

## The Dividend Puzzle: A Review

Dewasiri, N.J.,

*University of Sri Jayawardenepura, Sri Lanka*

*jayantba@postgraduate.edu.lk*

Weerakoon Banda, Y.K.,

*University of Sri Jayawardenepura, Sri Lanka*

*weerakon@sjp.ac.lk*

Azeez, A.A.,

*University of Colombo, Sri Lanka*

*aaazeez72@dfn.cmb.ac.lk*

Jayarathne, P.G.S.A.,

*University of Sri Jayawardenepura Sri Lanka*

*amilaj@sjp.ac.lk*

Silva, A.H.D.S.,

*National Development Bank, Sri Lanka*

*damitha.silva@ndbbank.com*

### Abstract

The purpose of this study is to comprehensively review the determinants and explanations of dividend policy. Using systematic literature review approach, 355 research studies in dividend policy have been reviewed and a sample of 185 studies was selected based on the importance they ascribed to the dividend puzzle. A crossover analysis was carried out critically reviewing 123 research articles from the final sample. The results presented in this study revealed contradiction with a high level of discrepancy amongst studies both in terms of theories and determinants of dividend policy. Moreover, there is no published research study focused on all determinants and explanations, and there were no distinctive factors which affect the dividend policy alone and it is suggested to proceed with the dividend decision model for a single consensus of the dividend puzzle. It is notable that, researchers should have balanced focus on organizational, market and behavioral determinants when examining dividend policy. Management and investors should consider all the imperfections or factors, their interactions and consequences when making important dividend and/or stock decisions. The future studies conducted in the same phenomenon should be more comprehensive and should be carried out through the dividend decision model in a mixed method approach in order to overcome the research gaps arisen within the current paradigm. Otherwise, they are likely to result in a blind search. This study is conducted comprehensively reviewing all available theories and empirical determinants of corporate dividend policy and emphasize on the dividend decision model to deal with the dividend puzzle.

**Key Words:** Dividend policy, dividend puzzle, dividend decision model

## INTRODUCTION

Various research studies have focused on dividend policy issues. The determinants of dividend policy were first investigated in early corporate financial studies. In 1956, Lintner pointed to existing dividend decision, its payout and firm's earnings as the benchmarks for future dividend decisions and the major determinants of corporate dividend policy. Miller and Modigliani (1961) suggested that in a perfect market the differential taxation of dividends could generate an 'affinity effect' whereby each firm would attract a fastidious clientele with a preference for its dividend policy. Elton and Gruber (1970) proposed that taxation has a negative impact on firm's dividend policy, which would equally lead to different tax clienteles. Higgins (1972) identified that firm's fund requirement for investments also has a significant impact on dividend policy. Bhattacharya (1979) identified profitability as a determinant of dividend policy and argued that managers could use dividend to communicate firm's profitability to outside investors. Rozeff (1982) identified agency cost as a major determinant of corporate dividend policy. Donaldson's (1990) stewardship theory suggested that corporate governance plays a positive role in diminishing agency costs while Jensen's (1986) free cash flow theory proposed that growth in dividend payouts may help to mitigate free cash flow under managers' control, therefore implying that free cash flow is also a determinant of corporate dividend policy. Mueller (1972) argued that dividend decision is based on the life cycle of the organization, and therefore life cycle variables such as size, growth opportunities and retained earnings to common equity ratio (Fama and French, 2001) can also be interpreted as determinants of corporate dividend policy. Baker and Wurgler (2004) stated that the decision to pay dividends is driven by current investor demand, which establishes market dividend premium as a determinant of corporate dividend policy. Shefrin (2009) investigated different behavioural accounts of dividends and posit that demographic factors such as low income, retired and older households as the actual determinants of dividend policy.

Even in the multi factor explanation context, findings of the different scholars are contradictory. For instance, Boțoc and Pirtea (2014) investigated dividend policy in sixteen emerging countries and findings implored that size, corporate governance, profitability, cash needs and liquidity as the determinants which have positive impact on dividend policy while growth is identified as a determinant which has a negative impact on dividend policy. Kuzucu (2015) studied the determinants of dividend policy in the Turkish listed firms. His findings revealed that the leverage, growth rate, profitability, earnings and family control as negative determinants, whereas

the size, age and P/E ratio as positive determinants and liquidity as insignificant variable. In terms of profitability and liquidity, his findings are contrary to Boțoc and Pirtea's (2014) results. Yusof and Ismail (2016) identified that firm size, earnings, and investment have a positive significant effect, whereas debt and large shareholders have a negative impact on dividend policy in the Malaysian context. Further, they revealed that growth, free cash flow and lagged dividends are insignificant which is contrary to previous findings. Baker and Jabbouri (2016) implored that the earnings, shareholder needs and the past dividends as key factors influencing corporate dividend policy. It seems that lagged dividends played a contradictory role in Yusof and Ismail's (2016) and Baker and Jabbouri's (2016, 2017) studies.

Bhattacharyya (2007) reviewed dividend policy focusing on clientele, signalling, agency and free cash flow hypotheses and results emphasized the future research studies should take all the empirical implications of all the theories while testing them simultaneously. Al-Malkawi et al. (2010) reviewed six major theories and their empirical stance on dividend policy. They concluded that the Fisher Black's statement of dividend puzzle is still valid; "the harder we look at the dividends picture, the more it seems like a puzzle, with pieces that just do not fit together" (Black, 1976, p. 5). Baker and Weigand (2015) revisited the dividend policy focusing seven explanations on paying dividends; bird in the hand, taxes and tax clienteles, asymmetric information, agency cost, catering, behavioural and firm life cycle theories. They suggested developing a new paradigm or model to compact the dividend puzzle. Addressing the aforementioned gaps in literature, this study focuses on all available explanations (twelve theories) based on dividend policy using the theoretical triangulation approach. Here, the aim of the study is to identify a possibly universal set of determinants of dividend policy, and to develop a new model to deal with the dividend puzzle as suggested by Baker and Weigand (2015). The contrasting views of aforesaid previous studies and lack of comprehensive reviews of dividend policy are the main justification for our study.

## **LITERATURE REVIEW**

A number of theories of dividend policy were proposed in the past decades. Lintner (1956) reviewed available information from 600 listed companies and selected 28 firms for detailed investigation as the first attempt to study dividend policy determinants. After a detailed financial analysis, in-depth interviews were conducted and identified existing dividend decision, dividend

payout and net earnings as the key determinants of dividend policy, while liquidity and debts were identified as secondary factors.

### *Dividend Irrelevance Theory*

In 1961, Miller and Modigliani criticized the bird-in-the-hand explanation theory and championed a view based on the concept of “dividend irrelevance.” They suggested that dividends have no impact on firm value under perfect and frictionless market conditions. Relying on quantitative modeling, they emphasized that given a certain investment policy, the firm’s dividend becomes irrelevant to its current valuation. Finally they identified tax differences and brokerage fees as major imperfections in the market place. Miller and Scholes (1978) argued that limitations such as interest deductions to investment income and tax free accumulation of wealth would cause taxable investors to be indifferent to dividends, despite tax differentials in favor of capital gains (Strong Invariance Proposition). The dividend irrelevance theory was highly criticized over the past decades even under the assumption of a perfect market. For example, De Angelo et al. (2006) criticized the theory by arguing that payout policy is not irrelevant to firm valuation in any market. After the irrelevance argument, there are multiple theories aroused supporting the relevance argument as stated below.

### *Bird-in-the-hand Theory*

Lintner (1956) proposed that dividend payments were associated with lower risk. His argument was backed by Gordon (1959) who argued that dividends are valued above retained earnings. Lintner and Gordon consolidated the view that a ‘bird-in-the-hand’ is more valuable than “two in the bush” when it comes to capital gains.

### *Tax Preference Theory*

The first attempt to investigate the impact of tax on dividend was provided by Lintner (1956). He argued that the higher the tax liability, the smaller the paid dividend. Miller and Modigliani (1961) identified tax as a major factor of imperfection and concluded that different tax brackets may lead to a particular clientele manifesting a preference for a given dividend policy. They were however unable to provide a mechanism for the phenomenon. Elton and Gruber (1970) supported the idea of a clientele effect by suggesting that higher firm's dividend payout ratios correspond to the lower tax brackets, thereby leading to different clienteles. Miller and

Scholes (1978) confirmed the findings in a seminal article. In summary, under the tax preference theory, tax is considered as a determinant of dividend policy. More recently, Deslandes et al. (2015) corroborated this view by identifying tax cuts as a key determinant of dividend policy.

### *Signalling Theory*

Bhattacharya (1979) proposed the ‘signaling hypothesis’ based on the idea of imperfect information to account for the dividend puzzle. Assuming that investors have asymmetric information about firms while managers have inside information about profitability, managers can be seen as signaling information on profitability to the market via dividends. Bhattacharya argued that higher support value is informed by higher dividends. Although Lintner’s (1956) and Pettit’s (1972) findings were compatible with the idea of a signaling equilibrium, unfortunately their findings were not fully developed into a theory. Al Deehani (2003) emphasized the significance of the signaling theory by stating that the indication of future profitability is a key motivation for the payment of dividends. The debate continues, as Al-Malkawi (2007) found no support for the signaling theory while in contrast Basil Al-Najjar (2011), Patra et al. (2012) and Botocand Pirtea (2014) produced supporting evidence for the theory.

### *Agency Cost Theory*

Rozeff (1982) argued that increased dividend premiums could reduce agency costs, but did not expand on the details of the process. Easterbrook (1984) did a survey to investigate the mechanisms relating dividends and agency costs. He identified a negative relationship between dividends and agency cost, and provided a convincing explanation for the dividend puzzle, which was strongly supported by Al-Malkawi (2007) and Patra et al. (2012). In contrast to those conclusions, Brav et al. (2005) and Maditinos et al. (2007) argued that there is no significant relationship between agency cost and dividend payout.

### *Substitution Theory and Outcome Theory*

La Porta et al. (2000) investigated the agency cost theory using two alternative dividend models. In the first model, dividends are identified as a result of effective legal protection while in the second model dividends were identified as a substitute for effective legal protection in order to create corporate governance or reputation. Sawicki (2009) studied corporate governance in East Asian countries and found mixed results when using pre- vs. post-crisis as a dummy variable.

Setiawan and Phua (2013) confirmed the substitution model by identifying a negative impact from corporate governance on dividend policy. Botoc and Pirtea(2014) also supported the substitution model providing evidence that dividends are a substitute for effective legal protection. Benjamin and Zain (2015) also identified corporate governance as a substitute determining reductions in agency cost. Contrary to these findings, Yarram (2015) posit that corporate governance has a positive impact on dividend policy, supporting the outcome model. Yarram and Dollery(2015), Ashraf and Zheng (2015) and Shamsabadi et al. (2016) also supported the outcome model of dividends.

### *Stakeholder Theory*

Cornell and Shapiro (1987) proposed the stakeholder theory expanding on the proposals by Titman (1984). They described non-investor stakeholder influence as net-organizational capital (NOC), proposing that management can indicate their capability to make payoffs on implicit claims through paying higher dividends. Holder et al. (1998) confirmed the stakeholder theory by revealing an impact from non-stakeholder influence on corporate dividend policy. Hence non-investor influence was also identified as a key determinant of dividend policy.

### *Free Cash Flow Theory*

Jensen (1986) developed free cash flow theory with the purpose of encouraging managers to distribute cash rather than invest in negative NPV (Net Present value) projects or wasting it. Hence payment in increased dividends may reduce the agency costs and mitigate the agency problem.

### *Rent Extraction Hypothesis*

In contrast to the free cash flow theory, Shleifer and Vishny (1997) developed the “Rent Extraction Hypothesis” with the proposal that major shareholders prefer private benefits and control of the firm over receiving dividends bringing advantages to all stockholders. Faccio et al. (2001) and Gugler and Yutoglu (2003) findings were consistent with the rent extraction hypothesis, as well as the study by Harada and Nguyen (2011) in Japan.

### *Pecking Order Theory*

Following the pecking order hypothesis developed by Myers (1984), Fama and French (2002) proposed that, more profitable firms are less levered, and firms with higher level of investment have lower long-term dividend payouts, thereby concluding that investment opportunities were another determinant of dividend policy. The pecking order hypothesis was provided strong support by Al-Malkawi (2007).

### *Life Cycle Theory of Dividends*

Mueller (1972) proposed that as large and mature firms realize investment opportunities, investors may face a reduction in dividends. According to Mueller's argument, dividend policy is therefore based on the life cycle of the firm. Fama and French (2001) later supported those views.

### *Catering Theory of Dividends*

In a seminal study and through comprehensive analysis of published data, Baker and Wurgler (2004) stated that the decision to pay dividends, and hence dividend policy itself, is based on the current investor demand for dividend payments. Tangjitprom (2013) confirmed the catering theory of dividends by suggesting that dividend premium is a key determinant of dividend policy. Wang et al. (2016) and Dereeper and Turki (2016) also confirmed the catering theory by stating that firms continuously change their dividend policy in order to cater for investor's demands.

### *Liquidity Hypothesis*

In 1956, Lintner identified liquidity as a less important determinant of corporate dividend policy. When there is trading friction in financial markets, an immediate implication of Miller and Modigliani's (1961) view is that, firms with less liquid shares (i.e., shares with higher trading friction) are more inclined to pay dividends. Banerjee et al. (2007) termed this implication the "liquidity hypothesis of dividends", and provided further evidence that firms with less liquid stocks are more likely to initiate or continue dividend payments. Ye et al. (2015) also observed that stock dividends policy has a negative relationship with liquidity, and that the relationship between stock dividends and liquidity of ex ante announcement is influenced by the time choice of stock dividends. In 2015, Baker and Kapoor found the highest support for the liquidity hypothesis among other possible motives for stock splits (Stock dividends).

### *Behavioural Explanations*

Shefrin and Statman (1984) made the point that financial theory has ignored the question of how individual investors actually behave with regards to dividends. They argued that standard models or theories seem incapable of accounting for inclusion of behavioral elements, thereby identifying a substantial 'behavioral gap' in the finance literature. From their perspective, demographic attributes of investors such as their preference for high or low dividend payouts play a vital role in determining dividend policy. Accordingly, some investors would prefer a premium for cash dividends for self-control reasons (Thaler and Shefrin, 1981). Miller (1986) also argued that behavioral/cognitive elements play a vital role at the most micro decision level, but was unable to pinpoint the specific behavioral elements bearing on dividend policy. Jirporn (2016) et al. emphasized that firms with more talented executives are more likely to pay larger dividends, thus identifying managerial ability as a behavioral determinant of dividend policy.

### *Multiple-factor empirical review*

Dickens et al (2002) emphasized that five of the seven variables originally identified by Lintner (1956) can explain dividend policy to a large extent: investment opportunities, profitability, ownership, risk size and past dividend. Thesis and Dutta (2009) pointed at capital to assets ratio and prior year dividends as positive determinants, and to earnings volatility and natural log of revenue as negative determinants, and concluded that the findings by Dickens et al (2002) were robust. Al- Malkawi's (2007) quantitative analysis of published data revealed that size, age and profitability were the determinants of dividend policy in the Jordanian market. Pandey and Ramesh (2007) investigated dividend policy under restricted monetary policy and identified restricted monetary policy as a key determinant, highlighting the importance of investigating multiple macro-economic variables. Basse and Reddemann (2011) identified inflation as a macroeconomic determinant of dividend policy in the USA context.

On one hand, Dutta (1999) investigated managerial ownership as a possible dividend determinant and identified insider ownership as a key negative determinant, a finding confirmed by Benjamin et al. (2016) in the Malaysian context. On the other hand, Al Najjar and Hussainey (2009) identified outside directorship as a key determinant of dividend policy. Al-Najjar and Kilincarslan (2016) posit that ownership structure has an overall negative impact on dividend policy. Benjamin et al. (2016) identified family share ownership as key determinant for the firms



with low debt, smaller total assets and low-growth opportunities. Setiawan et al. (2016) found that government- and foreign-controlled firms have a positive impact on corporate dividend policy, and a negative effect from family firms. Hoje and Pan (2009) identified managerial enrichment as another key determinant of corporate dividend policy. Booth and Zhou (2015) identified the market power as another key determinant of corporate dividend policy.

Abor and Bokpin (2010) investigated the dividend policy in 34 emerging countries. They identified that investment opportunity, profitability and stock market capitalization as main determinants and leverage, debt and external financing as less important determinants of dividend policy. Al-Ajmi and Hussain (2011) investigated the dividend policy in Saudi Arabia and identified that existing dividend payments, profitability, cash flows, and life cycle as core determinants of dividend policy. Khan et al. (2011) investigated the determinants of dividend policy through a qualitative approach. Interviewing 23 corporate managers, they argued that past dividends and profitability do not influence current dividend policy. Current earnings and liquidity were identified as determinants of dividend policy in Pakistan. Baker and Powell (2012) investigated dividend policy in Indonesia using a survey technique and revealed that earnings stability, current and future earnings, shareholder preferences and impact of dividends on stock prices were the key determinants of corporate dividend policy. Perretiet al. (2013) identified size, earned and contributed capital mix, and growth opportunities as key determinants of dividend policy in ADR firms (American depository receipts). Arko et al. (2014) studied the dividend policy in Sub Saharan African countries and revealed that profitability, investment opportunity, taxation, Institutional shareholding, leverage and earning volatility (risk) were the key determinants of dividend policy. Yarram (2015) studied the dividend policy in Australia and identified corporate governance, profitability and growth opportunities as the determinants of corporate dividend policy.

Patra et al. (2012) identified size, liquidity, profitability, investment opportunities, leverage and risk as the determinants of dividend policy. Jiraporn et al. (2016) identified that organizations with more capable executives exhibit a high propensity to pay dividends, pointing to managerial ability as a key determinant of dividend policy.

Ozoet al. (2015) studied dividend policy using a qualitative methodology and identified current earnings and their stability, availability of cash, and past dividends as the determinants of

dividend policy. Ankudinov and Lebedev(2016) studied the dividend policy in Russian markets and revealed that profitability, firm size, investing opportunities, financial structure of the firm and sectorial affiliation were key determinants of corporate dividend policy. Yusof and Ismail (2016) investigated the determinants of dividend policy in Malaysia. They identified earnings, size of the firm and investment as positive significant variables, while debt and large shareholders as negative significant determinants. Baker and Jabbouri (2016) identified level and stability of current earnings and investor's need as the most important determinants of corporate dividend policy. Al-Kayed (2017) studied the dividend determinants in Islamic and conventional banks and identified profitability, growth, liquidity, previous year dividend and leverage as key determinants of corporate dividend policy. The above review shows that the determinants of dividend policy remain an open question with multiple theories and potential factors being still debated as possible solutions to the puzzle. This situation seems to require a more general reflection on approaches to the problem.

## **RESEARCH METHODOLOGY**

When investigating dividend policy, researchers can rely on two broader methodologies: epistemological and phenomenological paradigms. Epistemologists use the quantitative methodology based on data collection, analysis and interpretation. Phenomenologists approach the topic using a qualitative ethnomethodology position (Uyangoda; 2010). From a set of 355 research studies in dividend policy, 185 studies were selected as the final sample on the basis of study relevance to the dividend puzzle. Even though the entire research study is based on 185 research articles, the crossover analysis was carried out reviewing 123 articles considering the direct relevancy to the dividend puzzle and the year of publication. In this study, the methodology adopted for the systematic literature review was proposed by Kumar and Goyal (2015) considering the fact that it has emphasized the use of systematic literature review method in the area of behavioural and corporate finance. The systematic literature review allows the researchers to identify, select and critically evaluate previous research studies in order to answer a clearly formulated research question/s. Accordingly, the data base search was conducted through key words, publication year, publisher, and the journal. A crossover analysis was used as the main data analysis approach.

## DATA ANALYSIS AND DISCUSSION

The data analysis and discussion was carried out through three stages. First, a descriptive analysis was carried out discussing the sample profile and classifying the literature. Second, a crossover analysis was carried out identifying the research gaps in dividend puzzle. Finally, a holistic model is proposed to deal with the gaps which has arisen within the dividend puzzle.

### Description and classification of literature

The literature review was conducted reviewing 185 articles in dividend policy. These studies were descriptively analyzed with special reference to the year of the publication, publisher, and the journal.

#### *Sample profile by the year of the publication*

The literature survey was carried out based on selected 185 publications from 1956 to 2017. Out of the final sample, 143 articles were published after 2000 whereas 42 studies were carried out amongst 1956-1999. It is vital to note that 111 publications (60 % from the sample) were published in the past decade (2007-2017). Table 1 depicts the sample profile by the year of publication.

Table 1.0: Sample profile by the year of publication

This table shows the sample breakdown based on the year of publication.

<b>Year</b>	<b>No of research articles</b>		
		2010	07
2017	12	2009	13
2016	12	2008	05
2015	14	2007	13
2014	07	2000-2006	32
2013	06	1956-1999	42
2012	08		
2011	14	<b>Total</b>	<b>185</b>
<b>Year</b>	<b>No of research articles</b>		

***Sample profile by the publisher***

The descriptive analysis of the sample revealed that 47.57% of the sampled studies were published by Emerald Group Publishing Limited whereas 14.59% of the studies were published by John Wiley and Sons Inc. It is vital to highlight that less than 5% of the sampled studies are published by unknown publishers. Table 2 shows the sample profile by the publisher.

Table 2.0: Sample profile by the Publisher

This table shows the sample breakdown by the publisher and it shows the no of selected articles against the no of screened articles produced by the respective publishers.

<b>Publisher</b>	<b>No of screened articles</b>	<b>No of Selected Articles</b>	<b>Percentage (N=185)</b>
Emerald	149	88	47.57%
Wiley	44	27	14.59%
Taylor and Francis	34	14	7.57%
Elsevier	29	13	7.03%
JSTOR (Online Publisher)	19	8	4.32%
Oxford University Press	12	6	3.24%
American Economic Association	6	4	2.16%
Cambridge University Press	5	3	1.62%
Springer	4	2	1.08%
SAGE	4	2	1.08%
Inderscience	5	2	1.08%
University of Chicago Press	3	2	1.08%

Financial Management Association	2	1	0.54%
Institutional Investor Journals	2	1	0.54%
American Accounting Association	2	1	0.54%
Macrothink	3	1	0.54%
Macmillan Publishing Co	1	1	0.54%
Social Science Association	1	1	0.54%
Other	30	8	4.32%
<b>Total</b>	<b>355</b>	<b>185</b>	<b>100%</b>

***Sample profile by the Journal of publication***

The final sample is spread over 82 academic journals and 50.81% of the sampled studies were selected from ten journals as depicted in Table 3. The descriptive analysis revealed that top five journals in terms of number of selected studies are Managerial Finance (40 research articles), International Journal of Managerial Finance (9 research articles), The Journal of Finance (8 research studies), Financial Management ( 8 research articles), and Journal of Financial Economics (8research studies).

Table 3.0: Sample profile by the Journal

This table shows the sample breakdown by the journal. The entire list is not included due to length constraints and the full list is available on request.

No	Journal	No of articles	% (N=196)
1	Managerial Finance	40	21.62%
2	International Journal of Managerial Finance	9	4.86%
3	The Journal of Finance	8	4.32%
4	Financial Management	8	4.32%
5	Journal of Financial Economics	8	4.32%
6	Studies in Economics and Finance	6	3.24%
7	The Review of Financial Studies	5	2.70%
8	American Economic Review	4	2.16%
9	The Journal of Risk Finance	3	1.62%
10	China Finance Review International	3	1.62%
<b>Total</b>		<b>94</b>	<b>50.81%</b>

#### Crossover Analysis and Discussion

The crossover analysis was conducted in three stages. First, methodologies applied by the sampled studies were critically analyzed and summarized in Table 5<sup>4</sup>.

Table 5. Summary of methodologies applied by sampled studies

This table shows the summary of methodologies used by the sampled studies in explaining the dividend policy.

Methodology	Number of Studies	Percentage (N=123)
Quantitative Published data	97	78.86%
Quantitative Survey Data	14	11.38%
Quantitative Modelling	8	6.50%
Qualitative Methodology	4	3.25%
Triangulation Approach	0	0.00%
<b>Total</b>	<b>123</b>	<b>100%</b>

Regarding sample composition, 78.86% of the studies were based on published data analysis, 11.38% on survey data, 6.50% on quantitative modeling and 3.25% on the qualitative approach. There is no single published study based on the triangulation approach. When the used methodologies of the sample are considered, most of the studies

<sup>4</sup> A detailed analysis of the methodologies used in the sampled 123 studies is available on request.

used (78.86%) proxy variables and 96.75% of the studies were based on the quantitative methodology in order to explain the dividend policy. It is debatable if the researchers tend to use only the proxy explanations in order to elucidate an explanation which has implications for behavioural decisions. Even though 96.75% of the methodologies on quantitative approach and contradictory in their findings, at least a single researcher did not show a positive signal to use triangulation approach in order to have more validity and completeness of their findings. Hence, it has been identified as a methodological research gap. Accordingly, the explanations based on published numerical data or survey results data could be validated through a triangulation approach; otherwise, the deduction results of various explanations based on such approaches under different conditions or contexts are inconclusive and inconsistent as same as today (Dewasiri and Weerakoon, 2016).

The second stage of data analysis was the investigation of common determinants of the corporate dividend policy cited in the sampled studies, summarized in Table 6. Notice that since a study can indicate more than one determinant, the total number of references to a determinant factor and the percentages do not add up to 123 (the number of sampled studies). For the same reason, percentages do not add up to 100%.

As shown in Table 6, most of the studies (35%) investigated investment opportunities as a key determinant. Moreover, profitability, earnings, company size, leverage, liquidity, ownership structure, and past dividends were investigated as key determinants by over 15% of the sample studies. There was no single published research study investigating all the determinants, even after correlation, validity and reliability analysis.

Table 6. Determinants of dividend policy in sampled studies (N=123).

This tables shows the determinants of dividend policy investigated in the sampled 123 studies.

<b>Determinant</b>	<b>Number research studies #</b>	<b>Percentage</b>
Growth Opportunities	43	35%
Profitability	38	31%
Earnings	29	24%
Company Size	27	22%
Leverage	22	18%
Liquidity	21	17%
Ownership Structure	19	15%
Past Dividends	18	15%
Shareholder preference	17	14%
Tax	16	13%
Corporate Governance	15	12%
Free Cash Flow	13	11%
Business Risk	12	10%
Industry Influence	9	7%
Life Cycle of the firm	8	7%
Rent Extraction	5	4%
Demographic Influence	3	2%

Table 7 displays the acceptance and rejection rate of dividend determinants across the sampled studies<sup>5</sup>. As mentioned above, 24% of the research studies investigated earnings as a key determinant; amongst those, 97% accepted earnings as a main determinant. Likewise, all the other proposed variables were accepted by over 50 % of the studies referring to them as key determinants of corporate dividend policy except free cash flow (46%). Even though, rent extraction and demographic variables scored 100% acceptance, it were investigated only in few studies out of the sample as mentioned in

<sup>5</sup> A detailed analysis of the determinants investigated in sampled 123 studies is available on request



table 3. Moreover, it is noticed that all of the dividend determinants and its relationships were contradictory in different studies in different contexts. Hence, it implied that there is no single consensus of dividend determinant puzzle.

Table 7. Acceptance and rejection rate of major dividend determinants

This table shows the acceptance of the dividend determinants investigated in the sampled studies.

Determinant	Number		Rejected #	Mix #	Acceptance Rate
	research studies	Accepted #			
Growth Opportunities	43	35	4	4	81%
Profitability	38	36	1	1	95%
Earnings	29	28	1		97%
Company Size	27	26	1		96%
Leverage	22	17	3	2	77%
Liquidity	21	15	2	4	71%
Past Dividends	18	16	2		89%
Share holder preference	17	15		2	88%
Tax	16	9	6	1	56%
Business Risk	12	10	1	1	83%
Free Cash Flow	13	6	7		46%
Life Cycle of the firm	8	6	1	1	75%
Industry Influence	9	6	2	1	67%
Rent Extraction	5	5			100%
Demographic Influence	3	3			100%
		Dispersed:			
Ownership Structure	19	5	1		26%
		Concentrated:			
		13			68%
		Substitute:			
Corporate Governance	15	7			47%
		Outcome:			
		8			53%

The third stage of the analysis was the deduction of dividend theories put forward by the sampled studies, with the breakdown presented in Table 8. Most research studies focused on testing the signaling (49%), agency cost (33%), tax preference (20%), catering (17%), outcome/substitute (15%), and life cycle (15%) theories, while other theories were comparatively neglected. Once again, as more than one theory can be addressed in a single study, totals do not add up to 123 studies or 100% frequency. Moreover, no published research study focused on testing all of the dividend theories simultaneously, even after controlling for respective assumptions which could be considered as another research gap of dividend policy<sup>6</sup>.

Table 8. Dividend theories tested in sample studies.

This table shows the theories of dividend policy investigated in the sampled 123 studies.

<b>Theory or Hypothesis</b>	<b>Number research studies #</b>	<b>Percentage (N=123)</b>
Signaling Theory	60	49%
Agency Cost Theory	40	33%
Tax Preference Theory	24	20%
Catering Theory	21	17%
Outcome/Substitute Theory	19	15%
Life Cycle Theory	18	15%
Free Cash Flow Theory	13	11%
Pecking Order Theory	11	9%
Bird in the Hand Explanation	11	9%
Rent Extraction Hypothesis	6	5%
Stakeholder Theory	3	2%
Behavioral Explanations	3	2%

Table 9 displays the acceptance rate of dividend theories in the sampled studies. The highest acceptance rates were achieved by the life cycle (94.4%), pecking order, catering, signaling and agency cost theories. Even though the rent extraction,

<sup>6</sup> A detailed analysis of the theories investigated in sampled 123 studies is available on request

stakeholder, and behavioral acceptance rate is high, those theories are investigated only in few studies (less than 10 studies). Overall, there is a high percentage of hypothesis rejections, which points to contradictory findings of the explanations which could be considered as another research gap in dividend policy.

Table 9. Acceptance rates of the dividend theories in sampled studies.

This table shows the acceptance of the dividend theories investigated in the sampled studies

Theory or Hypothesis	Number	Accepted #	Rejected #	Mix #	Acceptance Rate
	research studies #				
Signalling Theory	60	46	11	3	76.7%
Agency Cost Theory	40	30	5	5	75.0%
Catering Theory	21	19	1	1	90.5%
Tax Preference Theory	24	11	9	4	45.8%
Life Cycle Theory	18	17	1	-	94.4%
Pecking Order Theory	11	10	1	-	90.9%
Free Cash Flow Theory	13	8	5	-	61.5%
Bird in the Hand Explanation	11	4	5	2	36.4%
Rent Extraction Hypothesis	6	6		-	100.0%
Stakeholder Theory	3	3		-	100.0%
Behavioural Explanations	3	3		-	100.0%
Outcome/Substitute Theory	19	Substitute -10 Outcome - 9		-	52.6% 47.4%

The crossover analysis revealed that there are contradictions in both theories and determinants, it is important to develop a new model to deal with the dividend puzzle as emphasized by Baker and Weigand (2015). The findings divulge that both behavioural, firm and market characteristics influence the corporate dividend policy. Hence, an integrated explanation could be discussed as a cause and effect model as emphasized by Covalleski et al. (2010). Figure 1, represents a simple generic dividend decision model

(DDM), which could be taken as a template for developing more specific paradigms. The DDM emphasizes on the causal relationship between firm and market variables at the firm/ market level while impact of behavioural determinants and individual mental states showing at the individual level showing how organizational, market and behavioral factors effect firms' corporate dividend decisions.

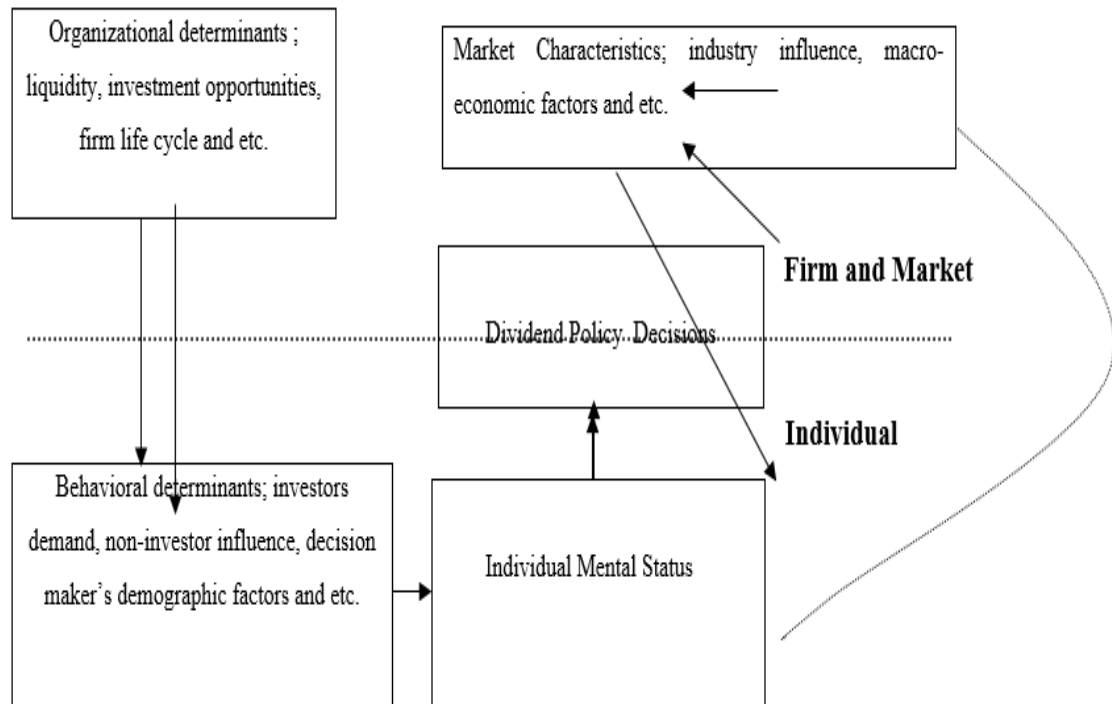


Figure 1. Dividend Decision Model

## CONCLUSION

It is notable that, more than 12% of the sampled studies investigated investment opportunities, profitability, earnings, company size, leverage, liquidity, ownership structure, past dividends, investor preference, tax, and corporate governance, as key variables, amongst those, more than 50 % accepted the same factors in determining corporate dividend policy. Moreover, there was no single research study investigating all the determinants, even after correlation, validity and reliability analysis. The theoretical triangulation revealed that more than 75% accepted that signaling, agency cost, life cycle,

catering, pecking order, and rent extraction theories explain the dividend policy. Besides, there is a high usage rate (78.86% of the published data based studies) of proxy variables to explain determinants which is problematic in determining dividend policy. The results presented in this study revealed contradiction with high level of discrepancy between studies both in terms of theories and determinants of dividend policies. Even though the dividend puzzle has been investigated for decades, researchers have not yet attempted to test and discuss all available theories and it is proposed to study determinants simultaneously in a single study. Here it is argued that the suggested DDM is the key to a consensual solution to the puzzle of dividend policy.

### **IMPLICATIONS OF THE STUDY**

As practical implications, two main suggestions are made, aimed at promoting more widespread agreement over theories and determinants.

1. In reality, dividend decisions are based on variety of conflicting forces between organizational, market and individual dilemmas. Hence the researchers should have balanced focus on firm, market and behavioral determinants as emphasized in dividend decision model when examining the dividend policy.
2. Management and investors should consider all of the imperfections or factors, their interactions and consequences when making important dividend and/or stock decisions.

### **AVENUES FOR THE FUTURE RESEARCH**

As future directions, it is imperative for researchers to investigate all variables in a single study after a careful evaluation of multicollinearity, validity and reliability analysis, and to use a triangulation approach to enhance the validity and completeness of conclusions while reducing potential contradictions (Yesmin & Rahman (2012)). It is imperative to note that most of the dividend studies (e.g. Al-Malkawi, 2007; Al-Kayed, 2017; Al-Najjar and Kilincarslan, 2016, 2017; Baker and Jabbouri, 2016, 2017; Baker and Kapoor, 2015) focused on two major research questions in a single study; what are the determinants of dividend policy and why do companies pay dividends (theoretical explanations). Teddlie and Tashakkori (2003) stated that mixed methods studies are

superior as they can answer research problems/questions that the other approaches/methodologies cannot. Onwuegbuzie (2006, p.483) argued that “mixed methods studies embed both a quantitative research question and a qualitative research question within the same study”. Accordingly, the research study which need a triangulated or mixed method inquiry are combined with both qualitative and quantitative aspects (Dewasiri et al, 2018). For instance, Creswell &Tashakkori, 2007 emphasized that “when a project explores mixed research questions with interconnected qualitative and quantitative components or aspects (e.g., questions including “what and how” or “what and why”), the end product of the study (conclusions and inferences) will also include both approaches”. Hence, this study recommends the future researchers to especially focus on methodological triangulation when investigating the dividend puzzle since it includes both qualitative and quantitative (what and why) research questions. Moreover, if a researcher has taken a proxy variable, triangulation/mixed methods can provide a dual confirmation on behavioral reality. Hence,the results do not recommendthe design of studies with few theories or determinants and too many symptoms, as they are likely to result in a search in the darkness. It is suggested to proceedwith the dividend decision model to have a single consensus of the dividend puzzle.

## REFERENCES

Abor, J. and Bokpin, G.A. (2010),"Investment opportunities, corporate finance, and dividend payout policy", *Studies in Economics and Finance*, Vol. 27 No.3, pp. 180 – 194.

Aharony, J. and Itzhak, S. (1980), “Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis”, *Journal of Finance*, Vol.35 No.1, pp. 1-12.

Al Ajmi, J. and Hussain, H.A. (2011),"Corporate dividends decisions: evidence from Saudi Arabia", *The Journal of Risk Finance*, Vol. 12 No.1, pp. 41-56.

Al Deehani, T.M. (2003),"Determinants of Dividend Policy: The Case of Kuwait", *Journal of Economic and Administrative Sciences*, Vol. 19 No. 2, pp. 59-76.

- Al-Kayed, L.T. (2017), "Dividend Payout policy of Islamic vs conventional banks: case of Saudi Arabia", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 10 No.1, pp.117-128.
- Al-Malkawi, H.A.N, Rafferty, M. and Pillai, R. (2010), "Dividend policy: A review of theories and empirical evidence", *International Bulletin of Business Administration*, Vol. 9 No.1, pp.171-200.
- Al-Najjar, B. (2011), "The inter-relationship between capital structure and dividend policy: empirical evidence from Jordanian data", *International Review of Applied Economics*, Vol. 25 No. 2, pp.209-224.
- Al Najjar, B. and Hussainey, K. (2009),"The association between dividend payout and outside directorships", *Journal of Applied Accounting Research*, Vol. 10 No.1, pp. 4 – 19.
- Al-Najjar, B. and Kilincarslan,E. (2016), "The effect of ownership structure on dividend policy: evidence from Turkey", *Corporate Governance*, Vol. 16 No. 1, pp.135-161.
- Ankudinov, A.B. and Lebedev, O.V. (2016), "Dividend payouts and company ownership structure amid the global financial crisis: evidence from Russia", *Post- Communist Economies*, Vol. 28 No.3, pp.384-404.
- Arko, A.C., Abor, J., Adjasi, K.D.C. and Amidu, M. (2014),"What influence dividend decisions of firms in Sub-Saharan African?",*Journal of Accounting in Emerging Economies*, Vol. 4 No. 1, pp. 57 – 78.
- Ashraf, B.N. and Zheng, C. (2015),"Shareholder protection, creditor rights and bank dividend policies", *China Finance Review International*, Vol. 5 No. 2, pp. 161 – 186.
- Baker, H. K., Farrelly, G. E. and Edelman, R. B. (1985), "A survey of management views on dividend policy", *Financial Management*, Vol.38 No.3, pp.78-84.
- Baker, H.K. and Jabbouri, I. (2016), "How Moroccan managers view dividend policy", *Managerial Finance*, Vol. 42 No.3, pp.270-288.
- Baker, H.K. and Jabbouri, I (2017), "How Moroccan institutional investors view dividend policy", *Managerial Finance*, Vol. 43 No.12, pp.1332-1347.
- Baker. H.K. and Kapoor, S. (2015),"Dividend policy in India: new survey evidence", *Managerial Finance*, Vol. 41 No. 2, pp. 182 – 204.

- Baker, H.K. and Powell, G.E. (2012), "Dividend policy in Indonesia: survey evidence from executives", *Journal of Asia Business Studies*, Vol. 6 No. 1, pp. 79 – 92.
- Baker, H.K. and Weigand, R.(2015), "Corporate dividend policy revisited", *Managerial Finance*, Vol. 41No.2, pp. 126 – 144.
- Baker, M. and Wurgler, J. (2004), "A Catering Theory of Dividends", *The Journal of Finance*, Vol. 59 No. 3, pp. 1125-1165.
- Banerjee, S. Gatchev, V.A. and Spindt, P.A. (2007), "Stock Market Liquidity and Firm Dividend Policy", *The Journal of Financial and Quantitative Analysis*, Vol.42 No.2, pp.369-397.
- Basse, T. and Reddemann, S. (2011), "Inflation and the dividend policy of US firms", *Managerial Finance*, Vol. 37 No. 1, pp. 34 – 46.
- Benjamin, S.J. and Zain, M.M. (2015), "Corporate governance and dividends payout: are they substitutes or complementary?" *Journal of Asia Business Studies*, Vol. 9 No. 2, pp. 177 – 194.
- Benjamin, S.J., Wasiuzzaman, S., Mokhtarinia, H. and Nejad, N.R.(2016), "Family ownership and dividend payout in Malaysia", *International Journal of Managerial Finance*, Vol. 12 No. 3, pp. 314 – 334.
- Bhattacharya, S. (1979), "Imperfect information, dividend policy, and 'the bird in the hand fallacy'", *Bell Journal of Economics*, Vol. 10 No. 1, pp. 259-270.
- Bhattacharyya, N. (2007), "Dividend policy: a review", *Managerial Finance*, Vol. 33No. 1, pp. 4 - 13.
- Black, F. (1976), "The Dividend Puzzle", *Journal of Portfolio Management*, Vol. 2 No.1, pp. 5-8.
- Booth,L. and Zhou,J. (2015), "Market power and dividend policy", *Managerial Finance*, Vol. 41 No. 2, pp. 145 – 163.



Boțoc, C. and Pirtea, M. (2014), "Dividend Payout-Policy Drivers: Evidence from Emerging Countries", *Emerging Markets Finance and Trade*, Vol. 50 No.4, pp. 95-112.

Brav, A., Graham, J. R., Harvey, C. R. and Michaely, R. (2005), "Payout policy in the 21st century", *Journal of Financial Economics*, Vol. 77, pp. 483–527.

Brennan, M.J. (1970), "Taxes, market valuation and corporate financial policy", *National Tax Journal*, Vol.23 No.4, pp. 417-427.

Claessens, S., Djankov, S. and Lang, L.H.P. (2000), "The separation of ownership and control in East Asian corporations", *Journal of Financial Economics*, Vol.58 No.1, pp. 81-112.

Claire, E. C. and Robert, S. H. (1989), "A Test of the Agency Theory of Managerial Ownership, Corporate Leverage, and Corporate Dividends", *Financial Management*, Vol.18 No.4, pp. 36-46.

Cornell, B. and Shapiro, A.C. (1987), "Corporate Stakeholders and Corporate Finance," *Financial Management*, Vol.16 No.1, pp. 5-14.

Covaleski, M.A., Evans, J.H. III, Luft, J.L. and Sheilds, M.D. (2003), "Budgeting research: three theoretical perspectives and criteria for selective integration", *Journal of Management Accounting Research*, Vol. 15, pp. 3-49.

Creswell, J. W. and Tashakkori, A. (2007), "Exploring the Nature of Research Questions in Mixed Methods Research", *Journal of Mixed Methods Research*, Vol. 1 No.3, pp.207-211.

De Angelo, H., De Angelo, L. and Skinner, D.J. (1996), "Reversal of fortune: Dividend signaling and the disappearance of sustained earnings growth", *Journal of Financial Economics*, Vol. 40, pp. 341–71.

De Angelo, H., De Angelo, L. and Stulz, R. (2006), "Dividend Policy and the Earned/Contributed Capital Mix: A Test of the Lifecycle Theory", *Journal of Financial Economics*, Vol.8 No.1, pp.227-254.

Deslandes, M., Landry, S. and Fortin, A. (2015), "The effects of a tax dividend cut on payout policies: Canadian evidence", *International Journal of Managerial Finance*, Vol. 11 No. 1 pp. 2 - 22

- Dewasiri, N. J. and Weerakoon, Y.K.B. (2016), "Why Do Companies Pay Dividends?: A Comment", *Journal of Corporate Ownership and Control*, Vol.13 No.2, pp.443-453.
- Dewasiri, N. J., Weerakoon, Y.K.B. and Azeez, A.A. (2018), "Mixed Methods in Finance Research: The Rationale and Research Designs", *International Journal of Qualitative Methods*, Vol.17 No.1, pp. 1-13.
- Dereeper, S. and Turki, A. (2016) "Dividend policy following mergers and acquisitions: US evidence", *Managerial Finance*, Vol. 42 No. 11, pp.1073-1090.
- Dickens, R.N., Casey, K.M. and Newman, J.A. (2002), "Bank dividend policy: explanatory factors", *Quarterly Journal of Business and Economics*, Vol. 41 No. 1-2, pp. 3-13.
- Donaldson, L. (1990), "The ethereal hand: organizational economics and management theory", *The Academy of Management Review*, Vol. 15 No. 3, pp. 369-381.
- Dutta, A.S. (1999), "Managerial ownership, dividend and debt policy in the US banking industry", *Managerial Finance*, Vol. 25 No.6, pp. 57 – 68.
- Easterbrook, F.H. (1984), "Two agency-cost explanations of dividends", *American Economic Review*, Vol.74 No.04, pp.650-659.
- Elton, E.J. and Gruber, M.J. (1970), "Marginal Stockholder Tax Rates and the Clientele Effect," *Review of Economics and Statistics*, Vol.52 No.1, pp. 68-74.
- Faccio, M., Lang, L. and Young, L. (2001), "Dividends and expropriation", *American Economic Review*, Vol. 91 No.1, pp. 54-78.
- Fama, E. and French, K. (2001), "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?", *Journal of Financial Economics*, Vol.60 No.1, pp.3-43.
- Fama, E and French, K. (2002), "Testing trade off and pecking order predictions about dividends and debt?", *The review of Financial Studies*, Vol.15 No.1, pp.1-33.
- Gordon, M. (1959), "Dividends, Earnings and Stock Prices", *Review of Economics and Statistics*, Vol. 41 No.1, pp.99-105.
- Gugler, K. and Yurtoglu, B.(2003), "Corporate governance and dividend pay-out policy in Germany", *European Economic Review*, Vol. 47 No.1, pp. 731-58.

Harada, K. and Nguyen, P. (2011), "Ownership concentration and dividend policy in Japan", *Managerial Finance*, Vol. 37 No. 4, pp. 362 – 379.

Higgins, R.C. (1972), "The corporate dividend savings decision", *Journal of Financial and Quantitative Analysis*, Vol.7 No.1, pp.1527-1541.

Hoje, J. and Pan. C. (2009), "Why are firms with entrenched managers more likely to pay dividends?", *Review of Accounting and Finance*, Vol. 8 No. 1, pp. 87 – 116.

Holder, M.E., Frederick, W. L. and Lawrence, J.H. (1998), "Dividend Policy Determinants: An Investigation of the Influences of Stakeholder Theory", *Financial Management*, Vol. 27 No. 3, pp. 73-82.

Jiraporn, P., Leelalai, V. and Tong, S. (2016), "The effect of managerial ability on dividend policy: how do talented managers view dividend payouts?", *Applied Economics Letters*, Vol. 23 No.12, pp. 857-862.

Jensen, G.R., Solberg, D.P. and Zorn, T.S. (1992), "Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies", *The Journal of Financial and Quantitative Analysis*, Vol. 27 No. 2, pp.247-263.

Jensen, M.C. (1986), "Agency costs of free cash flow, corporate finance, and takeovers", *American Economic Review*, Vol. 76 No.1, pp.323-329.

Khan, N.U., Burton, B.M. and Power, D.M. (2011), "Managerial views about dividend policy in Pakistan", *Managerial Finance*, Vol. 37 No. 10 pp. 953 - 970.

Kumar, S and Goyal, N. (2015), "Behavioral biases in investment decision making – a systematic literature review", *Qualitative Research in Financial Markets*, Vol.7 No.1, pp.88-108.

Kuzucu, N.(2015), "Determinants of Dividend Policy: A Panel Data Analysis for Turkish Listed Firms", *International Journal of Business and Management*, Vol.10 No.11, pp.149-160.

La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (1999), "Corporate Ownership Around the World", *Journal of Finance*, Vol. 54 No.2, pp.471-517.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R.W. (2000), "Agency problems and dividend policies around the world", *The Journal of Finance*, Vol. 55 No. 1, pp. 1-33.

Lintner, J. (1956), "Distribution of incomes of corporations among dividends, retained earnings and taxes", *American Economic Review*, Vol. 46 No. 2, pp. 97-113.

Maditinos, D. I., Sevic, Z., Theriou, N. G. and Tsinani, A. V. (2007), "Individual investors' perceptions towards dividends: the case of Greece", *International Journal of Monetary Economics and Finance*, Vol.1 No.1, pp.18–31.

Miller, M.H. (1986), "Behavioral Rationality in Finance: The Case of Dividends" *The Journal of Business*, Vol. 59 No. 4- 2, pp. S451-S468.

Miller, M.H., Modigliani, F. (1961), "Dividend policy, growth, and the valuation of shares", *Journal of Business*, Vol. 34 No. 4, pp. 411-433.

Miller, M.H. and Scholes, M.S. (1978), "Dividends and Taxes", *Journal of Financial Economics*, Vol.6 No.1, 333-364.

Mueller, D.C. (1972), "A Life Cycle Theory of the Firm", *The Journal of Industrial Economics*, Vol. 20 No. 3, pp. 199-219.

Myers, S.C. (1984) "The Capital Structure Puzzle", *Journal of Finance*, Vol. 39 No.01, pp.575-592.

Onwuegbuzie, A.J., & Leech, N.L. (2006), "Linking research questions to mixed methods data analysis procedures", *The Qualitative Report*, Vol.11 No.3, pp.474-498.

Ozo, F.K., Arun, T.G., Kostov, P. and Uzonwanne, G.C. (2015), "Corporate dividend policy in practice: the views of Nigerian financial managers", *Managerial Finance*, Vol. 41 No.11, pp. 1159 – 1175.

Pandey, I.M. and Ramesh, B. (2007), "Dividend behaviour of Indian companies under monetary policy restrictions", *Managerial Finance*, Vol. 33 No. 1, pp. 14 – 25.

Patra, T., Poshakwale, S. and Kean Ow-Yong (2012), "Determinants of corporate dividend policy in Greece", *Applied Financial Economics*, Vol.22 No.13, pp.1079-1087.

Perretti, G.F., Allen, M.T. and Weeks, H.S. (2013), "Determinants of dividend policies for ADR firms", *Managerial Finance*, Vol. 39 No. 12, pp. 1155 – 1168.

Pettit, R. (1972), "Dividend Announcements, Security Performance, and Capital Market Efficiency", *Journal of Finance*, Vol. 27 No.05, pp. 993-1007.

Rozeff, M.S. (1982), "Growth, Beta and Agency Costs as Determinants of Dividend payout Ratios", *The Journal of Financial Research*, Vol.5 No.3, pp. 249-259.

Sawicki, J. (2009), "Corporate governance and dividend policy in Southeast Asia pre- and post-crisis", *The European Journal of Finance*, Vol.15 No.2, pp.211-230.

Setiawan, D. and Phua, L.K. (2013), "Corporate governance and dividend policy in Indonesia", *Business Strategy Series*, Vol. 14, No.5/6, pp. 135 – 143.

Setiawan, D., Bandi, B., Phua, L.K. and Trinugroho, I. (2016) "Ownership structure and dividend policy in Indonesia", *Journal of Asia Business Studies*, Vol. 10 No. 3, pp.230-252.

Shamsabadi, H.A., Byung-Seong, M. and Chung, R. (2016) "Corporate governance and dividend strategy: lessons from Australia", *International Journal of Managerial Finance*, Vol. 12 No.5, pp.583-610.

Shefrin, H. (2009), "Behavioral explanations of dividends", in Baker, H.K. (Ed.), *Dividends and Dividend Policy*, John Wiley & Sons, Hoboken, NJ, pp. 179-199

Shefrin, H. and Statman, M. (1984), "Explaining investor preference for cash dividends", *Journal of Financial Economics*, Vol.13No. 2, pp. 253-82.

Shleifer, A. and Vishny, R. (1997), "A survey of corporate governance", *Journal of Finance*, Vol. 52 No.1, pp. 737-83.

Tangjitprom, N. (2013), "Propensity to pay dividends and catering incentives in Thailand", *Studies in Economics and Finance*, Vol. 30 No.1, pp. 45 – 55.

Teddle, C. and Tashakkori, A. (2003), "Major issues and controversies in the use of mixed methods in the social and behavioral sciences", in Tashakkori, A. and Teddle, C. (Ed.), *Handbook of Mixed Methods Research in Social and Behavioral Research*, Sage Publications, Thousand Oaks, CA.

Thaler, R. and Shefrin, H.(1981), "An economic theory of self-control", *Journal of Political Economy*, Vol.89No.01, pp. 392-410.

Theis, J. and Dutta, A.S.(2009), "Explanatory factors of bank dividend policy: revisited", *Managerial Finance*, Vol. 35 No. 6, pp. 501 – 508.

Titman, S. (1984), "The Effect of Capital Structure on a Firm's Liquidation Decision," *Journal of Financial Economics*, Vol.13 No.1, pp.137-151.

Uyangoda, J. (2010) *Writing research proposals in the social sciences and humanities: A theoretical and practical guide*, Social Sciences Association, Colombo.

Wang, M.H., Mei-Chu, K., Feng-Yu L. and Yen-Sheng, H. (2016) "Dividend policy and the catering theory: evidence from the Taiwan Stock Exchange", *Managerial Finance*, Vol. 42 No. 10, pp.999-1016.

Yarram, S.R. (2015), "Corporate governance ratings and the dividend payout decisions of Australian corporate firms", *International Journal of Managerial Finance*, Vol.11 No.2, pp. 162 – 178.

Yarram, S.R. and Dollery, Y.B. (2015), "Corporate governance and financial policies", *Managerial Finance*, Vol.41 No.3, pp. 267 - 285.

Ye, Z., Zhang, Z. and Tang, S. (2015), "Stock dividends policy and liquidity of ex ante announcement", *China Finance Review International*, Vol. 5 No.3 pp. 258 – 276.

Yesmin, S. and Rahman, K.F. (2012), "Triangulation research method as the tool of social science research", *BUP Journal*, Vol. 1 No.1, pp. 154-163.

Yusof, Y. and Ismail, S. (2016),"Determinants of dividend policy of public listed companies in Malaysia", *Review of International Business and Strategy*, Vol. 26 No. 1, pp. 88 - 99.

---

## **Economics, Public Policy, Law & Education**

---