The Moderating Role of *Shariah*-Compliant in the Relationship Between Free Cash Flow and Profitability in Family Firm

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ABSTRACT
These research aims to explain agency problem effect on free cash flow in the family firm setting. The free cash flow in the family firm will depend on the agency problem existing to mitigate and decreasing agency cost. Shariah-compliant could use to mitigates the agency problem of free cash flow in the family firm by restricting the free cash flow. This research applied a panel regression to a data set composed 55 families controlled-public company during period 2013-2017. We documented that free cash flow has positive influence on profitability, but low free cash flow by the shariah-compliant firms outperform by highly free cash flow firm. This profitability difference is primarily driven by shariah-compliant is an essential factor in mitigating agency problem for free cash flow by promoting free cash flow limitation.
Keywords: *free cash flow, shariah-compliant, profitability, agency problem, family firm*

1. INTRODUCTION

A family business survey conducted by PWC in 2018 reveals that 72% Indonesian family business have a clear sense of agreed value and purpose as a company [1]. This value is relevant to create a competitive advantage and increasing revenue and profitability. Furthermore, the survey also exposed that the value like honesty, hard work, respect, integrity, good value, employee had been come up consistently. Interestingly, this value is very similar and relevant with a value for *shariah*-compliant firm.

Shariah-compliant in the business refer to operating business that complies with Islamic law (*shariah*). *Shariah* is Islamic legal system from Islam principles. These principles cover all aspect of daily life include individual, family and society. *Shariah*-compliant value can reach effect on firm strategic management practice and financial performance [2].

Financial performance in the family business is controlled by management as an agent. Some of the firm doesn't involve family in the management. In this situation, there could be a problem that the value agreed by family to management couldn't deliver well to management to reach financial performance. Agency theory explains this conflict between management and owner can be increasing agency cost. In agency theory perspective, there are premises that management have self-interest motive waste to use free cash flow (FCF) inefficient.

One vital financial performance key in numerous research spotlight is free cash flow. Free cash flow as firm resources had been manage by management as an agent. Free cash flow refers to net cash flow from operating cash flow minus capital expenditure, inventory cost, and dividend payment. Free cash flow in the firm can be needed for positive net present value project. On the other hand, management could use excess cash flow to maximise his/her wealth instead of stockholder/principal wealth. Therefore, the level of free cash flow has an impact on performance.

The relationship between free cash flow and performance have been a focus by some earlier study. Study by [3] explains that FCF has a converse effect on performance. FCF could incur agency cost to perquisite consumption and shirking behavior, on the other hand FCF form internal efficiency could lead better firm performance [4]. Explain that high free cash flow performs better than low free cash flow in UK acquirer. Manager in firm family have more incentive to reserve a larger cash flow to future investment opportunity and flexibility market discipline, especially when shareholder control is less effective [5].

Shariah-compliant business possesses a financial characteristic that can adversely affect corporate cash holding policies on performance. The requirement for a business to be *shariah*-compliant is to have a low leverage [6]. It happens because *shariah*-compliant business had been passed form business screening and financial screening. In Indonesia *shariah*-screening must be criteria based on regulation BAPEPAM-LK NOMOR: KEP-208/BL/2012 *Tentang Kriteria dan Penerbitan Daftar Efek Syariah*. Business screening imply that business activity should not involve any practice judge impermissible to Islamic law (haram). The financial screening refers to the debt structure from conventional debt must be lower 45% from assets and return from impermissible to Islamic law under 10%. In *shariah*-compliant business agency problem in free cash flow will be reduced by paying more dividend to reduce free cash under manager [6].

This study is directed to examine the validity of FCF hypothesis and agency theory under *shariah*-compliant business in firm family. The purpose of this study is to investigate the impact free cash flow (FCF) on performance and examine the effect *shariah*-compliant on the free cash flow and performance relationship.

2. LITERATURE REVIEW

Shariah-compliant refer to Indonesian *Shariah* Stock Index (ISSI). ISSI launch in 2011 that consists of Islamic stock that listed in Indonesian capital market. Islamic stock is screening by The Financial Services Authority (OJK). Islamic screening stock is pass business screening and financial screening. This step required that Islamic stock pass qualitative and quantitative screening [7]. After screening steps then the stock will be listed in ISSI. The company that listed in ISSI will re-selected twice a year and when the business and financial decision making in review schedule and do not pass the Islamic criteria then it will come out from ISSI constituents.

The development of *shariah*-compliant investment could be witness in the developing of Islamic Index in security market. Contribution of family-controlled public company (next can see as family firm) in *shariah*-compliant investing is shown in increasing number of firm-family to become listed in Indonesia *Shariah* Stock Index (ISSI). Family-controlled public company in *shariah*-compliant firm will assessing agency problem in cash management and cash decision making to explain agency problem in *shariah*-compliant firm.

2.1. Hypothesis

Free cash flow can be an opportunity for manager to future investment. But, it also opposes opportunity for manager to increase their utility. Some study has explained inconsistency result to explain the impact free cash flow on firm profitability. Cash flow appears to be positively associated with performance [4]. It's explained that free cash flow can be used to improving firm profitability by manager. So free cash flow have positive impact on performance [3].

Some study exposed opposite result, Free cash flow could deteriorate firm performance based on the agency theory [8]. This hypothesis had been explain by research finding that free cash flow let's manager waste funds [9]. Recent finding in Pakistan explain the same argue that free cash flow have negative impact on performance [10].

H1: FCF influences firm profitability

The impact of free cash flow on firm performance doesn't impose that free agency problem will only influence cash management and cash decision. In family firm, management could also engage in more earning management [11]; [12]; [13]. Corporate cash decision is also differed between family firm and non-family firm [5]. Higher separation of board right tend to reduce cash holding in cash holding family firm [5]. Agency cost of family firm increase with the enhancement of family ownership [14]. Therefore, the family firm with a clear sense of agreed value and purpose as a company will create a competitive advantage and increase revenue and profitability. Especially family firm with *shariah*-compliant.

Shariah-compliant affects long term financial performance [2]. *The shariah*-compliant firm have barrier in business and financial decision making to accept in sharia-compliant criteria. The *shariah*-compliant criteria support lower leverage and prudent business decision making. *Shariah*-compliant is an essential factor in mitigating agency problem in free cash flow by free cash flow limitation using dividend policy [6]

H2: Shariah-compliant negatively moderates the positive influence of FCF on profitability. FCF has a less positive influence on performance for firm with shariah-compliant business

3. METHOD, DATA, AND ANALYSIS

This research employs financial statement data from 2013-2017. We use a micro-panel data set, which consist of cross-sectional firm-level and time series information. These study use family firm listed in Indonesian Capital Market (IDX) at the sample period. Sampling method is using non-probability sampling by purposive sampling method. We eliminate non-family firm in public company listed in IDX during 2013-2017. The firm family criteria is based on the level of family ownership that should be above 25 percent of the outstanding share [15]. Second, we exclude the firm family in financial sector. We further exclude family firm with family role in business as owner and manager to impose more with agency conflict and agency cost in family firm. Agency problem will exist more in family firm with family role as just own, and don't manage the company. Finally, sample consist of 55 firm (257 firm-year observations)

The base specification of this study is by using a panel-based OLS regression in which the dependent variable is the profitability in Indonesian family firms and the independent variables are a *shariah*-compliant dummy, free cash flow, and interaction variable free cash low-*shariah*-compliant. We use return on assets (ROA) as proxy for firm profitability. This measure estimate ROA using earning after tax scaled by total assets. The ROA is the most adopted measure for corporate operating performance [3]. *Shariah*-compliant using dummy scale with measure 1 if firm is *shariah*-compliant and 0 otherwise [6]. The free cash flow (FCF) refer to net cash flow from operating cash flow minus capital expenditure, inventory cost, and dividend payment scaled by sales [16].

Panel data methodology in this study intended to be control individual heterogeneity and reduce multicollinearity and estimation bias in our time series and cross-sectional sample firm. For each profitability measure the chow-test confirmed the fixed effect model over the pooled model.

The Breusch-Pagan Lagrange Multiplier test suitable to choosing random effects model over pooled model. Finally, the Hausmann test confirmed the fixed effect model to outperformance the random effect model.

4. RESULTS AND DISCUSSION

Table 1 illustrate descriptive statistic of the sample data, it shows that *shariah*-compliant in firm family is dominant in Indonesian family-controlled public company for about 74%. We find that profitability (ROA) is higher for *shariah*-compliant firm (0.06591 vs. -0.01874). The average free cash flow (FCF) in *shariah*-compliant firm is higher than non *shariah*-compliant firm. The free cash flow for the total sample is 1% of total assets, which is indicates that the cash available to manager in firm family are relatively low. The standard deviation of free cash flow is 54%, suggesting that the free cash flow in firm family is relatively highly dispersed. The sample mean value of ROA is 4% with standard deviation 20% show that throughout the periods, the profitability of the sample is low and dispersed.

Table 1: Descriptive Statistics

Variabel	Total Sample		*Shariah* Compliant		Non-*Shariah* Compliant	
	N = 275		N = 204		N = 71	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
ROA	0.04406	0.200012	0.06591	0.173808	-0.01874	0.252175
FCF	0.01891	0.548738	0.03045	0.579426	-0.01425	0.451123

Result of the pooled OLS, fixed effects, and random effects models for the three measure are presented in Table 2. The empirical result shown that higher free cash flow and *shariah*-compliant increased the firm profitability at 1% (from the pooled model and the random effect model), but *shariah*-compliant increased the firm profitability at 5% (from the fixed effects model). On the contrary, the interaction coefficient between *shariah*-compliant and free cash flow have negative relationship to firm profitability at 1% (from all models).

Table 2: Regression of *Shariah* Compliant and Free Cash Flow on Profitability

Variable	Pooled OLS		Fixed Effects***		Random Effects	
Constant	-0.0143	(0.5135)	-0.0090	(0.7080)	-0.0139	(0.5305)
SyCompli	0.0795	(0.0019)***	0.0727	(0.0118)**	0.0790	(0.0020)***
FCF	0.3126	(0.0001)***	0.3195	(0.0000)***	0.3132	(0.0000)***
Sy*FCF	-0.2900	(0.0001)***	-0.3067	(0.0000)***	-0.2914	(0.0000)***

(*** 1% level; **5% level; The t values for OLS (Robust) and Fixed Effects (Robust) and z values for Random Effects (Robust) are in parentheses). The dependen variable is firm profitability (ROA)

Fixed Effects (FE) vs Pooled OLS: F(54, 217) = 0.361418 Prob > F = 00000

Random Effects (RE) vs Pooled OLS: chi2 = 0.78637; Prob > chi2 = 00000 (Breusch and Pagan LM Test)

Random Effects (RE) vs Fixed Effects: chi2= 0.747738; Prob > chi2 = 00001 (Hausman Test)

Regression result show the positive relationship between free cash flow and profitability. Firm with higher free cash flow has reporting more profitable. This result didn't support free cash flow hypothesis in firm free cash flow, but in its can't conclude that a profitable firm can be free from agency problem in reporting profitability. Some researcher report that family firm is positively correlated with the earning management [11] [17]. Free cash flow will support the firm profitability, but the previous study finding that free cash flow make increasing earning management [18].
The *shariah*-compliant firm have numerous constraint to make the financial decision making. This value can be a boundary for firm management to set a fraudulent and promote commitment in free cash flow limitation by endorse to dividend payout [6]. Free cash flow limitation in *shariah*-compliant firm is preventive action to control the management act in their own interest. This study finding that *shariah*-compliant has negatively moderate the positive influence of free cash flow on profitability. It's explained that in *shariah*-compliant firm even have low free cash flow can reach the firm profitability.

5. CONCLUSION

We document that *shariah*-compliant will have impact on business and corporate cash decision making. Consistent with our prediction, we also discover straight forward result that free cash flow increasing firm profitability. With an exception that *shariah*-compliant firm with low free cash flow also could manage firm profitability. These results were consistent with agency problem over free cash flow in *shariah*-compliant firm, especially in family firm. Our result provides interesting insight that may be useful to other work analysing level of free cash flow. We need additional research to understand the role of shariah-compliant and firm performance better. We also need different form of governance to manage effectively corporate cash decision effectively under *shariah*-compliant.

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