and Seru (2014) predict that the behavior of firms in altering the financial shocks may include a reallocation of resources internally [2], where Hovakimian (2010) portrays that the internal capital within firms allows the firm to gain the opportunity in transferring capital between segments [4]. It is to be said that internally diversified firms may be highly able to phase out financial shocks in the market [5]. He believes that internal capital market plays an important part in a diversified firm. Hence, diversification behavior is emerging enormously as firms create internal capital market, thus reducing reliance to the external market,

avoiding credit market imperfections. Therefore, internally diversified firms can focus mainly to the reallocation process.

Internal resource allocation allows firms to withdraw from the external market's additional cost [5]. Matvos and Seru (2014) further qualifies that the performance of the diversified conglomerates investments improves when external capital market is distressed, relatively to the stand-alone firms, as the cost of the reallocation of resources internally becomes more beneficial and effective compared to the additional cost incurred in the external market within the time [2]. They also prove that there is a strong non-linearity in the effect of time-varying external capital market conditions. Based on [3]–[5], well-diversified firms can easily benefit highly during times of financial market freezes. As external market friction increases, financial market crash and eventually will freeze, where it may lead the financial markets to bearish. However, firm's diversification brings benefit and can potentially dampen the effect of financial market freezes. Diversification allows firms to avoid those underperforming, costly and freezing market sections and focus on those with high potential productivity internally to outperform market freezes [5]. Moreover, conglomerates are able to reallocate investments from one less productive sector to other more productive sector, as firms diversify [3].

With this intention, reallocating internal capital resources became more attractive compared to external. Thus, eager conglomerates diversify companies to better survive in financial market freezes that eventually result in outperforming their competitors. Increased diversification promotes better allocation of the internal financing. This strategy intuitively purges the likelihood of a low investment opportunity to a better investment opportunity. Therefore, diversification benefit should be at highest when conglomerates are more diversified in times of high external financial market frictions [3]. Although Hovakimian (2010) argues that the diversification causes by financial pressure may lead to an overinvestment [4], it may also cost other firms of underinvest. Disregarding the cost of the investments, it will still be more effective than entering the external capital market.

With the characteristic of market frictions in the financial market and potential firm's diversification benefits, firms show a positive attitude towards diversification strategy. As external market clashes, internal capital market became an interesting area to develop [2]. With this idea, it is predicted that firm's diversification attitude is affected by the level of frictions in the financial market. This paper aims to test the relationship between the effect of financial market frictions to firm's diversification behavior in Indonesia, which will be further discussed throughout the paper.

## 2. LITERATURE REVIEW

Financial market friction happens when there is a shock in the economy. It is defined to be times of economic slowdown, where external market frictions are usually measured by the difference and changes of the over-night rate with the Government's bond rate [3]. Financial market frictions also happen when a country experiences fluctuation in real economy [7]. Furthermore, frictions can further happen when economy slowdown is followed by less availability of lending and borrowings.

Financial market frictions are known as a mismatch of price in the market [8]. The frictions create additional costs interfering in trade. It is further elaborated as anything that drives a wedge between the amount of risk that the investor bears and the amount investor prefer to bear, given the tradeoff of risk and return.

Previous empirical researches are mostly conducted within a frictionless market framework, where it was actually impossible to obtain it [8]. There are a few reasons why understanding financial market friction would benefit researches, investors, conglomerates, and firms [8]. First, it generates real costs for investors. Understanding of the importance of these cost would allow investors to actually calculate the transaction costs on deciding where to invest correctly and placing them best to gain better profit. Second, it creates business opportunities. Transaction costs that appeals in the market are somewhat paid to either an individual or entity. Third, financial market frictions can and do changes over time. New frictions arise, and previous frictions fade through time.

Financial market frictions is a part of external capital market [4]. The external capital markets are often known to be the information asymmetries or agency problems [1], [9]. Hovakimian (2010) also explained financial constraints as a restriction of access towards capital. These can be identified based on recessions and monetary contractions in the economy. As monetary economy contracts, liquidity shocks may arise. These shocks lead to changes of behavior of the firms. Contraction in the monetary section, higher interest rate for capital access, leads firms to have tighter financial constraints. Firms would experience tighter access to bank financing supply and erosions of balance sheets [10]. Moreover, this tighter external access will further lead firms to a decline in the growth rates of capital expenditures, inventory, assets, and sales [4].

Diversification is defined widely by researchers from time to time. Diversification is defined as spanning wide range of investment over several industries [3]. Moreover, they also explained diversification as strategy undertaken in avoiding market freezes [3]. Additionally, diversification can be defined as the ability to dampen the exposure to market shock [11].

Diversification is classified into two categories [12]. Business diversification and ownership diversification. Business diversification is defined as spreading segments in different industries, and ownership diversification as a firm holding other fractions of other companies' ownership. It is also explained by Matvos and Seru (2014), that diversification is the ability for firms to be able to reallocate their resources internally [2].

On the bright side, internal allocation gives centralized control over the entire process, allowing firms to surpass the cost in external capital market [13]. However, Stein's idea had been challenged by several studies who argues that diversification in firms leads to a distortion towards weak divisions by managerial socialistic concerns [14], [15].

Diversification is also referred as internal capital markets by Hovakimian (2010) [4]. The internal capital market gives the opportunity for diversified conglomerates to flexibly transfer capitals across segments in avoiding the external capital market frictions. Through the transfers, Hovakimian believes that it could increase efficiency, as investments that are not financed externally gain access to internal capital flow. Nonetheless, the flexibility of fund allocation may also lead to inefficiency. Scharfstein and Stein (2000), and Rajan et al. (2000) believes that the flexibility may lead to an overinvestment in poor projects, sacrificing the good ones due to financial restrictions in the market [14] [15].

Conglomeration emerges from the opportunity of profitable reallocation [5]. He presumes that "reshuffling" of capital could minimize, at minimum, the misallocation effects of market imperfections. With strong internal capital market within firms, reliance on external funding is reduced. Thus, firms can avoid the effect of external imperfections and focus on channelling the funds to a more productive unit more efficiently. Therefore, internal reallocation plays a significant role for diversified conglomerates.

Internal allocation is also explained as a capital that is free from frictions [5]. He believes that investing in internal capital for firms could be a substitute for the external finance market in organizing production. However, it will not be a perfect substitute for market ideas. The imperfection is caused by investing in internal market that acts as the capital market, which may cause a shortage of ideas.

Financial friction may bring positive impact towards the internal allocation. As economy experiences downturn, leading to recession, firms may benefit from the situation. As external frictions increase, internal capital market becomes more efficient to invest in [4]. In addition, internal capital could bring positive effect to the economic development [5]. Small business groups have low productivity establishments, while conglomerations

contributes a high productivity establishments compared to stand-alone firms. As a result, a higher productivity will eventually lead to an improvement in the economic development through an increase in the income per capita. Through internal capital, businesses are considered to be able to achieve strong self-financing for their firms. In the long-run, strong self-financing firms are able to overcome the financial frictions through capital allocation [16].

### ***Hypothesis Development***

Diversification was viewed as a positive strategy during 1960s to 1970s by businesses and conglomerates. However, in 1980s to the early 1990s, the idea swung like a pendulum to a debate of a negative impact of diversification [17]. Moreover, diversification allows conglomerates to surpass external capital market by exercising control in the internal capital market [2]–[5], [13], [17]. Nonetheless, diversification strategy can also cause a negative impact to the firms [14].

Diversification allows managers to reallocate their excess cash to different sectors of investment within the firms [14]. However, this allocation is more likely to be driven by self-incentives of the managers. Diversification in firms are considered as a way to re-channel the funds from the least effective investments to the most effective ones. Despite the ideal, diversification might happen vice versa and creates an expense of poor investment in the cost of the good ones [18].

In the late 1990s and early 2000s, a new debate arise [17]. New idea sparks about the availability of the so-called "diversification discount". There are high correlation between how the conglomerates uses the benefit of diversification to mitigate the frictions in the capital market [17]. Additionally, Matvos and Seru also did a research on the reallocation of capital in response to the financial friction. They showed how firms shifts their resources from one sector to the other in response to the financial shocks [2].

Financial frictions can be defined as the difference between the business return from capital and the market cost of capital [19]. Matvos and Seru defined financial shock as a function impairment of the intermediation sector that is transmitted to the broader economy [2]. This impairment may cause the funds to require additional cost to flow to the highest value use. Matvos and Seru also found proof of a strong non-linearity in the effect of time-varying external capital market conditions. This suggest that extreme external market frictions bring greater impact during time of distress.

Thus, we believe that diversified firms have a high potential in surviving in the external market frictions. Diversified firms have the power to reallocate their resources internally. With less cost incurred compared to the additional cost in the external market, diversification

became an opportunity for firms to survive. They pointed out that the ability to diversify internally brings firms the benefit of full control. With the advantage of being less costly, diversification became a tendency pattern during times of external market frictions. A combination of both advantages could allow the diversified firms to outperform the external market during times of friction. It is proven in the U.S. that a diversified conglomerate performs better in comparison to the stand alone firms.

Financial frictions are always present in all market, as it is nearly impossible to obtain a frictionless market in real economy [8]. A wide gap and clashing of financial frictions in the market may lead to a market freeze. As tightening market seldom happens during times of low economic growth, downturn, or even economy recession [3]. During these times, financial markets are most likely to experience hardships and loss from the widening gap of the frictions [8]. Nonetheless, diversification pattern appears during these times and tend to happen to prevent losses during the freezes.

Moreover, diversification is also used to avoid costly frictions, as the widening of friction gaps increases [3]. A tightening market friction means that there are additional costs that burdened investors and firms [8]. With higher cost of one transaction to be settled externally, firms and investors tend to pull out from all transactions within the market. Pulling away transactions in the costly external market results in excess cash within a firm [2]. Through the excess cash, reallocation of resources internally becomes attractive.

In addition, reallocation of internal capital in a diversified firm would allow firms to be less dependent towards the external market. A highly distressed market would aggravate firms to obtain funds. In that case, stand-alone firms would have difficulties in retrieving capital, as it would require more. On the other hand, a well-diversified firm can cover one segment’s fund necessity through other segments’ excess holdings. As a result, firms that are well-diversified would have alternative resources to cover their indispensable fund.

Diversification usually happen either to reduce risk, increase profit, or both [8]. During times of frictions, diversification behavior becomes an opportunity [2]. Diversification itself is generally defined as distributing investments to different sectors to reduce risk. Matvos and Seru explained that diversification allows firm to be able to channel their excess funds internally between divisions or industry without implementing any costly transactions from the external market [2]. With these arguments, it is predicted that firms that diversify by reallocating resources internally has a higher chance of mediating the market freezes compared to the stand-alone firms, as it becomes more efficient than settling transactions in the external market. Therefore, we can hypothesize:

**H1: Financial market frictions have influence over firm’s diversification behavior.**

**3. DATA AND DESCRIPTIVE STATISTICS**

The sample taken under this research follows several requirements. The firms included in this research are:

**Table 1.** Firm Sampling

Total of publicly listed firms in IDX	501
Firms that are listed after 2008	175
Firms in financial industry	91
Firms that has incomplete data	23
Total amount of firm sample	294

The companies in the sample are with the following specifications: (1) All firms that are consistent. Excluding segments with negative assets, investments, or sales. (2) All firms listed under the Indonesian Stock Exchange. Excluding firms that have missing information on assets, investment, or sales for all divisions. (3) All firms that annually report financial data between 2009 to 2017 period. All firms that are unlisted or drawback from the Indonesian Stock Exchange within the period are excluded. (4) All sectors exclude finance sector. Finance sector has a different capital structure with other firm sector.

We use the *TED Spread* in measuring the financial friction in the market. *TED Spread* is defined as the difference between the interest rates on interbank loans to the short-term US government T-bills. While *TED* itself, is the three-year moving average of the *TED Spread*. However, as this research is conducted in Indonesia, the *TED Spread* used will be based on the difference between the Jakarta Interbank Offer Rate (JIBOR) for the 6-month rate against the Government 6-months Treasury Bill Rate (T-Bills).

$$TED\ Spread = JIBOR_t - T-Bill\ Rate_t \tag{1}$$

$$TED_t = \frac{TED\ Spread_{t-1} + TED\ Spread_t + TED\ Spread_{t+1}}{3} \tag{2}$$

Under the Indonesian Stock Exchange (IDX) Public Listing Sector, Table 1 shows the total sample of 294 firms chosen. These firms are chosen by the completion of the financial data required. A total of 3646 firm-year observation is conducted. The effect of financial market frictions to the firm's diversification level is observed by:

$$Y_{it} = \alpha + \beta_1 TED_{it} + X'\gamma + \varepsilon_{it} \quad (3)$$

Where  $Y$  is the *Diversification* level of a firm,  $TED$  is the *market friction*, and  $X'$  are the *control variables* of the empirical model. These variables are calculated by: *Diversification* as the number of division of firms.  $TED$  is the three-year moving average of  $TED$  Spread. The matrix of control  $X'$  consist of *Lag Size*, *Lag Cashflow*, *Lag Q*, *Lag Leverage*, and *Lag Age*.

*Size* is defined as the total asset, calculated by lagged log of total asset. *Cash Flow* is the availability of funds, measured by lagged cash flow over total asset.  $Q$  is

Tobin's  $Q$ , measured by lagged market value of asset divided by book value of asset. *Leverage* is the long-term capability of payment obligations, calculated by lagged book value of debt divided by market value of asset. *Age* is the life-span of the firm's establishment, measured by previous ( $t-1$ ) year subtracted with established year.

Table 2 presents the statistics summary, where all variables are winsored at 1% to eradicate any potential outliers, except for age and number of divisions. The  $TED$  is the implications of the frictions in the market averaged during the three years' time.  $TED$  Spread is the external market friction captured during the current period. As access to the financial market becomes harder, market frictions become higher, indicating a positive  $TED$ . With an easy access to financial market, frictions become lesser and would indicate a low, possibly negative  $TED$ .

**Table 2.** Descriptive Statistics

Variables	Mean	Std. Dev.	Min.	Max.
<b>Dependent Variable</b>				
No. of Division	2.4637	1.40671	1	18
<b>Independent Variable</b>				
TED	0.0069	0.00753	-0.0123	0.1416
TED Spread	0.0016	0.03282	-0.0708	0.0399
<b>Control Variables</b>				
Size	12.12	1.10608	6.7865	13.883
Cash Flow	0.1122	0.12594	-0.2843	0.5963
Tobin's Q	1.08	0.892	0.0128	4.9814
Leverage	0.3285	0.29079	0	1
Age	30.677	13.6515	2	99

Indonesia has a wide range in size comparison between companies. The average size of Indonesia's firms is 12.12 with the smallest at 6.8 and highest at 13.88. In addition, the number of division each company operates averaged at 2.46, with the lowest at a single division and 18 divisions at its maximum. Under this research, the age of each firms distinct broadly. A minimum of 0 years of firm age and maximum of 100 years of firm age is present in the sample data. A 0 year of firm age explains that the firms is established in the current year. Yet, a firm life of 30 years is the averaged firm life of sample data in Indonesia. The diversification level across industries also differ in pattern. Figure 1 gives a brief interpretation of diversification pattern based on industry classifications in Indonesia. The figure portrays the division distribution from 2009 to 2017. Among all 8 industries, firms under property classifications has the highest level of diversification, with an average of 3.14 diversification level between 2009 to 2017. Basic consumer goods, infrastructure, and

miscellaneous holds the most volatile movement across the firm's division.

As seen in Figure 1, during 2010, nearly all sector increased their division level, creating higher diversification. This event corresponds accordingly to the increase in the  $TED$ , external financial market frictions.

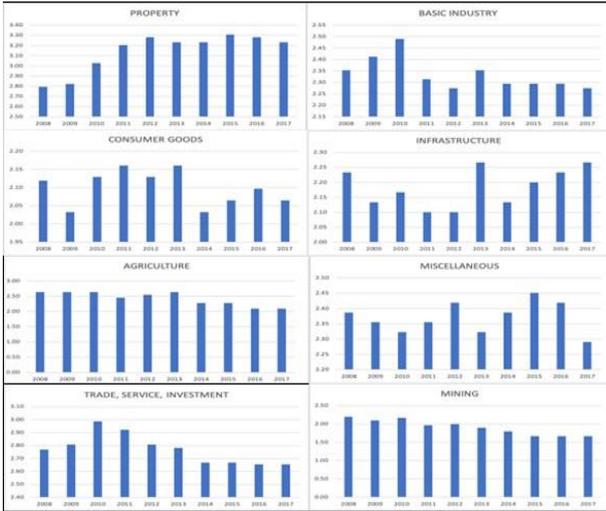


Figure 1. Diversification per Industry

Shown in Figure 2, the TED is increasing in 2010. This indicates an increasing external friction in the market during the time.

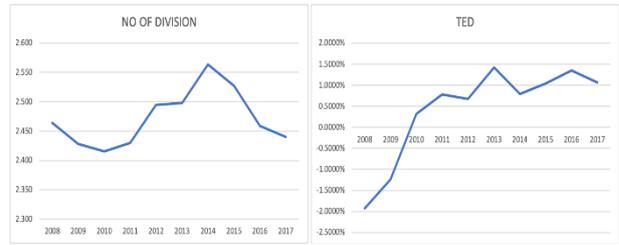


Figure 2. Number of Divisions and TED per year

In Figure 2, the number of divisions reflects the average number of diversifications behavior that conglomerates undertook during the years. A peak of external market frictions happened in 2013. However, firm’s diversification behavior responded a tad late. The average number of divisions of a firm increased in 2014. A jump to 2.563 diversification level index reflects the average number of reallocations of capital in 2014, responding from the high external market friction in 2013. Therefore, typically firms would re-distribute their investments internally across 2.56 diversification index

4. RESULTS AND DISCUSSION

Table 3. Regression Results

	Model 1		Model 2	
	Coef.	t-stat	Coef.	t-stat
TED	4.2863***	5.19		
TED Spread			0.404099	1.13
Size	0.07530	1.45	0.075335	1.46
Cash Flow	-0.11399	-0.88	-0.095493	-0.79
Tobins Q	-0.01981	-1.24	-0.019543	-1.22
Leverage	-0.1675***	-6.38	-0.1804***	-6.39
Age	-0.0281***	-4.34	-0.0216***	-3.83
_cons	2.47279***	4.90	2.30383***	4.69
N	3050		3050	
Adj. R <sup>2</sup>	0.098		0.087	

Table 3 shows the final result of the model conducted by Driscoll and Kraay standard error method. The regression follows a fixed effect panel model, with all p values resulted at 5% significant level.

The hypothesis stated that the level of firm’s diversification is predisposed by the level of frictions in the market. The diversification carried by firms are believed to be an internal diversification through firms, and not within a single industry. Market friction, as the difficulties in accessing the market, would then lead to an increasing possibility of firms to diversify internally. As market becomes harder to access for financial, firms

would shift to internal capital market, drifting from external markets. The changes in the firms’ focus provides beneficial outcome for the company.

Allocation of internal capital market provides more valuable outcome. A possible chance of firms to reallocate funds to internal capital would be a highly favored opportunity when external markets are distressed. However, reallocation of internal funds would also incur cost. Hence, lower cost would be required compared to the tightening financial market. Moreover, capital reallocation became an interesting investment as

it would be able to provide better investment efficiency and effectiveness.

The costly access to the financial market would cause companies hesitation to borrow or require capital from the market. Thus, improving the allocation of internal capital becomes a favourable opportunity. As firms has excess funds, firms would seek valuable investments. Firms would expand their scope, shifting their operations to a wider market segment. This investment can be done through internal capital market reallocation. This method is chosen by firms to avoid the unwanted costly access to the external market.

The lessening reliance of external market would also be an interesting point for conglomerates. As firms diversify, they would have enough cash holdings internally. A friction in one market segment may not affect other diversified segments. Therefore, firms with diversified segments could alter the required cash of the frictional market segment by funds allocated from other less frictional market. Hence, it could limit involvement in the distressed market of the specific firm's section.

Based on the result of the regression fixed by the Discroll & Kraay standard error, the financial market frictions influence the firms' diversification level. The variable TED, that represents the external market friction has a positive coefficient. This proves that the higher the market friction in the market, the higher the incentives of diversification to happen across conglomerates. The remarkable effect of the market friction can also be seen from the significance of the p-value. TED has a 0.000 p-value, lower than 5%, of the required minimum value.

In the first model, the model measures the external market friction by TED. TED is the moving average of the three years spread. The spread is measured by the difference between the JIBOR and the Government Bill Rate under the 6 months rate, a year prior, the current year, and the year after. This method is conducted to see the fluctuations of the market frictions throughout the years. On the other hand, the second model is conducted in capturing the financial market frictions using Ted Spread at time of t-1.

The coefficient of 4.29 from the TED indicates that a change of two-digit standard deviation in TED ( $2 \times 0.0075$ ) is corresponding to 6.46% of the firms adding a single segment. These changes are reflected in 0.0459 standard deviation from the sample. These changes of diversification level are reflected under the three years friction average. However, in the second model, it is seen that the TED Spread of time t-1 is not significant towards the diversification strategy undertake. As TED Spread measures only the specific market friction given the time period, it might not be a solid reason for firms to undertake diversification strategy based on a one-time friction.

The higher the coefficient of a variable indicates a higher impact to the dependent variable. Through this result, we can see that firms often reacts in diversifying towards the condition of market friction only after the friction happened. Moreover, firms also tend to analyze the movement of the frictions in the market with a minimum of three years' time period. This result is also reflected in Figure 3. TED dropped in 2012 and 2014. However, it peaked tremendously in 2013. While from the number of divisions, that reflects the diversification level of the firms, it nearly has no improvement in 2013 from the previous year. Yet, it bolts up in 2014, a year after the friction reached its high points.

Several control variables also prove a significant impact towards the level of diversification a company owns. The leverage and age of the firms also has influences on the level of diversification a company has. Leverage and age, both has a negative coefficient. Leverage, as a proxy of the dependency of firms to the external market and ability of firms to borrow from external market has a reciprocal effect towards the diversification level of firms. Firms that are highly dependent towards the external market will have harder access of cash holdings when financial market are distressed. Therefore, a highly leveraged firms would have lower opportunities towards diversification behavior.

As for age, an older firm is expected to have a high level of productivity and high profitability. However, the result from Table 3 reflects vice versa. As lifespan increases, firm's productivity increases through experiences. However, firm's profitability decreases. The lower profitability would lead to a less cash supply [20]. The lesser availability of cash supply leads to a lower incentive of branching out to a more diversified segments. Size, Cash Flow, and Tobin's Q however, does not have a significant effect towards the firm's diversification level. The size of the firm is expected to generate more profit for diversification. Instead, larger firms tends to have a second-class status compared to the small to medium business firms [20]. Moreover, larger firms tend to be more diversified in developed countries [21], where Indonesia is still considered as a developing country. Cash Flow is an imperfect proxy for firm's financing capacities [22].

Therefore, a positive cash flow does not correlate to the firm's diversification behavior. While for Tobin's Q, the growth opportunities do not reflect any corresponding behavior towards the diversification opportunities. This result is strong related with the idea that Tobin's Q measurement gives a little information towards the diversification value of firms [22].

## 5. CONCLUSION

This research contributes to family firms, especially in measuring firm performance with the existence of family involvement in management and with the family longevity goals. In the first hypothesis, where the hypothesis is not accepted, to improve the performance of the firm it would be better if the owner of a family firm also involves professional managers and not a family member. In order to improve business performance, it is necessary to choose managers based on their competencies, whether they are able to lead the firm and set a good example for their subordinates.

The statement that involvement of family members in firms with family longevity goals will result in stronger corporate performance. It means that the owner of the firm must involve family members in the firm with family longevity goals and in accordance with the objectives of the owner of the firm, so that there is an increase in business performance.

There are various ways to achieve this, for example firm owner can hold family meetings regularly so that family members involved in the firm can better direct their goals towards the family longevity goals. In addition, the meeting should not only provide direction in the aim for the family prosperity or discussing business, but also for the longevity the family.

### *Limitation and Contribution*

This paper tested the hypothesis using the given empirical model. The research is conducted in Indonesia with a total of 294 firms taken under the listed requirement from the IDX. The data sample is taken under a 9-year observation from 2009 to 2017. Diversification level is expressed by the number of divisions each company operates. External market friction is proxied by the difference of the rate of JIBOR with the Government T-Bill rate under the 6-month given rate.

The result of the test shows that the main idea of the hypothesis is true. As external financial market friction increases, the tendency of higher diversification level increases. The result is robust towards both model of capturing the external frictions on three years' time average and the current exact year. When external market is costlier, firms lean towards the idea of increasing more segments of market scope. However, if the investment payoffs do not differ highly between segments, there are less motives to diversify [3]. Yet, if the payoff of the investment differs highly, firms would better off to reallocate capital to be more efficient. Therefore, firms are inclined to be more diversified.

Through this research, it is proven that firms that are open to the opportunity of diverse expansion holds benefit. As firms diversify, they can reallocate their

resources internally, providing higher efficiency. Through the improved efficiency, firms can invest with lower cost than the cost of tight external market. Hence, firms can avoid external capital market freezes. Therefore, firms are suggested to spread their wings to a diversified segment.

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