CEO Overconfidence and Dividend Policy : Evidence from Tiger Cub Economies

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Abstract

This study aimed to investigate the effect of CEO overconfidence and dividend policy in Tiger Cub Economies which are Indonesia, Malaysia, Philippines, Thailand, and Vietnam. This research also examined the determinants of dividend policy that includes lagged dividend payment, firm size, growth, profitability, free cash flow, leverage, and liquidity. A sample of 232 public listed firms was selected from Tiger Cub Economies for the data period ranging from 2012 to 2016. Using system generalized method of moment (GMM) estimation, a negative relationship was found between dividend payment and CEO overconfidence, a finding that is consistent with the findings of past research. Moreover, the research finding was robust when a more stringent measure of CEO overconfidence was adopted. Other significant determinants of dividend payment were asset growth, firm leverage, earnings growth, and firm size. The findings indicated reduction in dividends associated with CEO overconfidence in firms with declining asset growth, lower firm leverage, higher earnings growth, and larger firm size.

Keywords : **CEO overconfidence, managerial overconfidence, dividend policy, behavioral corporate finance**

JEL Classification Codes : G3, G35, G350

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Behavioural finance advocates that managers are often subject to behavioural biases that can adversely affect their decision making. Unlike, traditional finance postulates that managers are rational to maximize their utility and expected utility. The psychology literature suggests that managers are particularly prone to exhibit overconfidence (Larwood & Whittaker, 1977). Similar to the notion of 'hubris' in Roll (1986), Malmendier and Tate (2005a) hypothesized that overconfident managers overestimate the expected returns to their corporate decisions. Studying managerial psychology is of paramount importance. Managerial overconfidence is one of foremost psychological biases that are often recognized as highly influential in shaping managers' decisions.

Emerging research in behavioural corporate finance examines the impact of managerial cognitive biases, for instance, overconfidence, on corporate financial decisions. Despite that, the existing literature has dedicatedly associated managerial overconfidence to corporate investment decisions (Malmendier & Tate, 2005a, 2005b),

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capital structure (Malmendier, Tate, & Yan, 2011), and merger and acquisitions (Malmendier & Tate, 2008). Corporate dividend policy has received little attention in recent literature. Overconfident CEOs who spend more internal funds in corporate investments (Malmendier & Tate, 2005a and 2005b) may reduce the available funds that are distributed to shareholders, and this explains a negative association between CEO overconfidence and dividend policy (Cordeiro, 2009 ; Deshmukh, Goel, & Howe, 2013). Research studies only focused on U.S. firms, however, relatively less research attention has been given to the effect of managerial overconfidence on dividend payment, particularly in developing countries. More empirical evidences are needed to enrich the existing literature. Furthermore, the dynamic effect of dividend payment, that is, whether the dividend payment is affected by lagged dividend payment, was not efficiently estimated by ordinary least square employed in the existing empirical works.

This paper contributes to the existing literature in several ways. Firstly, this study would provide new insights from Tiger Cub Economies and add empirical evidence to the existing literature that primarily focuses on U.S. findings. Secondly, this study applies panel GMM to accommodate the persistency of dividend payment, unlike the past researches not taking that into consideration. GMM serves as a better estimator to account for past dividend payment that is believed to contain some information to recent dividend payment.

Tiger Cub Economies

Tiger Cub Economies refers to the economies of the developing countries of Indonesia, Malaysia, the Philippines, Thailand, and Vietnam, which are also the five dominant countries in ASEAN economies (Jones, 2015). Previous empirical research examined the effect of overconfidence on the level of dividend payment solely focusing on a nation, for example: China (Wang, Manry, & Wandler, 2011), Indonesia (Baker & Powell, 2012), and Thailand (Fairchild, Guney, & Thanatawee, 2014). Thus far, none of the researchers investigated that beyond a nation. To the best our knowledge, there are no empirical evidences in developing countries. Hence, the five countries of Tiger Cub Economies were chosen in this research. The average of return of equity and dividend yield among the five countries is presented in the Table 1.

Table 1. Return on Equity and Dividend Yield of Tiger Club Economies

Countries	ROE (%)		DY (%)	
	2015	2016	2015	2016
Indonesia	16.84	17.43	2.20	1.94
Malaysia	10.87	10.00	3.15	3.24
Philippines	11.44	11.82	1.96	1.87
Thailand	11.13	9.70	3.39	2.99
Vietnam	13.44	13.24	3.49	2.65

Source: Bloomberg

Review of Literature

(1) Definition and Concept of Managerial Overconfidence : Overconfidence is defined as a tendency of individuals to think themselves 'above average' on positive characteristics (Alicke, Klotz, Breitenbecher, & Yurak, & Vredenburg, 1995 ; Kruger, 1999). The 'better than average' effect also affects the attribution of causality. As individuals expect their behavior to lead to success, they are more likely to connect their success and achievement to their actions and their failure to bad luck (Miller & Ross, 1975). Kahneman and Riepe (1998)

summarized sources of overconfidence as: the combination of overconfidence and optimism that affects people to overvalue their knowledge, underrate risks, and overestimate their ability to control events. Griffin and Brenner (2008) claimed that the overconfidence perspective refers to the better than average effect, unrealistic optimism, and illusion of control.

Hilary, Hsu, Segal, and Wang (2016) conceptualized structure links between overconfidence and optimism and depicted dynamic overconfidence as : individuals may suffer from a biased attribution of causality that leads managers to underestimate the role of random noise and over-attribute successes to their own actions after a series of good performance or success. Thus, this self-serving attribution of outcomes strengthens overconfidence. Overconfidence involves overestimating positive outcomes (upward bias in beliefs about future outcomes), outcomes are under one's control, and underestimate risks. The term 'over-optimism' and 'overconfidence' are used interchangeably in latter researches. Although, upward bias in managers' expectations is sometimes associated to over-optimism, in this study, it is referred to as overconfidence. Following Malmendier and Tate (2005a), 'overconfidence' terminology is employed in to draw a tighter link with the literature on excessive self-confidence and the 'better than average effect' as it is argued that managers overestimate their own abilities.

(2) Effect of CEO Overconfidence on Dividend Payment : The effect of managerial overconfidence is more broadly explored in corporate decision making : earnings forecasts (Hribar & Yang, 2016), financial misreporting (Schrand & Zechman, 2012), compensation contract and capital budgeting (Gervais, Heaton, & Odean, 2011), CEO turnover (Campbell, Gallmeyer, Johnson, Rutherford, & Stanley, 2011), initial public offering (Boulton & Campbell, 2016), innovation (Banerjee, Dai, Humphery - Jenner, & Nanda, 2017 ; Banerjee, Humphery - Jenner, & Nanda, 2015 ; Hirshleifer, Low, & Teoh, 2012), corporate debt maturity (Huang, Tan, & Faff, 2016), and compensation structure (Humphery - Jenner, Lisic, Nanda, & Silveri, 2016).

With reference to related past research for dividend payment, Cordeiro (2009) adopted press portrayal proxies to measure CEO overconfidence and found a negative effect of CEO overconfidence on dividend payment. Similar findings were obtained by Deshmukh et al. (2013), when they found that overconfident CEOs believed that firms were undervalued and expected external financing was more costly, and hence, lower dividend was paid to shareholders in order to accumulate financial slack for future investments. Thus far, the above-discussed two research studies are hitherto only found in literature. More empirical evidence is needed to expand the existing literature.

(3) Determinants of Dividend Policy

(i) Past Dividend : Literature has addressed the role of past dividends in determining the current dividend payment. Lintner (1956) found firms were reluctant to raise dividend rates to a level that was unsustainable and tried to maintain a stable dividend payout. Lintner's model has been examined in different markets and over many periods, and the findings of studies concluded that past payments affect current dividends (Benavides, Berggrun, & Perafan, 2016 ; Boţoc & Pirtea, 2014 ; Jabbouri, 2016).

(ii) Firm Size, Profitability, and Growth : Three common firm characteristics of dividend payers addressed by Fama and French (2001) are size, profitability, and growth opportunities. Evidenced by past empirical research studies : (a) large firms are more capable to pay out higher dividends (Firth, Gao, Shen, & Zhang, 2016 ; Poornima, Morudkar, & Reddy, 2019; Venkataramanaiah, Latha, & Rao, 2018); (b) more profitable firms are expected to pay out higher dividends (Jabbouri, 2016 ; Manneh & Naser, 2015 ; Rizvi & Khare, 2011); (c) there is a positive association between growth and dividend payment (Ping & Ruland, 2006). Firms with high growth opportunities are expected to plowback their earnings to avoid costly equity and debt financing, therefore, a negative

relationship is expected between historical growth and dividend payout (Abreu & Gulamhussen, 2013 ; Theis & Dutta, 2009). Historical growth was gauged by annualized rate of growth of total assets and growth of total earnings through the reference period. According to the signalling hypothesis, firms with positive future growth opportunities (expected growth) are expected to payout higher dividends to signal their firms' prospects (Abreu & Gulamhussen, 2013 ; Theis & Dutta, 2009). Unlike historical growth, firms with positive future growth opportunities (expected growth) will retain their earnings from paying dividend to prevent costly debt and equity financing. The signalling hypothesis is supported if the coefficient associated with expected growth is positive and statistically significant.

(iii) Free Cash Flow : From the literature, free cash flow hypothesis (Jensen, 1986) suggests that firms distribute cash dividend to shareholders to mitigate the agency cost problem between managers and shareholders because share repurchases reduce the firm's cash coffers, which prevent managers from misusing unproductive capital (lack of attractive investment opportunities) that would dampen shareholder wealth (Allen & Rachim, 1996; Hu & Kumar, 2004). Positive effect of firm's free cash flow on dividend payout was evidenced in past researches (Firth et al., 2016 ; Manneh & Naser, 2015). As such, firm's free cash flow is expected to have the same effect on dividend payment in this study.

(iv) Firm Leverage : Some past studies confirmed a negative impact of debt level on dividend payout (Firth et al., 2016 ; Jabbouri, 2016 ; Manneh & Naser, 2015). Several explanations are available regarding the negative impact : first and foremost, high leveraged firms prefer to pay less dividend deliberately or under creditors' pressure to preserve more cash to service their obligations (Gugler & Yurtoglu, 2003). Furthermore, low dividend payments increase firm equity on the balance sheet, which thereby improves leverage ratios, for example, debt to equity ratio or debt to asset ratio as well as firms' ability to repay. Another stack of literature highlighted how debt covenants put restrictions on firms' dividend payments (Mather & Peirson, 2006). Therefore, firms are willing to cut dividend payment to restore confidence from creditors (Nini, Smith, & Sufi, 2009). In addition to that, debt is a substitution for dividend used by firms to reduce agency costs of cash flow (Fleming, Heaney, & McCosker, 2005), resulting that higher leveraged firms are less incentive to pay dividends compared to less leveraged firms.

(v) Liquidity : One of the most important determinants of dividend payment is the firm's liquidity. Firms with insufficient cash will not pay dividend even with a decent profitability shown in the firms' income statements. Past research documented that dividend payment is highly reliant on the firms' cash position rather than earnings (Khang & King, 2006). Deshmukh (2003) exhibited the importance of liquidity in determining dividend policy for industrial U.S. firms. However, no significant relationship was found between firm liquidity and dividend payment (Venkataramanaiah et al., 2018).

(vi) Measure of Overconfidence : The major difficulty in examining the effect of CEO overconfidence on dividend policies is how to gauge this cognitive bias due to its behavioral nature. As a matter of course, the biases of interest are not directly observable and measurable. Thus far in the existing literature, there is no instrument to directly or fully measure a managerial personality trait or bias, which raises questions regarding how to quantify overconfidence. There are two common measures used by researchers : option-based and press-based measures. Late CEO's option exercise decision in line with the rationale was proposed by Malmendier and Tate (2005a) and Malmendier et al. (2011). The second measure adopted in few past research studies (Cordeiro, 2009 ; Malmendier & Tate, 2005a; Malmendier et al., 2011) was portrayal in the business press. A common approach is to count the number of past articles in prominent business news and publications if words like "confident"/"confidence" and

"optimistic"/optimism" are used relative to the use of words like "cautious," "conservative," "practical," "reliable," and "steady".

The main drawback is that managers may hold and delay exercising firm options simply because those options are in-the-money. Hence, option-exercise behavior as a proxy of managerial overconfidence may not always signal overconfidence. Moreover, limited use of stock options among firms is another challenge that dampens adoption of a measure reliance on the length of time a CEO holds company options (Brown & Sarma, 2007 ; Shu, Yeh, Chiang, & Hung, 2013). In addition, option compensation has, however, been declining in recent years. The typical cited cause for depleting popularity of option-based employment compensation in the literature are demands of shareholders, tax-law changes, and the experience of worthless options in the wake of the financial crisis (Chasan, 2013). Due to lack of option listed on stock exchange and inactive trading on listed stock options for the five countries, it becomes unfeasible to use option exercise to gauge overconfidence.

A potential limitation of press-based measure is that any judgment made by a newspaper or journal has a high possibility of subjectivity, resulting in unreliable conclusions. Authors, journalists, and analysts of the press are often biased due to personal intolerance, prejudices, interests or passions, and therefore, inferences made based on those should always be considered with great prudence. A second potential limitation of press-based proxy is that managers may try to demonstrate an impression of false confidence and to "hype" major corporate events to the press in order to mislead investors and maintain their stock price high(Malmendier & Tate, 2005a).

Due to the limitation of option-based and press-based measures, relative less stock options listed on stock exchanges for the five countries and as most listed stock options are thin trading and inactive, thus industry-adjusted investment rate, which is measured by capital expenditure for two consecutive years, is adopted as a proxy to objectively measure CEO overconfidence. The application of this proxy follows the works of Boulton and Campbell (2016) and Campbell et al. (2011). The investment rate was calculated as the capital expenditure dividend by beginning of the year for property, plant, and equipment. Firms with investment rate above the 80th percentile were classified as CEO overconfidence. In order to be stringent in determining CEO overconfidence, 85th percentile investment rate was adopted in this research for robustness test, which is more rigorous than the adoption of the 80th percentile of investment rate in Boulton and Campbell (2016) and Campbell et al. (2011).

Data and Empirical Model

A total of 232 listed firms were selected from the stock exchange of Tiger Cub Economies.The listed firms represent all the sectors of each country. The data were collected from the Bloomberg database during the period of 2012 to 2016. The variables in the following empirical model were employed in line with past empirical research frameworks (Abreu & Gulamhussen, 2013; Jabbouri, 2016).

$$DPS_{it} = \beta_0 + yDPS_{it\text{-}1} + \beta_1 CONF_{it} + \beta_2 AG_{it} + \beta_3 LEV_{it} + \beta_4 EG_{it} + \beta_5 EPS_{it} + \beta_6 lnFCE_{it} + \beta_7 LQ_{it} + \beta_8 lnSIZE_{it} + \beta_9 MTB_{it} + \beta_{10} ROE_{it} + \varepsilon_{it}$$

where, *DPS* denotes dividend per share, *CONF* is overconfidence, *AG* represents asset growth, *LEV* expresses as leverage, *EG* denotes as earnings growth, *EPS* represents earnings per share, *lnFCF* denotes as natural logarithm of free cash flow, *LQ* is liquidity, *lnSIZE* expresses as natural logarithm of firm size, *MTB* denotes as market to book ratio, *ROE* refers to return on equity.

The series of dividend payment is persistent over time as it is affected by lagged dividend payment. Such dynamic relationship is affected by the presence of a lagged dividend payment, and hence, dynamic panel data modelling was adopted. To overcome persistence in the series of dividend payment, following Arellano and Bover

Table 2. Measures and Proxy of Variables

Variables	Description	Measure	Used in Past Research Studies	Expected Signs
DPS	Dividend payment	Dividend per share	Kallapur (1994) ; Nusrathunnisa & Duraipandian (2019)	
DPS_{it-1}	Past dividend	Past dividend per share	Benavides et al. (2016) ; Jabbouri (2016) ; Lintner (1956) ; Nusrathunnisa & Duraipandian (2019); Poornima et al. (2019)	+
CONF	CEO confidence	Investment level	Boulton & Campbell (2016) ; Campbell et al. (2011)	-
LnSIZE	Firm size	Natural logarithm of total asset	Athari, Adaoglu, & Bektas, (2016) ; Esqueda (2016) ; Firth et al. (2016) ; Poornima et al. (2019) ; Venkataramanaiah et al. (2018)	+
LEV	Leverage	Debt ratio	Firth et al. (2016); Jabbouri (2016); Poornima et al. (2019) ; Venkataramanaiah et al. (2018)	-
AG	Historical growth	Asset growth	Abreu & Gulamhussen (2013); Amoako-Adu, Baulkaran, & Smith (2014); Firth et al. (2016); Jabbouri (2016)	-
EG	Historical growth	Earnings growth	Arnott & Asness (2003); Ping & Ruland (2006)	+/-
EPS	Profitability	Earnings per share	Jabbouri (2016); Poornima et al. (2019) ; Rizvi & Khare (2011)	+
ROE	Profitability	Return on equity	Abreu & Gulamhussen (2013); Jabbouri (2016); Venkataramanaiah et al. (2018)	+
LQ	Liquidity	Quick ratio	Jabbouri (2016) ; Kapoor, Anil, & Misra (2010)	+
LnFCF	Free cash flow	Natural logarithm Free cash flow	Abreu & Gulamhussen (2013) ; Firth et al. (2016); Jabbouri (2016) ; Manneh & Naser (2015)	+
MTB	Expected growth	Market to book ratio	Abreu & Gulamhussen (2013); Firth et al. (2016); Jabbouri (2016)	+/-

(1995) and Blundell and Bond (1998), a two - step system generalized method of moments (GMM) is less biased and more precise to estimate the above empirical model. Measures and proxy for variables are presented in the Table 2.

Empirical Findings and Discussion

Descriptive statistics for the variables are reported in the Table 3. Firms, on an average, pay $0.03 dividend per share to shareholders. There are no serious issues of over identification and autocorrelation indicated by *p* - value of Sargan - Hansen test and autocorrelation test, respectively in Table 4 and Table 5. Hence, the instrument

Table 3. Descriptive Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations
DPS	Overall	0.030716	0.036606	0	0.1702	*N* = 1112
	Between		0.03705	0	0.167	*n* = 232
	Within		0.014835	-0.04754	0.152356	*T* = 4.7931
CONF	Overall	0.154676	0.361759	0	1	*N* = 1112
	Between		0.238634	0	1	*n* = 232
	Within		0.271454	-0.64532	0.954676	*T* = 4.7931
*CONF*2	Overall	0.043166	0.203321	0	1	*N* = 1112
	Between		0.133243	0	1	*n* = 232
	Within		0.151649	-0.75683	0.843166	*T* = 4.7931

AG	Overall	14.80753	35.97317	-46.5011	1012.02	*N* = 1112
	Between		18.74939	-10.6796	243.2199	*n* = 232
	Within		30.56579	-210.429	783.6076	*T* = 4.7931
LEV	Overall	23.41215	17.53186	0	81.055	*N* = 1112
	Between		16.52494	0	67.29132	*n* = 232
	Within		6.154375	-12.459	61.26891	*T* = 4.7931
EG	Overall	27.98214	156.9923	-98.5668	3394.81	*N* = 1112
	Between		65.81205	-41.1887	688.1655	*n* = 232
	Within		142.0563	-698.268	2734.627	*T* = 4.7931
EPS	Overall	3.740733	55.0632	-0.0494	937	*N* = 1112
	Between		53.61245	-0.01474	816.675	*n* = 232
	Within		6.658762	-150.934	124.0657	*T* = 4.7931
lLnFCF	Overall	6.845151	0.285916	0	7.99489	*N* = 1112
	Between		0.190596	5.152182	7.799318	*n* = 232
	Within		0.214445	1.692969	8.662139	*T* = 4.7931
LQ	Overall	1.636481	4.526423	0.0269	76.0844	*N* = 1112
	Between		4.345397	0.06956	63.3958	*n* = 232
	Within		0.961627	-7.42662	14.32508	*T* = 4.7931
LnSIZE	Overall	5.979895	1.916213	0.737834	10.4629	*N* = 1112
	Between		1.91176	0.875927	10.29238	*n* = 232
	Within		0.19437	3.416483	7.164262	*T* = 4.7931
MTB	Overall	4.583938	16.01283	-48.5819	35.7557	*N* = 1112
	Between		4.635691	-13.9984	22.7636	*n* = 232
	Within		15.44005	-41.2122	36.75471	*T* = 4.7931
ROE	Overall	17.75093	14.30207	-15.8813	131.688	*N* = 1112
	Between		12.3336	-6.55506	123.7102	*n* = 232
	Within		7.13148	-23.7167	88.61257	*T* = 4.7931

variables used in the system GMM are valid. The research findings indicate that CEO overconfidence appears to be negatively affecting dividend payment, as presented in the Table 4. This finding is consistent with 1-step system GMM model to 2-step system GMM with robust standard error model. The negative effect of managerial overconfidence on dividend payment is robust when the 85th percentile is used to determine CEO overconfidence (CONF2) as shown in the Table 5. Though a different proxy is used for measuring CEO overconfidence, the findings are still consistent with past empirical findings (Cordeiro, 2009 ; Deshmukh et al., 2013) that overconfident CEOs pay less dividends relative to rational CEOs. The fact that overconfident CEOs tend to pay less dividends per share, a reduction of $0.005 is further confirmed by the robustness test.

The effect of control variables on dividend payment, lagged dividend payment, asset growth, firm leverage, earnings growth, and firm size are found to be significant. Dividend is found to be affected by lagged dividend payment, which is in line with Sudhahar's (2010) findings. A higher asset growth (AG) reflects an increase in firm's investments, resulting in low level of funds left for shareholders, and thus, the firm will pay less dividend. An increase of 1% in asset growth leads to a reduction of $4 dividend received if shareholders own 100,000 shares. This finding is consistent with the findings of past research studies (Abreu & Gulamhussen, 2013 ; Amoako - Adu

Table 4. Influence of CEO Overconfidence on Dividend Payment

	1-Step System GMM	2-Step System GMM	2-Step System GMM with Robust SE
VARIABLES	***DPS***	***DPS***	***DPS***
DPS_{t-1}	0.568***	0.574***	0.574***
	(0.0679)	(0.158)	(0.176)
CONF	-0.00468*	-0.00491*	-0.00491*
	(0.00247)	(0.00253)	(0.00252)
AG	-0.00004	-0.00004**	-0.00004**
	(0.00003)	(0.00002)	(0.00002)
LEV	-0.00030**	-0.00028**	-0.00028*
	(0.00012)	(0.00013)	(0.00015)
EG	0.00002***	0.00002***	0.00002***
	(0.00001)	(0.00001)	(0.00001)
EPS	0.00001	0.00000	0.00000
	(0.00011)	(0.00001)	(0.00001)
LnFCF	0.00175	0.000601	0.000601
	(0.00288)	(0.00220)	(0.00236)
LQ	-0.00002	0.000145	0.000145
	(0.00070)	(0.00029)	(0.00030)
LnSIZE	0.0107***	0.00960**	0.00960**
	(0.00334)	(0.00402)	(0.00411)
MTB	0.00003	0.00003	0.00003
	(0.00004)	(0.00004)	(0.00004)
ROE	0.000163	0.000204	0.000204
	(0.00010)	(0.00013)	(0.00015)
Constant	-0.0585**	-0.0451	-0.0451
	(0.0257)	(0.0279)	(0.0276)
Sargan Test	6.89940	2.42969	
(*p* - value)	0.54750	0.96490	
AR(2)		0.10060	
(*p* - value)		0.91990	
Observations	872	872	872
Number of Id	227	227	227

Note. *CONF* is the 80th percentile of investment rate. Standard errors in parentheses.
***, **, * indicates significance at the level of 1%, 5%, and 10%, respectively.

et al., 2014; Jabbouri, 2016). Consistent with past research findings (Abreu & Gulamhussen, 2013), larger firms (SIZE) tend to pay more dividend per share, about $0.01 more than smaller firms. Besides, firms with higher leverage (LEV) tend to pay lower dividends due to their commitment to serve interest payments, which is similar to the findings of previous research studies (Firth et al., 2016; Gugler & Yurtoglu, 2003; Jabbouri, 2016). As such, a shareholder who owns 100,000 shares receives $28 less dividend for an increase of 1% total assets financed by debt. Furthermore, it is evidenced that firms with higher earnings growth (EG) promise a higher dividend payment, which is in line with the past research findings (Ping & Ruland, 2006). A shareholder owning 100,000

Table 5. Robustness Test with More Restrictive Overconfidence Measure

	1-Step System GMM	2-Step System GMM	2-Step System GMM with Robust SE
VARIABLES	***DPS***	***DPS***	***DPS***
DPS_{t-1}	0.568***	0.575***	0.575***
	(0.0681)	(0.156)	(0.173)
*CONF*2	-0.00306	-0.00409**	-0.00409**
	(0.00421)	(0.00198)	(0.00196)
AG	-0.00005*	-0.00005**	-0.00005**
	(0.00003)	(0.00002)	(0.00002)
LEV	-0.00030**	-0.00028**	-0.00028*
	(0.00012)	(0.00014)	(0.00015)
EG	0.00002***	0.00002***	0.00002***
	(0.00001)	(0.00001)	(0.00001)
EPS	0.00001	0.00000	0.00000
	(0.00011)	(0.00001)	(0.00001)
LnFCF	0.00174	0.00044	0.00044
	(0.00294)	(0.00247)	(0.00268)
LQ	0.00003	0.00021	0.00021
	(0.00070)	(0.00028)	(0.00028)
LnSIZE	0.0101***	0.00895**	0.00895**
	(0.00336)	(0.00411)	(0.00423)
MTB	0.00003	0.00003	0.00003
	(0.00004)	(0.00004)	(0.00004)
ROE	0.00017	0.00021	0.00021
	(0.00010)	(0.00013)	(0.00015)
Constant	-0.0556**	-0.0410	-0.0410
	(0.0262)	(0.0293)	(0.0293)
Sargan Test	7.29393	2.63063	
(*p* - value)	0.50530	0.95540	
AR(2)		0.23629	
(*p* - value)		0.81320	
Observations	872	872	872
Number of Id	227	227	227

Note. *CONF*2 is the 85th percentile of investment rate. Standard errors in parentheses.
***, **, * indicates significant at the level of 1%, 5%, and 10%, respectively.

shares receives $2 more dividend on an average when the firm's earnings growth increases by 1%.

Corresponding to past research findings (Venkataramanaiah et al., 2018), this study finds no significant effect of firm liquidity toward dividend payment, despite the fact that positive effect of firm liquidity position on dividend payment is documented in literature. Firms tend to pay higher dividends when they have a large pile of free cash flow - this is not found in the context of the present research study.

The rationale of the main prediction is that overconfident CEOs are more likely to allocate more funds in investment causing over investment, thus resulting in fewer funds returning to shareholders. Taking together,

overconfident CEOs managing firms that experience higher earnings growth, accelerated asset growth, and increasing firms' total assets tend to pay lower dividends. Reduction of dividend payment would imply that the CEOs are overconfident, perhaps about their future ability in generating more firm earnings. In contrast, firms managed by CEOs who are not overconfident are more prudent in making asset allocations in conjunction with the significant effect of control variables, and tend to have surplus funds, resulting in higher dividend payments.

Conclusion

Lack of empirical evidence on the effect of CEO overconfidence on dividend policy motivates researchers. The research findings provide further insights for Tiger Cub Economies and enrich the existing literature. The aim of this study is to establish the relation between CEO overconfidence and dividend policy in Tiger Cub Economies and to examine the determinants of dividend policy, which involve past dividend, firm size, growth, profitability, free cash flow, leverage, and liquidity. Investment rates proposed by Boulton and Campbell (2016) and Campbell et al. (2011) were adopted to measure CEO overconfidence. A total of 232 listed firms were selected from Tiger Cub Economies and data period spans from 2012 to 2016. System generalized method of moment (GMM) estimation was adopted for the analysis. The results reveal that overconfident CEOs pay fewer dividends relative to rational CEOs, a finding which is consistent with the findings of past research. The research findings show their robustness when a more stringent measure of CEO overconfidence is adopted, and similar findings are generated. In line with the past research findings, the research results reveal that firms with higher asset growth (AG) and higher leverage (LEV) pay less dividends. Firms with large size (SIZE) and higher earnings growth (EG) and dividend payment pay more dividends.

Implications, Limitations of the Study, and the Way Forward

This study has strong implications for investments or portfolios which target dividend payments as the primary source of income. The findings provide useful insights to: (a) investors and shareholders who are interested in investing in income stocks or (b) fund managers and portfolio managers who intend to construct portfolios of dividend stocks or include income stocks as part of their investment portfolios. When they are selecting dividend stocks, they have to be cautious and see whether CEO overconfidence has a detrimental effect on dividend payments. Besides, other determinants of dividend payment also serve as important references for them to understand that dividend payments are positively influenced by the past dividends, earnings growth, and firm size, yet are negatively affected by asset growth and firm leverage. The overconfidence measure used in this study allows us to adopt panel data in order to capture the time-effect as well as the dynamic effect of dividend payment. Despite that, testing with option or press-based measures of overconfidence is essential in the context of developing countries. Thus, more future empirical studies are required to validate these measures.

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