CHAPTER 2

A REVIEW AND SYNTHESIS OF THE IOS AND DIVIDEND PAYOUT LITERATURE

2.1. INTRODUCTION

The purpose of this chapter is to review the extant literature on IOS and identify research gaps. The discussion in this chapter is structured as follow: Section 2.2 discusses prior studies on dividend payout. Section 2.3 discusses growth and dividend payout research and defines Investment Opportunity Set which is a proxy for growth. Section 2.4 discusses the two strands of research on dividend payout, that is, signalling explanations for dividends based on the desire by companies to communicate information to shareholders and followed by theories that focus on internal drivers, namely, growth opportunities, debt, performance and dividend payout decisions. Section 2.5 discusses the relevance of the institutional context for dividend payout research. Section 2.6 presents the institutional setting in Malaysia. Section 2.7 highlights the research gap in extant literature on IOS and dividend payout. Section 2.8 concludes the chapter.

2.2. PRIOR STUDIES ON DIVIDEND PAYOUT – AN INTERNATIONAL PERSPECTIVE

Since the 1990s, a new phenomenon has been observed. The percentage of US publicly held firms paying dividends declined from 66.5% in 1978 to 20.8% in 1999 and the reason for the decline was attributed to changing characteristics of the firms and partially on the lesser desire of firms to declare dividends. Lee (1996) puts forth that more than 25% of firms listed on the New York Stock Exchange do not pay dividends

at all. One possible reason for decline in the number of companies paying dividend is the double taxation of dividends (Monica, 2005). Further Ferris *et al.* (2009) posit that this global decline in the propensity to pay dividends is more pronounced in firms incorporated in common law jurisdictions and the percentage increase in aggregate dividends and the dividend payout ratio is more higher in civil law countries.

Arnott & Asness (2003) challenge the norm that advocated a higher dividend payout results in low future growth. Based on the American stock market (S&P 500), their findings show that the higher the dividend payout, the higher was the future earnings growth. A similar study by (Zhou & Ruland, 2006; Gwilym *et al.,* 2006) support the findings of Arnott & Asness. Further, (Gwilym *et al.,* 2006) found higher payout ratios do not lead to higher, real dividend growth. Therefore, two key themes arise from the extant literature on dividend payout. Firstly, it concerns growth opportunities and secondly it hinges on the institutional context within which the firms operate. This can be discerned from the next discussion.

In the next section, the prior empirical studies on the determinants of dividend payout are discussed.

2.2.1. Prior empirical studies on the determinants of dividend payout

Whilst, Miller & Modigliani (1961) argue that the firm's value is determined by its basic earning power and business risk, there have been several factors identified in prior empirical studies as possibly impacting dividend payout. These relate to profitability, market risk, cash flow, agency cost and financing and investing decisions, amongst which growth is an important consideration (Higgins, 1981; Rozeff, 1982; Lloyd *et al.,* 1985; Pruitt & Gitman, 1991; Jensen *et al.,* 1992; Collins et al., 1996; D'Souza & Saxena, 1999; Leng, 2007; Al-Twaijry, 2007; Ling, *et al.,* 2008; Rashid,

2008; Franklin & Michaely, 2003; DeAngelo et al., 2004; DeAngelo et al., 2006; Gerard & Prabhala, 2009).

2.2.1.1. Current profits and past year profits

According to Pruitt & Gitman (1991), current year and past year profits are important factors affecting dividend payments. Baker (1993) stressed that a major determinant of dividend payout is the anticipated level of the firm's future earnings. Further, Baker & Wurgler (2004) based on a study of NASDAQ-listed firms to test 22 different factors that influence the dividend policy and study show that the most significant determinants of dividends are the pattern of past dividends, stability of earnings and current and expected future earnings.

Lintner (1956) and Fama & Babiak (1986) find that the level of profit is almost invariably the starting point in the management's consideration of whether dividend can be distributed in any of the given year. In the Malaysian context, Al-Twaijry (2007), Rashid (2008) and Ling *et al*. (2008) posit that to a lesser extent dividends are associated with net earnings.

Another related factor discussed is the change in sales. Brittain (1964) suggests that rapid gains in earnings, as indicated by sales change might lead firms to be very cautious. Management might be in doubt as to whether the growth could be sustained and as a precautionary measure, might adopt a more conservative approach towards the dividend policy. There has been limited evidence on the extent to which sales change has effect on dividend payout.

2.2.1.2. Market risk

Several studies examine the relationship between dividend payout and firms' beta value. Beta is used as an indicator of a firm's market related risk. On the study related to risk, (Pruitt & Gitman, 1991) point out the firm which has stable earnings are able to pay out a higher percentage of dividends as they are able to gauge the future earnings more reliably. Likewise studies by Rozeff (1982) and Lloyd *et al.* (1995) suggest that firms having a higher level of market risk pay a lower level of dividend.

In contrast, in the Malaysian context, Ling *et al.* (2008) find that dividend payer companies have relatively lower growth opportunities, lower firm risk and lower firm leverage as compared to non dividend paying companies but they tend to have higher profitability and larger revenue.

Another related market variable that has been considered is share price behaviour. Prior studies have shown that the firm's share price is expected to have a negative relationship with dividend policy. Shrieber (1986) examined the dividend payout phenomenon in Singapore and found that dividend payout ratio in Singapore is directly related to price earnings ratio. Therefore, it is envisaged that to enhance share value firms should have liberal dividend policies. There has been limited evidence on the impact of the firm's share price on dividend payout.

2.2.1.3. Cash flow/Liquidity

Liquidity is also an important determinant of dividend payout. Alli et al. (1993) reveal that dividend payout depends on the availability of cash flow i.e the more cash flow a

company has the more dividends are paid out. They claim that current earnings do not really reflect the firm's ability to pay dividends.

On the same note, Brittain (1966) suggests that cash flow is a more appropriate measure of the company's capacity to pay dividends and has proved to be a significant determinant of dividend policies. He argues that dividend payment is considered a charge prior to depreciation and is related to earning gross of depreciation. Mahapatra & Sahu (1993) also find cash flow as a major determinant of dividend policy. Interestingly, countries like Australia and New Zealand have gone further by incorporating in their Companies Act that declaration of dividend can only be undertaken upon conforming to a minimum level of solvency test. In the context of Malaysia, Al-Twaijry (2007) find that cash per share has a positive and significant effect on the dividend payout.

In this context, several related variables have also been examined. These include (a) current ratio; (b) debt equity ratio; (c) lagged dividends.

(a) Current ratio

This ratio is specifically based on the financial ratio analysis. According to Pal & Goyal (2007) payment of dividends means cash flow. Based on the cash accounting concept and accrual concept, a firm might have sufficient earnings to declare dividends but it might not have enough cash to pay out dividends. The higher the current ratio the higher would be the ability of pay dividends. There has been limited evidence on the impact of current ratio on dividend policy.

(b) Debt equity ratio

This variable was examined by Dhrymes (1964), Mahapatra & Sahu (1993), Ling *et al.* (2008) and Leng (2007). The demand for external finance becomes very chaotic when management put in various restrictions on internal financing. The higher the internal financing that could be sourced out, given the investment requirements, lesser will be the demand for borrowings. Internal flows are generated by means of net profit after tax and dividend. Thus, it can be deduced that the higher the dividends, the higher the demand for borrowings and likewise the lower the dividend payout, the lesser would be the borrowings and the lower debt to equity ratio. Ling *et al.* (2008) support the fact that firm leverage and firm risk show negative relationship with both dividend yield and dividend payout ratio.

(c) Lagged dividend

According to Pal & Goyal (2007) lagged dividend is the cash dividends paid by one company prior to the year under consideration. Usually to follow a consistent pattern of dividend distribution, management has to follow past trends on dividend payout. It also exhibit the speed of adjustment mechanism in which companies try to ascertain a desired payout ratio pattern in the long run.

2.2.1.4. Financing and Investment Decisions

Several studies have examined the factors related to financing and investing as being critical to understanding dividend payouts. In relation to financing decisions, a key variable which is examined is interest payment. Brittain (1964) reports that interest payment have a direct bearing on dividend payout. An increase in interest payment by the firm would automatically reduce the dividend payout and hence found dividends to

be negatively correlated to interest payment. There has been limited evidence on the extent to which interest payment has effect on dividend payout.

In the context of investing decisions, three factors are commonly examined: (a) capital expenditure; (b) depreciation allowance; and (c) growth.

(a) Capital expenditure

Dhrymes (1964) and Mahapatra & Sahu (1993) report the impact of capital expenditure and dividend payout. According to them, the extent to which the company decides to finance this expenditure from internal resource and external source would be weighed out between capital expenditure and dividend payout. Therefore, capital expenditure is negatively correlated to dividend payments. However, in the context of developing countries, there has been limited evidence on the impact of capital expenditure and dividend payout.

(b) Depreciation allowance

Brittain (1964) examines whether the depreciation charge impacted dividend payout. This is a non-cash item which was added as an independent variable in the dividend behaviour model since he argued that regulation and accounting practices regarding depreciation might affect dividend policy inversely through its impact on current year profits. There has been limited evidence from other studies on the impact of depreciation on dividend policy.

(c) Growth

On the relationship between dividends, investment and financing decisions, Green *et al.* (1993) show that dividend payout levels are not totally decided after a firm's investment and financing decision have been made. As the decisions are not made along investment and financing decision, the results do not coincide with the views of

(Miller & Modigliani, 1961). According to Partington (1983), the motives for paying dividends, firm's use of target payout ratios and the extent to which dividends are determined, are all independent of investment policy.

However, (Higgins, 1981) indicates that there is a direct link between growth and financing needs and this is because growth firms have external financing needs. Their internal financing needs (working capital) usually exceed the incremental cash flows from new sales. Other studies by Rozeff (1996), Lloyd *et al.* (1985) and Collins *et al.* (1996) show a negative relationship between historical sales growth and dividend payout. In contrast D'Souza & Saxena (1999) shows a positive but insignificant relationship in terms of growth and negative and insignificant relationship in terms of market to book value. However, as the studies are using different institutional variables, the examination of different variables is necessary to make the comparison relevant.

Smith & Watts (1992) find using the industry level data that firms with high growth options to pay lesser dividends. Gaver & Gaver (1993) confirm the results of Smith & Watts by the use of a more rigorous methodology and firm level data. Their results show that growth firms have lower debt/equity ratio and significantly lower dividend yields than non-growth firms. Yet, Higgins (1982) and Leng (2007) show that payout ratio is negatively related to a firm's need for funds to finance growth opportunities. In summary, the results obtain is mixed and there are also insufficient evidence as to the generalisability of the evidence to developing countries' context given the differing institutional variables. The discussion on the institutional context and dividend payout is in Section 2.5.

In summary, factors are considered as the determinants of dividend payouts. Among all these factors, growth is all encompassing and indirectly captures all these factors. Therefore, a study of the impact of growth on dividend payout is critical to be examined in different institutional contexts. Furthermore, the overall evidence is mixed given the diversity in institutional features, tax systems and the law systems of different countries. In the case of developing country, the differing institutional settings may greatly impact the availability of alternative financing and investment opportunities. Growth is most commonly proxied by investment opportunities as discussed in Chapter 1. The next section discusses in detail about growth and dividend payout.

2.3. GROWTH AND DIVIDEND PAYOUT

As noted in the earlier discussions, growth has been linked constantly with dividend payout. In this section the extant literature on growth and dividend payout is discussed. Firstly, a definition of the proxy that is commonly used for growth, Investment Opportunity Set (IOS) is discussed.

2.3.1. Definition of IOS

Myers (1977) introduce the term Investment Opportunity Set (IOS) to refer to the extent to which firm value depends on future discretionary expenditures by the firm. Thus IOS refers not only to traditional investment opportunities such as the right to explore for minerals but also to other discretionary expenditures such as the extent of brand advertising required in future to ensure the success of the firm. Usually, the firm's IOS will depend on firm-specific factors such as physical and human capital in

place mainly because the firm's investment opportunity set consists of projects which allow the firm to grow and IOS can be thought of as the growth prospects of the firm.

IOS (also known as growth opportunities) is defined in terms of assets in place, the lower the fraction of firm value represented by assets-in-place, the more the growth opportunities (Myers, 1977). However, IOS is difficult to observe and measure because of the uncertainty attached to the outcomes of the managerial decisions that affect their value of the investments (Smith & Watts, 1992; Gaver & Gaver, 1993; Skinner, 1993).

Growth opportunities include virtually any kind of further discretionary expenditure like capacity expansion projects, new product lines and maintenance and production of existing assets (Mason & Merton, 1985). Hence, firms with more growth options are known to have high investment opportunities. Smith & Watts (1992), Rajan & Zingales (1995) and Billet *et al.* (2007) posit that the mix of assets and investment opportunities affects a firm's capital structure, its maturity, its dividend policy, its compensation contracts and its accounting policies. IOS as mentioned earlier in Chapter 1 is a proxy for growth opportunities. Next, the characteristics of high and low growth firms are discussed.

2.3.2. Characteristics of High growth & Low growth firms

Firms can vary in their potential for future growth for many reasons such as firms that benefit from managerial talent, flexibility and ability to innovate (McGuire, 2000). There are firms that would enjoy a technological advantage (Wright *et al.,* 2005; Barney, 1991; Feeser & Willard, 1990). Growth prospects may also arise from

favourable industry conditions or competitive positioning (Porter, 1980; Wright & Ferris, 1997; Miles *et al.,* 1993; McDougall *et al.,* 1994). Furthermore, there are also firms in certain sectors of the economy with high technology, service industries and high growth niche markets that may have a greater growth potential than heavy manufacturing industry. Further, as discussed in section 2.2, there is considerable evidence that cash flow has a significant role in financing investment expenditure under asymmetric information. However, there seems to be two sides of a coin. The question here is, why does cash flow play a more significant role as compared to other sources of funds such as debt in financing investment spending? Two common explanations relate to the free cash flow (FCF) theory by (Jensen, 1986) and the pecking order (PO) hypothesis by (Myer & Majluf, 1984). In section 2.4 the free cash flow theory which encompasses the FCF hypothesis and the PO hypothesis are discussed.

2.3.2.1. Characteristics of High growth firms

A firm with high growth potential faces change and uncertainty both in the environment and within the organisation. Growth potential may imply new markets and customers (Porter, 1980; Zahara, 1996; Feeser & Willard, 1990; McDougall *et al.,* 1994). A firm that seeks to exploit its technological innovations need to be flexible enough to accept change and to take advantage of strategic opportunities. There are also growth opportunities associated with increased corporate entrepreneurship (Zahara, 1996) and higher risk taking (Wright *et al.,* 2005). The highly competitive nature of growth markets (McDougall *et al.,* 1994; Miles *et al.,* 1993) makes the ability to respond quickly to changing conditions particularly important. High growth firms may have to closely monitor their competition and respond quickly to changing competitive

conditions. In general, the strategic context of high growth firms is to be future orientated and to allow the firm to seize the potential for expansion and development.

Prior research suggests that high-growth firms are relatively riskier than low growth firms and risk is positively associated with earnings volatility. Miller & Modigliani (1961, p.425) state that 'growth stocks…may well be riskier than non growth stocks'. Smith & Watts (1992) use the variance of stock return to be positively correlated with the variance of stock returns as one measure of firm's growth opportunities. Similarly, Skinner (1993) selects asset beta as one of the IOS variables. A positive relation between growth and risk suggests that, ceteris paribus, earnings of higher growth firms would be more volatile, i.e. they would have a higher variance. The point to note here is that high growth firms tend to be risk takers as they seek for more innovations, expansions and investments in the industry and most importantly in need of large amount of cash flow funds as compared to low growth firms.

With regards to the compensation policy, Smith & Watts (1982) expect growth firms to pay higher levels of remuneration to top executives and to select compensation packages that emphasise incentive compensation (relative to non growth firms). Higher levels of compensation are expected because the selection of investment projects commands a higher equilibrium wage than the supervision of existing assets in place. Furthermore, the growth firms are also likely to be more risky than their non growth counter parts. These findings have been empirically supported by (Christie, 1989; Chung & Charoenwong, 1991).

Further, Smith & Watts (1982) suggest that as the proposition of firm value represented by growth opportunities increases, the observe-ability of managerial actions decreases.

This is because it is difficult for outside shareholders, without the inside information and specialised knowledge of managers, to ascertain the menu of investment opportunities available to the firm. In contrast, maintenance and supervision of existing assets are more readily observable. If managerial actions are less observable in growth firms, then these firms' shareholders are more likely to rely on incentive contracts to motivate managers to act in the shareholders interest.

Smith & Watts (1982) also consider the form that this incentive contract will take and they unambiguously predict a higher incidence of market based incentive plans among growth firms relative to non growth firms. These are incentive plans with a performance measure that clearly reflects the effect of managerial actions on investment opportunities. With regards to the incidence of accounting based plans such as bonus and performance plans, in growth versus non growth samples, it has not been clear. However the incentives in the form of performance suggests a higher incidence of any kind of incentive plan among growth firms, these firms will avoid accounting based performance measures if the financial statements do not immediately reflect managerial growth-enhancing activities. Thus, the relation between the use of accounting based plans and growth opportunities is an empirical issue.

2.3.2.2. Characteristics of Low growth firms

In contrast, firms with low growth potential face a different strategic environment. The industry context may be more predictable and more stable (McConnel & Servaes, 1995; Boyd, 1995). In essence, a firm's more conservative strategic orientation may contribute to its lower growth prospects such that lower growth firms may be slower to respond to competition and may be 'defenders' or followers rather than leaders (Miles

& Snow, 1978). They may tend towards less risky and more stable strategies than firms seeking higher growth and generally focus on exploiting remaining industry potential while limiting risk. Low risk firms usually aim for cost advantage by building on market dominance. Other strategies may involve limited or gradual product development to exploit additional market potential and other strategies to take advantage of current markets (Anand & Singh, 1997; Porter, 1980).

In summary, high growth and low growth firms exhibit different features and accordingly the performance of high growth firms are attributed to large investments in projects and low growth firms are attributed to much smaller scale investments. These growth opportunities can be measured using IOS as a proxy variable. The measurement issues are discussed in Chapter 5. In the next section, the differing theories related to IOS are evaluated and discussed.

2.4. EXTANT THEORIES ON DIVIDEND PAYOUT

Premised on the agency theory, two variants of research related to dividend payout literature have been observed.There are generally two strands of research in dividend payout literature. The first strand focuses on "signalling" explanations for dividends that are based on the desire by companies to communicate information to shareholders (Lintner, 1956; Farinha, 2003). The second strand is based on agency theory which focuses on the relationship between internal factors [such as growth opportunities (also used interchangeably as Investment Opportunity Set (IOS), debt, firm performance] and dividend payout (Smith & Watts, 1992; Gaver & Gaver, 1992; D'Souza & Saxena, 1999; Gul & Kealey, 1999; Mitton, 2004; Alonso *et al.,* 2005 and Amidu & Abor, 2006). In this study, the focus is on the second strand of research. Hence, only a brief

signalling theory is not dealt with in detail as Ling et at. (2008) reiterated that under the signalling theory, the information conveys generally historical performance of the companies and not future performance prediction. A brief discussion of signalling theory and the related catering theory and tax clientele hypothesis is given in Section 2.4.2.1, 2.4.2.2, and 2.4.2.3.

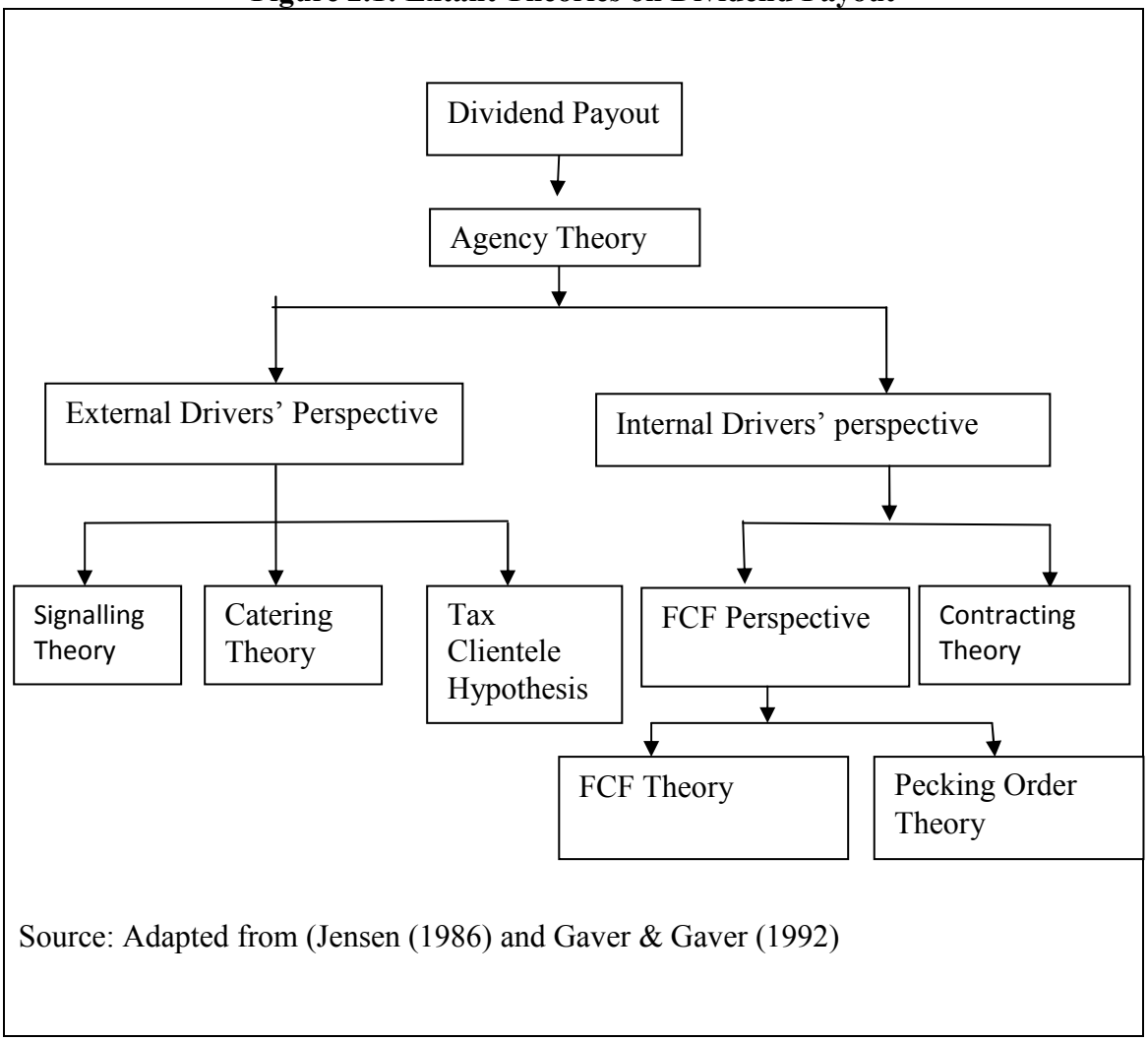
In this section, the theories predominantly underlying the second strand of research linking the internal firm characteristics and dividend payout are discussed. Other theories in the first strand are also discussed briefly including (Refer Figure 2.1) the tax hypothesis. As such the theories predominantly underlying the second stand of research are the Agency Theory, Contracting Theory, Free Cash Flow Theory and Pecking Order Theory.

Evidently, although several theories exist to explain firms' dividend payout policies, none of these theories fully answer the question why firms pay dividends to their shareholders although it is opined that the agency theory seems to offer the most promising theoretical framework (Adjaoud & Ben-Amar, 2010). As Jensen (1986) argues, dividends are expected to attenuate agency costs that result from the separation of ownership and management of public listed firms. Dividends reduce free cash flows that could otherwise be spent by managers on their private benefits (Adjaoud & Ben-Amar, 2010). Likewise, dividend payments compel managers to raise funds more frequently and hence increasing capital market monitoring (Easterbrook, 1984 as cited in Adjaoud & Ben-Amar, 2010).2.4.1. Agency Theory

Jensen & Meckling (1976), Denis & Osobov (2008) and McKnight & Weir (2009) extend the agency theory to explain the dividend relevance. They show that the agency

cost would exhilarate if the management only considered its own interest and not the interest of outside shareholders. There are also other theories extended on the agency cost explanation of dividend policy which is based on the observation that firms pay dividends and raise capital simultaneously (Rozeff, 1982; Easterbrook, 1984).

Figure 2.1: Extant Theories on Dividend Payout



Source: Adapted from (Jensen (1986) and Gaver & Gaver (1992)

Agency theory generally seeks to explain corporate capital structure and attempts to minimise the association with the separation of ownership and control. Further, it is also envisaged that agency costs are lower in firms with higher managerial ownership stakes because of better alignment of shareholder and managerial control (Jensen &

Meckling, 1976). According to John & Kalay (1982) another way in which dividend policy affects agency costs are through increased monitoring by capital market.

According to Easterbrook (1984), monitoring of outside suppliers of capital helps to ensure that managers act on the best interest of outside shareholders. Jensen *et al.* (1992) and Collins et al. (1996) confirm that the relationship between dividend payout and insider holding is negatively related. Other studies that have corresponded to this study are (D'Souza & Saxena, 1999; Rozeff, 1982).

In the Malaysian context, agency cost, studies by (La Porta *et al.* 1997; 1998 and 2000; Mitton 2004; Sawicki, 2009) that are similar to developed countries, posit that the principle remedies to agency problems is in the law. In this context, the institutional setting becomes a very relevant feature to consider in discussing dividend payout. This is discussed further in Section 2.5.

2.4.1. Informational asymmetry and signalling: External Drivers Perspectives

This strand of research focuses on the signalling to market participants by firms using dividend payouts. There are three theories generally found in this category. These are signalling theory, catering theory and tax clientele hypothesis.

2.4.1.1. Signalling Theory

Frankfurter & Lane (2002) reveal that the information asymmetries between managers and shareholders forced dividends to be paid to increase the attractiveness of the issuance of dividends. Michel (1979) stress that the systematic relationship between

industry type and dividend policy imply that managers of firms are to a certain extent affected by decisions taken by rival firms when deciding on the dividend payout of the firms.

Several studies subsequent to Bhattacharyya (1979) emphasise on dividends being used by managers to transmit information to capital market. These studies, notably, include Miller & Rock (1995), John & Williams (1985), Ambarish *et al.* (1987) and Williams (1988) which emphasise the signalling paradigm of dividend policy. The signalling model depict that the higher the cash flow the higher is the dividend payout.

Comparatively, Miller & Rock (1985) explain that the signalling cost is the opportunity cost of less than the first best investment. John & Williams (1985), Ambarish *et al.* (1987) and William (1988) on the other hand rationalise that the differential taxation of dividends sustains the signalling equilibrium by way of capital gains. In contrast, Kumar (1988) demonstrate that dividends can also sustain a semi-separation equilibrium in which the manager of the company has private information about the company. Further, Bar-Yosef & Venezia (1991) argue that the optimal dividend of a company is proportional to the cash flow.

Brennan & Thakor (1990) focus on the amount of cash to be distributed as exogenously given as compared to the earlier studies which emphasise on the decision on the amount to be distributed as dividends. Accordingly, there are three forms of disbursement i.e dividend declaration, non-proportionate share repurchase through open market operation and non-disproportionate share repurchase through open tender. It is assumed that in a tender offer, the uninformed shareholder always tenders and the informed holds on to the shares (Brennan & Thakor, 1990). However, Denis & Osobov (2008)

found that outside US, countries such as Canada, UK, France and Japan, have little evidence of a systematic positive relation between relative prices of dividend paying and non-paying firms and the propensity to pay dividends and hence creating a doubt on the signalling theory explanation for dividends.

Further, in a recent study in the Malaysian context, the information conveyed the historical performance of the companies and not future performance prediction as predicted by signalling theory. This study suggests that the dividend payout have a positive correlation with past earnings, little or no correlation with current earnings and is negatively correlated with future earnings (Ling *et al.,* 2008). Closely associated with the signalling theory and information asymmetry issue is catering theory discussed next.

2.4.1.2. Catering theory

According to Baker & Wurgler (2005), the decision to pay dividends is driven by prevailing investor demand for dividend payers. Further, managers cater to investors by paying dividends when investors put a stock price premium on payers and by not paying when investors prefer non-payers. They find that payers tend to omit dividends when the dividend is low and this is better explained by the catering theory than other theories of dividends. Brav et al. (2005) study on the factors that drive dividend and share repurchase decisions and found that maintaining the dividend level is on par with investment decisions and repurchases are made out of the residual cash flow after investment spending.

2.4.1.3. Tax clientele hypothesis

Miller & Modigliani (1961) emphasised that the tax-clientele hypothesis use the market imperfection of differential taxation of dividends and capital gains to explain the dividend puzzle. However, this is disputed by Bhattacharyya (1979) who provides a different view. He argues that managers through their private information on the projected cash flow use it as a signal to the market. Heinkel (1978) considers a set up where different firms have their own income generating capabilities. Their information is transmitted to the market by means of dividends from investing at less than the first best level and the signalling cost is derived from the reduced investment from the first best level.

Miller and Modigliani ((1961) argue that while formulating the famous dividend irrelevance propositions, observed that in the presence of taxation, investors will form clienteles with specific preferences for particular levels of dividend yields. This specific preference for dividends may be determined by way of marginal tax rates faced by the investor and hence, altering the dividend level would only lead to a change in the clientele of shareholders of the firm. However, in the Malaysian context, there is no capital gains tax and no double taxation of corporate earnings. Shareholders returns are taxed only once, at personal rate for earnings paid out as dividends and/or at company rate for earnings that are retained. Dividends are paid from firms' after tax net income and shareholders receive only net dividends.

The hypotheses formulated in this study are based on important factors affecting the relationship between corporate governance variables, growth opportunities and dividend policy. The corporate governance variables cover both the internal and

external aspects of corporate governance. These corporate governance variables and the control variables would be used to test these hypotheses. The reason for the selection of those corporate governance variables are based on Malaysia's unique feature as a multiracial developing country with its different levels of investor protection, legal regime, corporate policies and ownership structure.

2.4.2. Free Cash Flow & Contracting Theories: Internal Drivers Perspectives

Typically the strand of research under the internal drivers perspectives encompass theories suggesting factors relating to the firm characteristics. Two dominant theories relate to the free cash flow and contracting perspectives. Under these free cash flow perspectives, generally two theories are common. These are Free Cash Flow Theory and Pecking Order Theory.

2.4.2.1. The free cash flow theory (FCF)

The free cash flow theory provides an alternative explanation on the importance of internal cash flow in firms' investment decisions. Jensen (1986) defines free cash flow as cash flow remaining after all the positive net present value projects are funded at the relevant cost of capital. He suggests that, in the presence of free cash flow and in the absence of shareholders monitoring, managers have a tendency to over-invest to gain the financial and non-financial privileges of larger firms.

Further, modern finance has long advocated a focus on "free cash flow" rather than on earnings for evaluating firm performance (Copeland *et al.,* 2006). Voluntary FCF disclosures can play a significant role in a firm's access to capital for instance Graham

et al., (2005) and Brown *et al.,* (1988). Wild (1994) argue that distress induces an increase in market uncertainty leading to an increase in the cost of raising additional capital. They emphasised the fact that FCF information to signal good news in cash flows when experiencing transitory bad news in earnings.

In examining the FCF theory, Lang & Litzenberger (1989) study stock returns associated with announcements of dividend changes. They report that after they held the magnitudes of dividend increases constant, the firms with limited growth opportunities experience larger share price increases. Lang & Litzenberger (1989) interpret these results as being consistent with FCF; that is, the strong market reactions for the low growth companies indicate that the reduction in agency cost through dividend increases is large for firms with limited growth opportunities. Further, studies by (Strong & Meyer, 1990; Devereux & Schiantarelli, 1990 and Gul & Tsui, 1998), fully support the interpretation of the free cash flow theory.

Rozeff (1982) and Easterbrook (1984) reinforce this observation by providing two arguments. Firstly, they argue that the new issue markets lower agency cost by providing effective monitoring i.e more disclosures and scrutiny by the investors as all pertinent information about the company is required to be laid out. This is because there is a need to approach the capital markets to impose a discipline on the managers and automatically reduce the cost of monitoring i.e the agency cost. Secondly, dividend covenants specify a maximum on dividend payout and indirectly impose a minimum investment requirement thereby reducing the underinvestment issue. In summary firms with more profitable investment opportunities have the ability to cope with dividend restrictions compared to lower growth companies and hence expected to pay lower dividends.

2.4.2.2. FCF Hypothesis

The free cash flow hypothesis advanced by Jensen (1988) states that managers endowed with FCF will invest in negative net present value projects rather than pay out to shareholders. Hence, the free cash flow (FCF) hypothesis, provides emphasis to agency costs and according to FCF hypothesis, Managers who have access to substantial cash flow in the absence of shareholders control, tend to over invest in negative net present value projects to expand their powers. Hence, this provides a clear explanation on why high growth firms pay lesser dividends as their funds have been utilised for growth opportunities purposes.

2.4.2.3. Pecking Order (PO) theory

Myers & Majluf (1984) provide a theoretical explanation for Pecking Order behaviour. They argue that in the presence of asymmetric information, managers rely first on internally generated funds and next they issue debt and as a last resort, they issue equity. Fazzari *et al.* (1988) investigated the investment behaviour in groups with different earnings retention practices and their results indicated that the investing decisions of all firms are shaped by internal funds and liquidity. Further, they revealed that the sensitivity of investment to fluctuations in cash flow is substantially greater in firms that exhaust all of their internal funds than firms that merely maintain a high level of dividend payouts.

Hoshi *et al.* (1991) concluded that the investment expenditure of 24 financially constrained, Japanese firms are much more sensitive to their cash flow than the 121 firms belonging to Keiretsu (Group companies). In addition, Oliner & Rudebusch

(1992) posit that the sensitivity of investment to cash flow is highest for the young firms, whose stocks are traded over the counter. Furthermore, Whited (1992) employ equal equation approach and explored investment behaviours in firms that maximise their value subject to borrowing constraints and conclude that information and incentive problem in debt markets shape corporate investment.

Bond & Meghir (1994) report similar results as Whited (1992). Himmelberg & Peterson (1994) show the substantial effect of internal finance on R & D investment for a panel of 179 small firms in high-tech industries. Lastly, Myers (1977) examined eight developed countries for the period 1970 to 1985 and evidence financing hierarchies. They reveal that cash flow is the dominant source of financing in all the countries and the bank loans are the main source of external finance when the cash flow is exhausted.

Likewise, Whited (1992) have classified firms with a lower than average leverage as relatively unconstrained but Calomiris & Himmelberg (1985) rank them as relatively constrained. KZ emphasise that this ambiguity results in interpretation of data from these studies that are dubious and cannot be taken as evidence of financing constraints. Cleary (1999) followed the approach of KZ and concur with KZ that investment sensitivity to the availability of internal funds is much higher for the creditworthy firms than it is for less creditworthy firms. Fazzari *et al.* (1988) thoroughly investigated the effect of unfavourable selection problems on capital investing (i.e fixed plant and equipment) and their results supported that the problem of excess cost of external funds that makes the availability of internal funds an important factor in investment decisions. In summary, the availability of internal funds and accessibility to external funds are important elements of growth opportunity.

2.4.2.4. Contracting theory

Contracting theory is typically applied in circumstances where individuals and businesses construct and develop legal agreements. Contract theory analyzes how parties to a contract make decisions under uncertain conditions, and when there is asymmetric information, it draws upon principles of financial and economic behaviour, as principles and agents often have different incentives to perform or not (Oliver & John, 1988).

Contracting theory in the context of firms with more growth opportunities or higher IOS posits that such firms are less likely to issue debt or pay dividends. This theory depicts that generally growth firms are less likely to issue debt because of the underinvestment[2] and asset substitution[3] problem. Underinvestment occurs when managers acting on behalf of shareholders decide not to undertake positive return projects simply because debt holders have a senior claim on the projects cash flow and subsequent payoff (Myers, 1977). As such firms issue debt only when they are confident that the debt can be supported by assets in place. Likewise an asset substitution problem arises when managers use available opportunity to substitute high variance assets with lower variance assets when the debt has already been issued.

Rozeff (1982) and Easterbrook (1984) reinforce the contracting theory argument, that the issuance of new market shares lowers the agency costs by providing an effective monitoring system. Firms with more profitable investment opportunities can control dividend payouts before the expected cost of forced negative net present value projects outweigh the benefits of controlling dividend payouts (Rozeff, 1982 & Easterbrook, 1984).

Further, Smith & Warner (1979) also evidence contractual arrangements that encourage managers to pay higher dividends rather than undertake negative return projects. Hence, firms with low growth opportunities tend to pay higher dividends to remove resources from the firm.

2.4.3. Extant theories in dividend payout research: an evaluation

In general, the theoretical aspects of dividend payout with regards to agency theory, informational asymmetry and signalling models and free cash flow and contracting theory have an effect on the dividend policy of a firm. This is evident from the studies carried out on the relationship between IOS and dividend payout in developed and developing countries as per Table 4.1 and 4.2. However, the findings based on different theories to support the relationship between IOS and dividend policy are mixed. The gap that is envisaged here is that although there are many studies that support the contracting explanation based on the Jensen's Free cash flow theory, the studies have been generally conducted in developed countries only and there is limited evidence of the generalisability of the theoretical perspectives in the developing countries' context.

Hence, this raises a concern as to whether the extant theories discussed earlier are applicable in an emerging economy context such as Malaysia, which differs in terms of the institutional setting compared to that of the developed western capitalist nations.

In the next section, dividend payout research is discussed in the context of institutional settings such as legal regimes and how it varies across legal regimes in ways consistent with a particular version of the agency theory.

2.5. INSTITUTIONAL CONTEXT AND DIVIDEND PAYOUT

La Porta *et al.* (2000) report that dividend payout policies vary across legal regimes in ways consistent with a particular version of the agency theory of dividends. Generally, they observe that firms in common law countries where the investor protection is better make a higher dividend payout as compared to firms in civil law countries. Further, it is also more evident in common law countries but not civil law countries, for higher growth firms to have lower dividend payouts than low growth firms (Mitton, 2004; Amidu & Abor, 2006 and Farinha & Foronda, 2009).

La Porta *et al.* (1998) pointed that the extent of legal protection of outside investors differs extensively across countries. Legal protection here has been referred to as the content of the law and together with its enforcement. As agency problems manifest themselves primarily from non-value maximising investments, effective protection of minority shareholders is necessary so that the outright expropriation of corporate assets by the insiders is rare. La Porta *et al.* (1997) found that corporate ownership is more concentrated in countries with poor shareholder protection and that valuation and breadth of capital markets is greater in countries with better investor protection.

Furthermore, La Porta *et al.* (2000) find consistent support for the agency model of dividends where firms operating in countries with better protection of minority shareholders, pay higher dividends and there is a likelihood that high growth firms pay lower dividends than low growth firms consistent with the idea that legally protected shareholders are willing to wait for their dividends when investment opportunities are good. Likewise poorly protected shareholders tend to take whatever dividends possible, regardless of investment opportunities.

In a world of significant agency problems between corporate insiders and outsiders, dividends play a vital role (La Porta *et al.,* 2000; Leng, 2008; Ling, 2008; Sawicki, 2009). By paying dividends, insiders return earnings to investors and are no longer using them for their own benefits (Easterbrook, 1984). Further, payment of dividends, compel firms to raise external funds and hence, this provides some control to outside investors to monitor and control the insiders at that crucial time (Easterbrook, 1984).

However, evidence on an appropriate theoretical agency model of dividends that gives an optimal solution between investors and corporate insiders is limited. Fluck (1995), Myers (1998), Gomes (2000), Farinha & Foronda (2009) and Sawicki (2009) argue that different models capture different aspects of the problem. The basic mechanisms of the model that are tested are necessarily limited due to the fact that not all of the financing and payout choices are simultaneously scrutinised.

In examining dividend payout literature, two themes in examining the role of dividends in a agency context, namely: (i) Dividends as an outcome of legal protection of shareholders; and (ii) Dividends as a substitute for legal protection of shareholders.

(i) Dividends as an outcome of legal protection of shareholders

In this theme, dividends are an outcome of an effective system of legal protection of shareholders and hence under an effective system, minority shareholders use their legal powers to force companies to payout dividends. Hence under this view, dividends act as a deterrent for the insiders from using too high of fraction of company profits to benefits themselves. This is because shareholders might appoint directors who make attractive dividend payouts. Hence, the greater the rights of minority shareholders, the

more cash can be disgorged to them from the company, other things being equal (La Porta *et al.,* 2000 and Sawicki, 2009).

A classic example in the US is the Chrysler Corporation where the minority shareholders managed to force the management to disgorge its cash by paying dividends in 1995 and 1996. This case illustrates that in a high protection country such as US, in contrast to a low protection country like the Netherlands, shareholders are able to extract dividends from companies by virtue of their ability to resist oppression rather than having a specific dividend rights per se (La Porta *et al.,* 1997; 1998 & 2000; Claessens *et al.,* 2000; Sawicki, 2009).

La Porta *et al.* (2000) find that in a cross section of countries with different quality of shareholders protection, the implication that better protection is associated with higher dividend payout is testable. The first implication of this theory is that shareholders who feel protected would expect lower dividend payouts and high investment rates, from a company with good opportunities because they know the company's investment payoff. As a result, with good shareholder protection, high growth firms should have significantly lower dividend payouts than low growth companies.

In contrast, a mature company with poor investment opportunities would not be allowed to invest unprofitably. Similarly, if shareholders protection is poor, it is not expected to have such relationship between payouts and growth. Ambarish *et al.* (1987) derive the negative relationship between growth and payouts in a dividend signalling model and do not focus on how this relationship varies as it depends on how well shareholders are protected and in principle if this is possible. As a consequence, the

outcome model of dividends advocates a minority shareholder protection. The implication here is that better protection is associated with high dividend payout.

Further, a study by Sawicki (2009) on the dividend policy in Southeast Asia pre and post crisis, posit that the relationship is incremental to the effect of the legal regime whereby the shareholder protection in the firm level is important in forcing firms to disgorge cash in an outcome model of dividends.

(ii) Dividends as a substitute for legal protection of shareholders

In an alternative agency view, dividends are substitute for legal protection and this view relies on the need of the firms to come to the capital markets for funds (Bilow & Rogoff, 1989 and Sawicki, 2009). To be able to raise external funds a reputation for moderation in expropriating dividends to shareholders must be established and for this mechanism to work, the firm must never want to 'cash in' its reputation by stopping dividends and expropriating shareholders entirely. Further, the firm would never want to cash in as there is enough uncertainty about its future cash flows and the option of going back to the capital market is always valuable (Bulow & Rogoff, 1989).

Therefore, in most countries where the legal protection for minority shareholder is weak, the need for dividends to establish a reputation is vital. In contrast to this, countries with stronger shareholder protection, the need for a reputation mechanism is weaker, and hence so is the need to pay dividends. This view imply that other things being equal, whether it is a developed or developing country, dividend payout ratios should be higher in countries with weak legal protection of shareholders than in those with strong protection (La Porta *et al.,* 2000; Mitton, 2004; Sawicki, 2009).

Additionally, in this view, other things being equal, firms with better prospects also have a stronger incentive to establish a reputation as they have a latent need for external finance. As such, firms with better opportunities might opt for higher dividend payout as compared to firms with poor growth opportunities. However on the other hand, firms with better growth opportunities also have a stronger need for cash than firms with poor growth prospects. This relationship between growth prospects and dividend payout ratios is rather ambiguous and mixed (La Porta *et al.,* 2000).

The next section discusses on the institutional setting in Malaysia. In Malaysia, although there are broad similarities in the accounting and regulatory environments with the United States, and the United Kingdom, there are, however, other important institutional differences. This section highlights the key institutional features in Malaysia.

2.6. MALAYSIAN INSTITUTIONAL ENVIRONMENT

Malaysia, as an emerging economy in Asia, clearly exhibits several unique features that portray the institutional environment with which Malaysian firms operate. The political economy[1] of Malaysia is compounded by its legacy from the British colonial rule which ended in 1957 when Malaya obtained its independence, and its relationship-based or "crony" rather than "market-based" capitalism (Adhikari et al., (2006).

[1] In general terms, political economy represents a range of institutional arrangements that capture important relations between the government and the economy (Bushman, Piotroski, & Smith [2004] as cited in Gul (2006).

2.6.1. Malaysian Political Economy

Evidently, a major factor that contributes to the Malaysian government's involvement in the corporate sector is the government's new economic policy (NEP) that commenced in late 1969 (Jomo, 1990). Apart from encouraging Bumiputera[1] ownership of firms with easy credit facilities and government created trust Bumiputera agencies, the government's active involvement saw the emergence of many government linked companies (Gomez & Jomo, 1997).

Government Linked Companies (GLCs) are defined as companies that have a primary commercial objective and in which the Malaysian Government has a direct controlling stake[2] (Mitchell & Joseph, 2010) directly thorugh its Government Linked Investment Companies. For example, Khazanah Nasional Berhad is the national government's investment arm and has shareholdings in many of these companies.

Furthermore, prior studies (Ohlsen, 1982; Rajan & Zingales, 1998; Kaplan & Rodrik, 2002; Johnson & Mitton, 2003) evidence the ability of special interest groups (specifically, referring to political connected firms[3]) to obtain regulation which furthered their economic interests over other groups or the general population. For example, in their study of their performance of individual Malaysian firms over the Asian financial crisis period, Johnson & Mitton (2003) suggest that the Malaysian capital controls[4] provided a screen behind which favoured firms could be supported.

[2] Controlling stake refers to the Government's ability (not just percentage ownership) to appoint members in the Board of Directors, senior management, make major decisions such as award of contracts, strategy. Restructuring etc (Mitchell & Joseph, 2010).

[3] Politically connected firms are firms with identifiable with key government officials (Johnson & Mitton, 2003).

There was also evidence of an implicit government guarantee for connected firms (Mitchell & Joseph, 2010). Interestingly, Faccio et al (2006) show that political connections significantly increased the probability of firms receiving a government bailout and evidence a significantly higher occurrence of bailouts in Malaysia for the period 1997 to 2002.

Another factor that has shaped Malaysia's capital market is the close identification between racial and economic functions. Ethnicity has shaped how the country and businesses are run externally, through political means (Mohammad *et al.,* 2006). Hence, this led to the anecdotal evidence that suggest that government owned firms have less difficulty raising funds to finance investments (Mitchell & Joseph, 2010) and therefore, are able to pay dividends irrespective of their growth opportunities (Gul, 1999).

2.6.2. Ownership structure

Family controlled firms, especially related to the Chinese ethnic community which typically controls the businesses, is a common feature in Malaysia. The family members usually control the board and management, hence the accountability aspect of corporate governance may not be important (Miles, 2009). The situation here is that as long as the business prosperity aspect of corporate governance is fulfilled the company thrives. Cheung & Chan, (2004) report that approximately 58 percent of all Asian companies can be classified as being family owned (based on 20 percent cut-off point) where Malaysia (67.2 percent) show the highest degree of family ownership of total market capitalisation controlled by family groups.

[4] On 1st September 1998 Malaysia announced a raft of capital control measures to address the panic caused by the Asian financial crisis and to stabilize the crisis by restricting the free flow of funds (Mitchell & Joseph, 2010)

2.6.3. Concentration of ownership

On the separation of ownership and control in state controlled firms, Malaysia seem to have a measurable wedge between ownership and control in firms controlled by widely held corporations and the largest separation is held in small firms at approximately 78.9 percent. Whilst, the Japan-Keiretsu and Korea-Chaebol evidence that cross-business shareholdings exacerbate tunnelling or managerial opportunism by controlling shareholders through discretionary accruals that cause the market to discount the discretionary accruals of firms with high cross-business shareholdings, evidence is limited from the Malaysian context.

2.6.4. Board composition

Cheung & Chan (2004) raise the issue of board composition (such as a number of independent non-executive directors) when inside directors dominate the board. As the directors are elected by the controlling owners, it raises doubts as to whether the independent directors are truly independent and provide an adequate degree of monitoring of the majority shareholders. Sing & Ling (2008) document that independent directors in Malaysian firms generally play a passive role as their appointment is merely to fulfil listing requirement rather than as a measure at improving corporate governance or to bolster the capability of the firm. Further, Zubaidah *et al.* (2009) posit that firms should maintain a minimum number (one third of the board) to be considered effectively governing a board.

2.6.5. Legal System

According to Cornelius (2005), the country factor becomes an important consideration in setting an effective corporate governance framework, as two companies in two different countries may experience different legal, regulatory and market standards. The legal systems might also present barriers for enforcing corporate governance principles in Asian countries as the legal systems and enforcement are still developing institutions and laws (Cheung & Chan, 2004). DeMiguel *et al.* (2005) show that the main institutional factors (i.e. investor protection, development of capital markets, activity of the market for corporate control and effectiveness of boards) embodied in a corporate governance system affects the relationship between ownership structure and performance. Further, as Malaysia comes under the common law system, the role of the dividend policy has been established as a disciplining mechanism in countries with different legal systems and distinct agency problems (Farinha & Lopez-de-Foronda, 2009).

In summary, Malaysia provides an interesting case study to investigate the dividend payout phenomenon given the discussion above. Specifically, the existence of GLCs and highly concentrated ownership structure and predominantly Chinese family owned businesses coupled with the fact that firms with government connections are more likely to receive support, affirms the motivation for this study. The next section discusses, directional predictions concerning the relation between IOS and dividend policy and other related variables.

2.7. RESEARCH GAP IN EXTANT LITERATURE ON IOS AND DIVIDEND PAYOUT

There are primarily two strands of research with respect to dividend payout. One focuses on external drivers and the other focuses on internal drivers. This thesis is focused on the second strand, i.e., specifically on the association between growth opportunities and dividend payouts. Basically, IOS includes virtually any kinds of further expenditures like capacity expansion projects, new product lines, maintenance and replacement of existing assets. Further, as mentioned in Chapter 1, since investment opportunities are typically unobservable by outsiders, a common practice is to rely on proxy variables that can be generally classified into three types: the price-based proxies, investment based proxies and variance measures (Adam & Goyal, 2008).

In this section, the research gap is discussed in the context of dividend payout in an emerging economy within a different institutional context. The Malaysian institutional environment varies considerably with other Asian and developed countries with regards to the political economy, ownership structure, concentration of ownership, board composition and legal system. Further, the relationship between IOS and dividend policies is only explainable from a multifaceted viewpoint and as discussed in Chapter 1, the predominant theory is the contracting theory and FCF set in the context of the agency theory. Echoing from the above issue, evidence is limited from the east, for example Asia, where relationship capitalism is more evident. This poses a concern as to the applicability of these theories in the Malaysian institutional environment in an emerging economy context.

2.8. CONCLUSION

Given that the Malaysian environment is predominantly different from other Asian countries mainly because of its unique political scenario, ownership structure, concentration of ownership, number of independent directors representing the board and its legal system, it is useful to examine the applicability of the contracting theory and Jensen's Free Cash Flow Theory on the relationship between growth and dividend payouts in Malaysia. Further, as Malaysia comes under the common law system, the role of the dividend policy arguably can be a disciplining mechanism in protecting minority interest. In this context the issue of the state of corporate governance in the country becomes relevant. The interface between corporate governance and dividend payout is discussed in the next chapter.