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Abstract

Since the 1960's, there is an ongoing debate on dividend policy, which remains a controversial issue to this day. Why do firms pay dividends? The academics have not been able to agree on any convincing explanation, and the same time, many even claim that firms should not pay dividends, and so we have a "dividend puzzle". The purpose of this paper is to summarize the main findings of two more recent fields of research, and to discuss why they seem to be the most promising avenues for further research, to solve the "dividend puzzle", and to build a complete payout policy theory. These fields are: (i) the agency theory and (ii) the lifecycle theory. Besides being very intuitive, these theories are consistent with most empirical facts on U.S. firms' payout policy.

JEL classification codes: G35

Since the pioneering works of Gordon (1959), Lintner (1956, 1962), and Miller and Modigliani (1961) there is an ongoing debate on dividend policy, which has been a controversial issue to this day. Black (1976) finds no convincing explanation of why firms pay cash dividends and talks about a "dividend puzzle". Authors have produced extensive and sometimes conflicting research, with several alternative theories trying to explain why firms pay dividends, or why they should not pay dividends, or even why this decision may be irrelevant. Through the years, the empirical evidence did not clearly favour any of the proposed alternatives. In the United States, the "dividend puzzle" is even deeper, as historically dividends have been generally taxed higher than capital gains, and this makes it even more difficult to understand why dividends are favoured. Taxes and investor clienteles (Elton and Gruber, 1970), have spawned a very extensive body of work, but mostly favouring the view that firms should not pay dividends, which is not helpful to explain why firms pay dividends.

Perhaps the most influential work in this field is the seminal paper of Miller and Modigliani (1961), who show that, in perfect markets, the payout decision is irrelevant because it neither creates nor destroys value for shareholders. If the investment decision is held constant, higher dividends result in lower capital gains, leaving the total wealth of shareholders unchanged. However, contrary to this theory, firms have been for the

past decades following very clear rules in setting their dividend policy (Lintner, 1956; Brav et al., 2005), which would be incomprehensible, if they believed this decision to be irrelevant.

In the real world, with market imperfections such as taxes and transaction costs, and other issues such as information asymmetries and agency problems, dividend policy seems to be very relevant, both for the managers of the firms, shareholders, prospective investors and market analysts. Not only do managers show extra care in their payout decisions, especially in changing payout decisions, but also the markets react strongly to dividend changes, and more so, to dividend omissions and initiations, as proved by Aharony and Swary (1980) and Michaely, Thaler and Womack (1995).

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Information asymmetry and signalling (Bhattacharya, 1979; John and Williams, 1985; Miller and Rock, 1985) have been proposed as explanations for positive dividends, with some supporting evidence. However, the signalling hypothesis has been loosing ground, as more recent research (DeAngelo, DeAngelo and Skinner, 1996; Benartzi, Michaely and Thaler, 1997) shows that dividend changes are not very good predictors of future earnings changes. If the signal does not work, why send it? Furthermore, in an extensive enquiry, Brav et al. (2005) find that financial managers do not have a signalling purpose, when they decide on payout policy. How can dividends be a signal, if managers do not mean them to be one?

The purpose of this paper is to summarize the main findings of two more recent fields of research, and to discuss why they seem to be the most promising avenues for further research, to solve the "dividend puzzle", and to build a complete payout policy theory. These fields are: (i) the agency theory and (ii) the lifecycle theory.

Agency theory, as applied at the firm level, relates to all the conflicts of interest that may arise within the company, between the decision makers (managers) and all claim holders on the firm, including shareholders, debt holders and employees. The conflicts of interest that are more interesting, for the purpose of this paper, are those that occur between shareholders and managers, resulting from the separation of ownership and control. In most big firms, the capital is owned by a large and diffuse group of investors who delegate management decisions to professionals, who often are not shareholders of

the firm. Managers are appointed to act as agents of the shareholders, but in practice it is generally difficult for shareholders to control the actions of managers, as they will have less information. Ineffective control allows managers to pursue their own interests, taking decisions that may not be on the best interest of shareholders.

If we define free cash-flow as excess cash, not needed for positive NPV investments, it is easy to understand that agency costs arising between managers and shareholders are higher, when free cash-flow is higher. Managers may be tempted to pursuit non-profitable investments, including mergers and acquisitions, if they expect to gain prestige from the growth of the firm, or on excessive salaries, luxury consumption, asset diverting and outright theft. The interesting point is that dividend policy may help reduce agency costs. How does this work?

The first mechanism is proposed by Easterbrook (1984), who argues that increasing dividends, all else being constant, forces the firm to increase the frequency of external capital raising and associated monitoring by investment bankers and investors, which reduces the degree of freedom of managers, for non-profitable investment decisions. The importance of monitoring is recognized by Shleifer and Vishny (1986) and Allen, Bernardo and Welch (2000) who note that institutional investors prefer to own shares of firms making regular payments, and this type of investor is more prone to frequent monitoring than small shareholders. The second mechanism is more direct. Jensen (1986) points out that if agency problems are linked to free cash-flow, because money is the asset that managers can misuse most easily, these problems can be reduced if free cash-flow is minimized, and shareholders can achieve this by forcing managers to pay higher dividends.

So, perhaps one of the principal remedies to agency costs is the legal environment (La Porta et al., 2000), as some work (Gompers, Ishii and Metrick, 2003) shows that agency costs are likely to be inversely related to the strength of shareholders rights. In common-law countries such as the U.S.A. and U.K., where the protection of minority shareholders is higher, the outright expropriation of corporate assets by managers is relatively rare, and so the main agency problems are related to non-value-maximixing investment decisions. In civil-law countries, such as most western European countries, the protection of minority shareholders is lower, and so agency costs should be higher.

La Porta et al. (2000) use the level of legal shareholder protection as a proxy to agency problems to test two alternative models. First, the outcome model suggests that dividends are paid because minority shareholders pressure the managers to disgorge excess cash, to avoid its misuse, by exercising their legal rights to protest and resisting against management decisions. Second, the substitution model predicts that firms with weaker shareholder rights need to establish a reputation for non expropriating the wealth of shareholders, in order to be able to reduce the cost of raising external capital. A reputation for good treatment of shareholders is more important for firms in low legal protection countries, as shareholders may have nothing else to rely on. So, if the outcome model is correct, we should find that payout ratios are generally higher in high protection countries than in low protection countries, and the inverse result would suggest that the substitution model is correct. The authors find that payout ratios are generally higher in high protection countries, supporting the outcome model of dividends. These results are confirmed by Bartram et al. (2007) in a more generalised context, considering more countries, more firm-years and including share repurchases along with cash dividends in the payout ratio.

DeAngelo, DeAngelo and Stulz (2006) note that: "Dividends tend to be paid by mature established firms, plausibly reflecting a financial lifecycle in which young firms face relatively abundant investment opportunities with limited resources so that retention dominates distribution, whereas mature firms are better candidates to pay dividends because they have higher profitability and fewer attractive investment opportunities." Also in other works such as Fama and French (2001), Grullon, Michaely and Swaminathan (2002) and DeAngelo and DeAngelo (2006), lifecycle explanations for dividends rely on the trade-off between the advantages and disadvantages of paying dividends, which evolve over time as the firm matures, profits cumulate and investment opportunities decline. Young firms prefer to retain all internal resources and do not pay dividends, and they also need external (contributed) resources. Larger firms with moderate growth rates payout a small part of their profits and retain the rest, to finance continuing investment and growth. As firms reach a stage where their growth is slow, and investment opportunities are scarce, free cash-flow tends to grow and so payout ratios also increase, both through dividends and share repurchases, thus avoiding the agency problems of retaining excess cash.

Confirming this theory, Fama and French (2001) find that firms with current high profitability and low growth perspectives tend to pay dividends, while low profit/high growth firms tend to retain any profits. Also, DeAngelo, DeAngelo and Stulz (2006) show that the fraction of firms that pay dividends is high when retained earnings are a large portion of total equity (mature firms) and falls to near zero when most equity is contributed rather than earned (young firms).

Note that the lifecycle theory of dividends is reconcilable with the outcome model of La Porta el al. (2000). In fact, another important prediction of the outcome model is that firms with higher investment opportunities have lower payouts, even if only in countries where minority shareholders enjoy better protection. This happens because investors understand these growth opportunities and so they should exert less pressure on the firm. Again, this prediction is confirmed by the empirical results of La Porta et al. (2000) and other replicating studies, including Bartram et al. (2007).

The agency/free cash-flow/outcome model, together with the lifecycle theory, seem to be the best lines of research for a complete positive theory of dividends. Besides being very intuitive, these theories are consistent with most empirical facts on U.S. firms' payout policy, documented in extensive research (Linter, 1956; Fama and Babiak, 1968; Fama and French, 2001; De Angelo, DeAngelo and Skinner, 2004; Grullon et al., 2005; Brav et al., 2005), including: (i) total payout is massive, and has consistently grown through the years; (ii) dividends are concentrated in a small number of firms, with very high profits; (iii) dividends and profits are positively correlated, through time and cross-sectionally; (iv) dividends are mostly paid by mature firms, and not by young firms; (v) firms pay dividends through time and do not cumulate excessive cash; (vi) dividend changes are assymetric, with the number of increases exceeding decreases; (vii) dividend changes are due to firm-specific events, as increases are linked to higher profits and decreases reflect losses and financial distress; (viii) stock prices go up following unexpected dividend increases and fall after unexpected dividend decreases; (ix) unexpected changes in dividends do not predict future surprises in profits; and finally, (x) when firms initiate regular dividends, they are reluctant to decrease or cut dividends.

One final point to note is that these two theories are also consistent with the pre-Miller and Modigliani (1961) view that dividends are good, namely, the bird-in-the-hand theory of Lintner (1962) and Gordon (1959). DeAngelo and DeAngelo (2006) point out to the irrelevance of the irrelevance proposition of Miller and Modigliani, arguing that their conclusion is constrained by the assumption that free cash-flows are 100% distributed each year, and also claim that the "dividend puzzle" of Black (1976) is solved by the lifecycle theory. In the real world, with agency problems between managers and shareholders, the latter may definitely believe that one dollar of dividends (in the hand) is worth more than one dollar of retained earnings (in the bush), due to the risk of suboptimal investment decisions by managers if excess cash is available. In this context, shareholders use their rights to force firms to pay dividends, especially if they believe that growth opportunities are low. In the next few years, it will be very interesting to see if this theories resist to new empirical evidence. If they do, then maybe we have found the new paradigm that will replace the irrelevance proposition of Miller and Modigliani, and definitely solve the "dividend puzzle".

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