



Behavioural finance and dividend changes as predictors of future profitability: A literature review

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ABSTRACT

This paper's primary goal is to present a significant element of the current dividend policy challenges from the perspective of behavioral finance. Given that dividend policy is one of the more contentious subjects in corporate finance, and because of this, scholars in the field have recently attempted to address the dividend policy conundrum by utilizing behavioral finance viewpoints. From the standpoint of behavioral finance, the study provides a general overview of the literature on dividend policy. This work offers a review of the literature. Together with behavioral components, it summarizes the main theoretical justifications for the dividend policy from the standpoint of behavioral finance.

KEYWORDS

Dividend policy; Behavioral Finance; Signalling Theory; Prospect Theory

1. Introduction

A very important question in finance asks why firms pay dividends? To give the answer to this particular question we can say, in general investors want some return against their investment and dividend is a very well recognised and accepted way of giving returns. In broad way, dividend is a major part of the financial policy for every company (Hasan & Shahbaz, 2021). Not only do shareholders or investors have a big interest in it but also, corporate managers have a big interest in dividend because, it may have the influence on share pricing. At the end government also put interest on it, because it has relation with the tax calculation.

Determining a dividend has been a long-term puzzle and an important issue in finance, this is because lots of economists including M & M believe that dividends do not matter; the only thing that matters for the shareholders is their final wealth. In standard financial theory it does not matter whether wealth is embodied in the form of a cash dividend or in the form of stock, because they are perfect substitutes (Hasan & Shahbaz, 2021). But on the other hand, According to Lintner's (1956) groundbreaking work on dividends, the payment of regular cash dividends to shareholders is a chronological tradition in developed capital markets. Lintner's (1956) main argument

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was company manage firm's believe shareholders are entitled to get firm's profits in the form of dividends. On the other hand, Shefrin and Statman (1984) argued about the behavioural dividend policy of the firms, that firms pay dividends simply because investors exercise better self-control with their expenditure.

As we know, there is plenty of research conducted to solve the dividend puzzle, and some of them were specially based on dividend changes and whether dividend can predict future profitability (Hasan & Shahbaz, 2021). In 1997 and in 2005 Benartzi, Michaely, and Thaler said that there is no positive correlation between dividend changes and future profitability and earnings but in 2001 Doron and Amir proved that there is positive correlation between dividend changes and future profitability and earnings (Hasan & Islam, 2022,?).

Dividend changes are positively associated with stock returns in the days surrounding the dividend change announcement (Aharony and Swary (1980, Asquith and Mullins (1983), Kalay and Loewenstein (1985), and Peti (1972)). Doron and Amir (2001) find that dividend increases are positively related to unexpected earnings but on the other hand, dividend decreases are not significantly related to earning changes. And they showed the reason for the positive relation between dividend changes and earnings changes due to autocorrelation in the earnings change's series. On the other hand, G Grullon, Michaely, Benartzi, and Thaler (2005) and Hasan and Islam (2022) prove that Donor and Amir (2001) findings are not correct, and they said that, dividend changes are uncorrelated with future earning changes and dividend changes are negatively correlated with future changes in profitability.

Brickly(1983), Healy and Palepu (1988), and Aharony and Dotan (1994) also provide evidence that an increase in dividends leads to an increase in future earnings. But on the other hand, Watts (1973) and Gonedes (1978) show there is no relationship between current dividends and future earnings while the evidence in Benartzi, Michaely, and Thaler (1997) suggests that dividend changes provide information about current and past levels of earnings. So, there are different results on the information content of dividends. Many of the differences arise from different techniques of estimation and different functional forms. My research will explore the importance of functional form in explaining different results using UK data.

Another perspective of the dividend puzzle is that of Behavioural finance. Like orthodox finance, behavioural finance also has theories, and its main theory is Prospect theory. As we know, investment always uncertain and risky for the investors. Prospect theory (PT) (Kahneman & Tversky, 1979) is one of the most well-known and influential models of decision making under uncertainty (Wakker 2010). Prospect theory contends that the utility function of investors is concave over the domain of gains. The separate valuation by investors of individual gains over a concave utility function influences how a stream of dividend payments will be valued. More specifically, it suggests that the frequency with which dividends are paid will positively affect an investor's valuation of a total dividend distribution (Hasan, Kayani, & Choudhury, 2023). As part of our exploration of functional form we will develop and test an econometrics specification based on behavioural finance and prospect theory.

The rest of the paper is organized as follows, in the second section we explain all the relevant theories of behavioural finance and dividend policy and in section 3 we conclude this paper.

2. Literature Review

Corporate dividend policy is an important component of firm policies and has been viewed as an important issue in the newly developed behavioural corporate finance literature. Modigliani and Miller (1958 and 1961), first given dividend irrelevancy theory for the businesses and shareholders to solve the too complicated dividend puzzle. A number of researchers tried to solve that puzzle using different areas of corporate finance, and some of them think that this puzzle is unsolvable because of the capital structure problem of the company. And few of the researchers have examined whether this puzzle has any direct link with the permanent earnings of the company. But all this research has got some kind of positive result, and they manage to make some contribution to the literature, but still no one have the absolute answer. But no researcher has tried to use behavioural finance theory to solve this puzzle. Though, already many theories have appeared in the literature that explain the payment of dividends and variations in dividend payout policy by focusing on market imperfection (Alli et. al. 1993). All of those studies after Miller and Modigliani (1961) are basically concentrated and focused on the dividend theories e.g., signaling on dividend theories, catering theories and more on, but very recently one more behavioural theory is added with the existing theories, and it is called prospect theory.

2.1. Behavioural Finance

Behavioural finance is a relatively new concept in the financial markets, and it replaces traditional finance models, rather than following traditional financial models, and on top of it offers a better model for the human behaviour. Avaniidhar Subrahmanyam (2007) says traditional finance academics often offer a few common objections to behavioural finance. At first theoretical behavioural models is to some extent ad hoc and designed to explain specific stylised facts and behavioural models are based on people actually behave based on extensive experimental evidence and justify evidence better than traditional ones. Moreover, data mining plagues the empirical work. Behavioural finance examines the impact of psychology on market participant's behaviour and the resulting outcomes in markets (Hyoyoun and Wook, 2013).

Hyoyoun and Wook (2013) report that behavioural finance is a study that combines psychology and economics, and it tries to explain various events that take place in the financial markets. Behavioural finance discusses two things which are, the behavioural finance macro, which recognizes anomalies in the Efficient Market Hypothesis (EMH) that behavioural model can explain and other one is the behavioural finance micro, which recognizes individual investor behaviour, or biases that are not explained by the traditional model incorporating rational behaviour (Hyoyoun and Wook, 2013). Behavioural finance also focuses on the individual investor's decision-making process, in particular, how individual investors interpret and act on specific information. Investors' decision-making processes include cognitive biases and affective (emotional) aspects, because investors do not always have rational and predictable reactions when examined through the lens of quantitative models (Hasan, 2024).

Behavioural finance has been defined in different ways by different researchers. Ricciaedi and Simon (2000) defined behavioural finance in the following manner: "Behavioural finance attempts to explain and increase understanding of the reasoning patterns of investors, including the emotional processes involved and the degree to which they influence the decision-making process". Basically, behavioural finance ex-

plains what, why and how of finance and investment, from a human perspective. Shefrin (2000), however, mentioned the difference between cognitive and affective (emotional) factors: “cognitive aspects concern the way people organise their information, while the emotional aspects deal with the way people feel as they register information”.

2.2. Behavioural Finance and Dividend Policy

Psychology is the second building block of behavioural finance (Shleifer and Summer, 1990). Behavioural finance economists have done broad experiments and they gathered huge number of experimental evidence complied by cognitive psychologists on the biases that arise when people form beliefs, and on people’s preferences, or on how they make decisions, given their beliefs. Economists are believed that a long-term puzzle in behavioural finance has been the determination of dividends in spite of the recognition that share repurchases as a means of cash distribution confer tax advantages (Subrahmanyam, 2007). More recently, Baker and Wurgler (2004a) rationalise dividends by arguing that during certain times, investors are more desirous of dividends.

Psychological factors have direct influence on investors’ decision-making process: overconfidence (Alpert and Raiffa, 1982) on private information, optimistic and wishful thinking about their ability and prospects (Weinstein, 1980), representativeness, belief perseverance, anchoring. Investors believe that the mean dividend growth rate is more variable than it actually is. When investors see a surge in dividends, they are too quick to believe that the mean dividend growth rate has increased. Investor’s exuberance pushes prices up relative to dividends, adding to the volatility of returns. Investors rely more on private information than public information and in particular, on overconfidence about private information.

Basically, dividends have been taxed at a higher rate than capital gain. Therefore, investors who pay taxes always prefer that the firm repurchase shares rather than pay a dividend. Shefrin and Statman (1984) proposed behavioural explanations tell that, investors always exhibit self-control problems and rationale for dividends is based on mental accounting, by designating an explicit dividend payment, firm make it easier for investors to segregate gains from losses and hence to increase their utility. And paying dividends also helps firms investors avoid regret.

2.3. Dividend signaling theory

The basis of signalling theory derives from a study by Lintner (1956), in which 28 companies’ managers were interviewed to find out which factors were most instrumental in firms’ payout policies. Lintner was convinced by that, dividend is not only important for the amount of cash needed to finance projects in the short-term, but that they also show managers confidence over the sustainability of company earnings for the long-term. For that reason, managers tended to increase or initiate pay-outs only when they believed that subsequent earnings would be high. John and Williams (JW) (1985) and Miller and Rock (1985) show that the level of dividends signals the level for a firm’s cash flow, while Kale and Noe (1990) demonstrate that the level of dividends signals the variance of the firm’s cash flow.

Empirical evidence tells that investor always interested to dividend increases and initiations; the stock prices of firms that initiate dividends tend to increase around the time of the initiation announcement (Asquith and Mullins, 1983; Healy and Palepu, 1988). Similarly, the signalling theory implies that any subsequent decrease or elim-

ination of dividends will be viewed with extreme disfavour by the financial markets (Healy and Palepu, 1988; Michaely et al., 1995;) (Benartzi et al., 1997).

Deangelo, Deangelo, and Skinner (2004) finds that the cumulative level of real dividends increasing but dividends becoming increasingly concentrated instead of widely distributed. According to the signalling theory, before paying dividends companies sending a positive signal to the capital markets to inform about their high future cash flows and profits, and this signal rests a message (Lintner, 1956) that the initiation of dividends represents a commitment to sustained payments. Therefore, that firms whose expecting higher future cash flow to pay dividends are the firms that are most rewarded by investors at the time of the initiation announcement (Boubaker, Choudhury, Hasan, & Nguyen, 2024).

Hobbs and Schneller (2012) findings are extension of DeAngelo and DeAngelo (1990) findings to dividend omissions, but they do not find evidence for the signalling theory's implication that dividends signal a rosy future for the firms that initiate them, which coherent with Grullon et al. (2005), who find little correlation between changes in dividends and subsequent firm profitability. Hobbs and Schneller (2012) show that permanent payers firms are doing better than temporary payers, even though this findings is not true in all the case, because there are evidence that dividend sustainability is directly related to future performance. The important implication is that firms will try to obtain correct market valuation through dividend signalling only when shares of equity have to be sold in the market, either by insiders to satisfy personal cash needs or by the firm to raise investment capital. Then, conditional on this decision to initiate dividends, the dividend level will signal firm quality and result in the correct valuation of the firm's shares.

2.4. Future profitability and dividend Policy

Since Miller and Modigliani (1961) demonstrated the irrelevance of dividend policy, from then to till now researchers attempting to explain market price reaction to firms' dividend decisions. Dividend decisions have mainly been influenced by the information issues and tax effects. Information issues have been empirically investigated by examining market reactions to announcements of dividend changes. The effect of differential tax treatments of dividends and capital gains usually has been examined through cross-sectional regression testing the significance of dividend yield in explaining returns.

Dividend adjustment is linked to earnings changes; the studies using the event-study methodology usually find a significant relation between dividend and earning changes. On the other hand, studies based on the time-series regression analysis typically find a weak relation between dividend and earnings changes (Hasan and Al-Najjal, 2024). The problem is that most of the time series regression studies have focused on the relation between dividends and reported accounting earnings rather than dividends and earning changes. However, Lintner (1956) said that dividend changes are more related to changes in permanent earnings. The use of reported accounting earnings figures rather than permanent earnings figures in the empirical analysis may have produced the puzzling results documented in previous dividend studies (Jumming et al., 1998).

According to "the information content of dividend hypothesis" (Miller & Modigliani, 1961), dividend changes generate stock returns because they carry new information about the firm's future profitability. But Doron and Amir (2001) strongly disagree with this hypothesis, and they come out with evidence that dividend changes are positively

related to future earnings changes, future earnings, and future abnormal earnings. But G Grullon et al. (2005) come up with new information and they prove that Doron and Amir (2001) provide wrong evidence that dividend changes have influence on future earnings and future profitability. They find when they control the nonlinear patterns in the behaviour of earnings, the relation between dividend changes and future earnings does not exist.

To get the results whether dividend changes convey new information about future profitability, need to estimate expected profitability. Doron and Amir (2001) found the same result, what previous research had found, that dividend changes are not positively related to future earnings changes. But when they extend their experiment then they find the positive relation between the dividend changes and future earnings. Doron and Amir (2001) observed that dividend increases are positively related with the profits, which are, comes from the normal and abnormal earnings but dividend decrease are not related to future profits. But later G Grullon et al. (2005) find completely different results than Doron and Amir (2001) find, and they say that the relation between dividend increase and earning increases is not positive and not that significant.

Doron and Amir (2001) also find that the positive relation between dividend changes and earnings changes is due to autocorrelation in the earnings change's series. Doron and Amir (2001) shows that dividend changes are positively related to the level of future profitability, after controlling for book value, past and current profitability, market expectations of future profitability as reflected in price prior to the dividend changes, past dividends and dividend changes and consensus analysts' earnings forecasts. But according to Grullon et al. (2005), dividend changes are negatively correlated with the future changes in earnings and profitability.

Brickly (1983), Healy and Palepu (1988), and Aharony and Dotan (1994) provide evidence that an increase in dividends leads to an increase in future earnings. Fama and French (1998a) claim that variables that proxy future expected earnings are relevant in explaining current dividend pay-out. Watts (1973) and Gonedes (1978) show there is no relationship between current dividends and future earnings while the evidence in B Benartzi et al. (1997) suggests that dividend changes provide information about current and past levels of earnings. These points suggest that dividends may respond both to past prices, which, following MM (1987), act as forecasts of current and future permanent earnings, and to unexpected current permanent earnings.

2.5. Prospect theory

In this part I am going to look at prospect theory because, as we all know that prospect theory is the main theory in behavioural finance. In my research work I will use prospect theory as my behavioural finance theory to examine whether prospect theory can forecast dividend and at the same time, I will test there is any relation between dividend changes and future profitability.

Expected Utility Theory has dominated the analysis of decision-making under risk until Tversky and Kahneman's prospect theory (1979). Tversky and Kahneman and Tversky (1979) describes several classes of choice problems in which preferences systematically violate the axioms of expected Utility theory and they also argue that Utility theory, as it is commonly interpreted and applied, is not an adequate descriptive model. Utility theory and the prospect theory agree that utility from wealth is distinct from the actual monetary value of wealth. Utility theory and the prospect theory both of the theories analyse the satisfaction that a person would derive from

his current wealth or a change in his wealth. David, Charlie and Raymond, (2004) said that, both theories predict that investors are risk averse means increases in wealth have diminishing marginal utility.

Tversky and Kahneman and Tversky (1979) in their Prospect theory they mentioned that most people choose the prospect where winning is more probable. If anywhere the possibility of winning is there but the probabilities of winning are minuscule, in this situation where winning is possible but not probable, most people choose the prospect that offers the larger gain.

According to Prospect theory (Kahneman & Tversky, 1979), the preference between negative prospects is the mirror image of the preference between positive prospects. But the reflection of prospects around 0 reserves the preference order and Tversky and Kahneman and Tversky (1979) labelled this pattern the reflection effect. This reflection effect implies that risk aversion in the positive domain is accompanied by risk seeking in the negative domain.

Tversky and Kahneman and Tversky (1979) explanation tells that, reflection effect eliminates aversion for uncertainty or variability as an explanation of the certainty effect. People do not prefer prospects that do not have any variance even though that prospect has higher expected value, on the other hand people will choose that prospect which has large variance despite it has lower expected value. Tversky and Kahneman and Tversky (1979) reported that, when the prospects are reduced, the difference in variance between the two prospects might be insufficient to overcome the difference in expected value. Because one prospect has both a higher expected value and lower variance than the other prospect, it appears that certainty increases the aversiveness of losses as well as the desirability of gains.

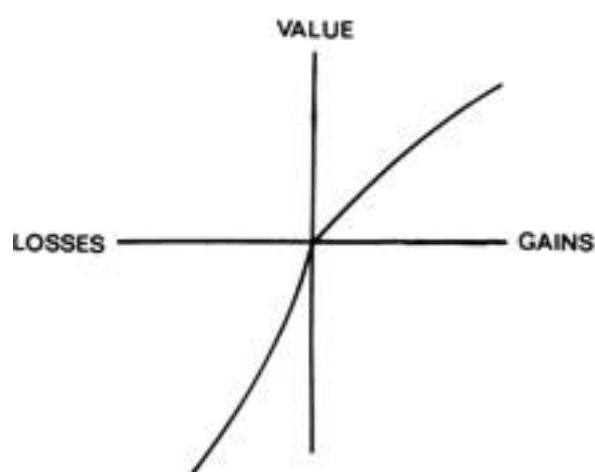


Figure 1. A hypothetical Value function (Kahneman & Tversky, 1979).

To make the choice between the alternatives, people generally ignore components that the alternatives share, and focus on the components that differentiate them (Tversky, 1972). This type of choice problem may produce inconsistent preferences, because a pair of prospects can be decomposed into common and distinctive components in more than one way, and different decompositions sometimes lead to different preferences. Tversky and Kahneman and Tversky (1979) refer to this phenomenon as the isolation effects. The isolation effect implies that the contingent certainty of the fixed return enhances the attractiveness of this option, relative to a risky venture with the

same probabilities and outcomes.

Tversky and Kahneman's (1979) prospect theory is developed on the base of simple prospects with monetary outcomes and stated probabilities. Tversky and Kahneman and Tversky (1979) distinguish their prospect theory into two phases in the choice process: the first one is phase of editing and it followed by the phase of evaluation.

The editing phase consists of the application of several operations that transform the outcomes and probabilities associated with the offered prospects, like – Coding, Combination, Segregation and Cancellation. Tversky and Kahneman and Tversky (1979) mentioned two more additional operations, simplification and the detection of dominance.

An essential feature of the Tversky and Kahneman's (1979) prospect theory is that the carries of value are changes in wealth or welfare, rather than final states. In prospect theory Tversky and Kahneman and Tversky (1979) said that value should be treated as a function in two arguments: the asset position that serves as reference point and the magnitude of the change (positive or negative) from that reference point.

In prospect theory Tversky and Kahneman and Tversky (1979) defined the value function on deviations from the reference point; generally, concave for the gains and convex for the losses and steeper for losses than for gains. Their proposed S- shaped value function postulated by Markowitz (1952), which is relatively shallow in that region. Tversky and Kahneman and Tversky (1979) accommodate the decision weight and the value of each outcome is multiplied by a decision weight. They find that the decision weights measure the impact of events on the desirability of prospects, and not merely the perceived likelihood of these events.

Source: prospect theory (Kahneman & Tversky, 1979).

According to Tversky and Kahneman and Tversky (1979) attitudes towards risk are determined jointly not solely by the utility function. It is therefore instructive to examine the conditions under which risk aversion or risk seeking are expected to occur. Prospect theory implies that a negative translation of a choice problem increases risk seeking in some situations.

Tversky and Kahneman and Tversky (1979) pointed out another important case of a shift of reference point arise when a person formulates his decision problem in terms of final assets, as advocated in decision analysis, rather than in terms of gains and losses, as people usually do. Because people are expected to exhibit more risk seeking in deciding whether to accept a fair gamble than in deciding whether to purchase a gamble for fair price, and the location of the preference point, and the manner in which choice problems are coded and edited emerge as critical factors in the analysis of decision.

As we know that prospect theory specially using for asset pricing, gambling or political and social research, but in this research, I will use this theory as a behavioural prospect to find out the relation between dividend changes and future profitability and earnings. First, I will test orthodox finance general linear and non-linear models to discover functional form and specification in terms of their statistical power and extension utility value. Then check the specification and try to improve it.

As discussed Doron and Amir (2001) and G Grullon et al. (2005) found some asymmetry of behaviour in the ability of dividends to forecast future profitability and we wish to evaluate if this is consistent with prospect theory. At the same time, I will check the estimation, whether the result gives conservatism or not. If it gives conservatism, then we can tell this is one kind of bias.

It is well known that shareholders cannot make a rational forecast for dividends, and dividend changes meet shareholders' expectations (Das, Hasan, & Suthadhar, 2024).

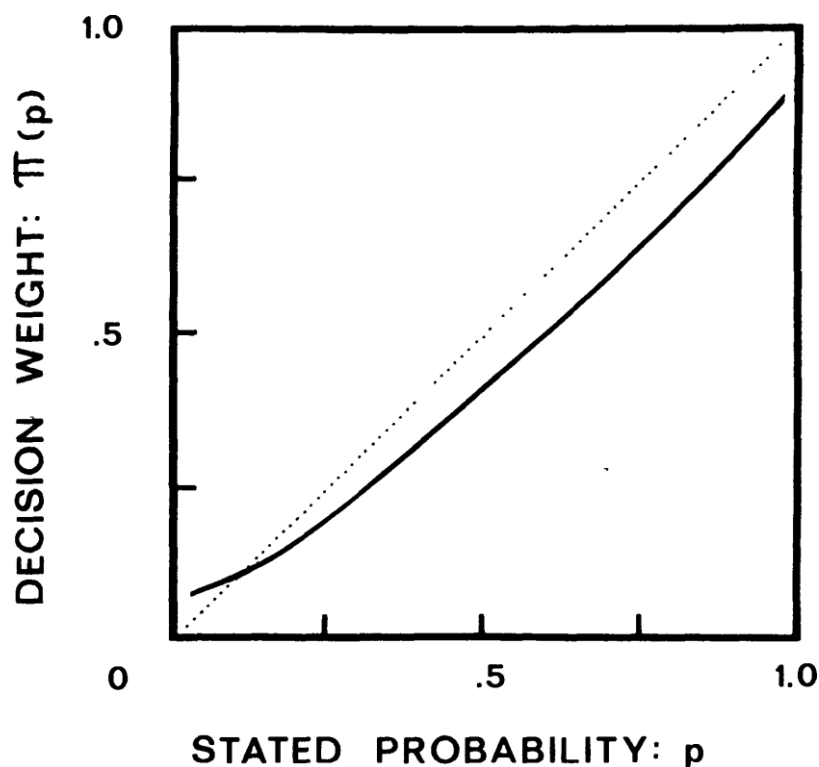


Figure 2. A hypothetical weighting function

On the basis of estimation, I have to find which specification will best reflect prospect theory. And after that we will use another model to examine whether prospect theory can explain the relation between dividend changes and future profitability and earnings. We will use Hung and Wang (2005) consumption-based asset-pricing model with some modification to use as our dividend change model. We might change the equation round and then we will check whether earnings have any kind of effect on dividend payments. And maybe that will help us to show using prospect theory that it is not all about the information signaling but also anticipating how shareholders or investors react.

2.6. Dividend policy and Prospect theory

In the recent time dividend policy is one of the most intensely studied areas of behavioural finance. The previous literature in corporate pay-out policy examines the decision to pay or not to pay dividends (; and Baker and Wurgler, 2004a and 2004b) (Deangelo et al., 2004; Fama & French, 2001), how much to pay (Miller & Rock, 1985; Rozeff, 1982), or how to pay – repurchases versus dividends (Stephens and Weisbach, 1998; and Jagannathan et al., 2000). To do all this research, researchers use different types of theories; like –catering theory, life cycle theory or signalling theory. But only Stephen, Gregory and Emre (2010), use prospect theory when they examine how frequent firms should pay dividends when they made the decision to pay dividends and Shefrin and Statmen (1986) use prospect theory to examine the dividend pay-out

policy.

Prospect Theory can be defined as a mathematically formulated theory that substitutes “weights” instead of “probabilities” and “value function” instead of “utility function” in expected utility theory. In Prospect Theory, individuals are working to maximize the weighted sum of value rather than utility whereby weights are not equal to probabilities (Kahneman and Tversky (1979) Kahneman and Tversky (1979); Shiller (2001)). People treat extremely improbable events as impossible and extremely probable as certain (Kahneman and Tversky (1979) Kahneman and Tversky (1979)).

Investors prefer cash dividends dealing with the distinction between ‘issues of form’ and ‘issues of substance’. In standard financial theory it does not matter whether wealth is embodied in the form of a cash dividend or in the form of stock, because they are perfect substitutes. According to Kahneman and Tversky (1979) individuals tend to rank companies according to their chances to get dividend from that company before investment, because investors want cash dividends. Moreover, they postulate that individuals typically display risk-averse behaviour over investment which involve only gains; display risk-seeking behaviour over investment which involve only losses; and have losses loom larger than gains in those investments which admit the possibility of either a gain or loss of equal magnitude. Therefore, in the single-variable case, a standard Kahneman and Tversky value function is concave in gains and convex in losses with a somewhat non-symmetric shape.

Once the level of pay-out is decided, then it does not matter how frequently dividends are paying, but such an argument, ignores the higher utility derived by investors from receiving more frequent payment implied by the prospect theory of K Kahneman and Tversky (1979) and Thaler’s (1980) mental accounting. Prospect theory contends that the utility function of investors is concave over the domain of gains. The separate valuation by investors of individual gains over a concave utility function influences how a stream of dividend payments will be valued.

In this research study we will use prospect theory to test for asymmetry in gains and losses, where Doron and Amir (2001) use simple linear regression model to test that. Another aspect of this research will be that we will try to investigate inconsistent dividend payments of the UK firms has any relation with future profitability, even though we do not have any idea what the result will be, but the result may be reacting to the prospect theory way. And using Hung and Wang (2005) consumption-based asset-pricing model we will test exponential forms of prospect theory and apply to dividend or earnings.

3. Conclusion

Behavioural finance is based on two factors called ‘Cognitive Psychology’ (people’s way of thinking) and ‘limits to Arbitrage’ (effectiveness of arbitrage in different circumstances). As it is well known that behavioural finance is based on the concept of helps individuals to take his/her decision in an efficient way. Tversky and Kahneman’s (1979) path breaking prospect theory explain individual’s behaviour without considering expected utility theory. According to Barberis and Thaler (2003), prospect theory is the single most successful theory in capturing experimental result and they said that prospect theory should not consider as a normative theory. Prospect theory is an excellent example of behavioural economic theory, the reason behind it that, it integrated with the theoretical components of finance.

According to Kahneman and Tversky (1979) theory individuals tend to rank compa-

nies according to their chances to get dividend from that company before investment. Because individuals' investors always want to get cash dividends. Moreover, they postulate that individuals typically display risk-averse behaviour over investment which involve only gains; display risk-seeking behaviour over investment which involve only losses; and have losses loom larger than gains in those investments which admit the possibility of either a gain or loss of equal magnitude. Therefore, in the single-variable case, a standard Kahneman and Tversky value function is concave in gains and convex in losses with a somewhat non-symmetric shape.

Shareholders are not able to take rational decisions, that is why they concentrate only on a few areas before investment. They check how frequently firms pay dividends, and the firm's future profitability and earnings. In 2001 Doron and Amir said that there is positive correlation between dividend changes and future profitability and earnings but on the other hand in 2005 Grullon, Michaely, Benartzi and Thaler, they prove that there is no correlation between dividend changes and future profitability and earnings. But the main drawback in both of this research is that not a single one of them tried to use behavioural finance theory to solve this puzzle, they only use orthodox finance econometrics. But my research will progress by first of all estimating standard models found in literature using UK data, so we can find the best functional form and then we will relate those results with behavioural finance theory, especially prospect theory.

References

- Allais, M. (1953). Le comportement de l'homme rationnel devant le risque, critique des postulats et axiomes de l'école américaine, *Econometrica* 21, 503-546.
- Barberis, Nicholas and Richard H. Thaler (2003), A Survey of Behavioral Finance, Handbook of the Economics of Finance, 1052-1121.
- Baker, M. and Wurgler, J. (2004a), A Catering Theory of Dividends, *Journal of Finance*, 59, 1125-65.
- Baker, M. and Wurgler, J. (2004b), Appearing and Disappearing Dividends: The Link to Catering Incentives, *Journal of Financial Economics*, 73, 271-88.
- Boubaker, S., Choudhury, T., Hasan, F., and Nguyen, D. K. (2024). Firm's carbon risk exposure, stock returns and dividend payment. *Journal of Economic Behavior and Organization*. (In press).
- Bryman, A. (1988), "Quantity and Quality in Social Science Research ", Contemporary Social Research: 18, Series Editor: Martin Bulmer, Routledge: London and New York.
- Das, B.C., Hasan, F., and Suthadhar, S. R. (2024). Impact of Economic Policy Uncertainty and Inflation Risk on Corporate Cash Holdings. *Review of Quantitative Finance and Accounting*. 62(3), 865-887.
- DeAngelo, H., DeAngelo, L, and Stulz, R.M. (2006). Dividend Policy and the Earned/Contributed Capital Mix: A Test of the Life-Cycle Theory. *Journal of Financial Economics* 81, 227-254,
- DeAngelo, H., DeAngelo, L., and Skinner, D. (2004). Are dividends disappearing? Dividend concentration and the consolidation of earnings. *Journal of Financial Economics* 72, 425-456.
- DeAngelo, H., and DeAngelo, L. (2006). The irrelevance of the MM dividend irrelevance theorem. *Journal of Financial Economics* 79, 293-315.
- Denis, D.J., Denis, D.K., and Sarin, A. (1994). The Information Content of Dividend Changes: Cash Flow Signaling, Overinvestment, Dividend Clientele. *Journal of Financial and Quantitative Analysis*, 29, 567-587.
- Denis, D.J. and Osobov, I. (2008). Why Do Firms Pay Dividends? International Evidence on the Determinants of Dividend Policy. *Journal of Financial Economics*, 89, 62-82.
- Ding, K. D., Charoenwong, C., and Seetoh, R. (2004). Prospect theory, analyst forecasts, and stock returns, *Journal of Multinational Financial Management*, 14, 425-442.
- Nissim, D. and Ziv, A. (2001). Dividend Changes and Future Profitability, *Journal of Finance*, 56(6), 2111-2133.
- Emory, C. W. (1980), "Business Research Methods", Richard D. Irwin. Inc., USA.
- Fama, E. and French, K. (2001). Disappearing Dividends: Changing Firm Characteristics or Lower

- Propensity to Pay?, *Journal of Financial Economics*, 60, 3–43.
- Ferris, S., Sen, N., and Unlu, E. (2009). An International Analysis of Dividend Payment Behavior, *Journal of Business Finance & Accounting*, 36 (3&4), 496–522.
- Grullon, G., Michaely, R., Benartzi, S., and Thaler, R. (2005). Dividend Changes Do Not Signal Changes in Future Profitability, *Journal of Business*, 78(5), 1659-1682.
- Hasan, F., and Shahbaz, A. A. (2021). COVID-19 and Two different Stock Markets: An Event Study Analysis. *The Journal of Prediction Markets*. 15(2), 3-18.
- Hasan, F. (2021). Dividend changes as predictors of future profitability. *The Journal of Prediction Markets*. 15(1), 37-66.
- Hasan, F., (2021). Relationship between orthodox finance and dividend policy: a literature review. *Indian-Pacific Journal of Accounting and Finance*. 5(1), 13-40.
- Hasan, F., and Islam, M. R. (2022). The relationship between behavioural finance and dividend policy: A literature review. *Academy of Accounting and Financial Studies Journal*. 26 (5), 1-11.
- Hasan, F., Shafique, S., Das, B.C., Shome, R. (2022). R&D intensity and the effect of dividend announcements on stock return: an even study analysis. *Journal of Applied Accounting Research*. 23(4), 846-862.
- Hasan, F. (2022). Using UK Data to Study the Effects of Dividends Announcements on Stock Market Returns. *The Journal of Prediction Markets*. 16(2), 47-75.
- Hasan, F., Kayani, U. N., and Choudhury, T. (2023). Behavioral Risk Preferences and Dividend Changes: Exploring the Linkages with Prospect Theory Through Empirical Analysis. *Global Journal of Flexible Systems Management*. 24(4), 517-535.
- Hasan, F. (2024). The Impact of Climate Change on Dividend Policy in the UK Stock Market. *International Journal of Managerial and Financial Accounting*. 16(1), 119-137.
- Hasan, F. and Al-Najjal, B. Exploring the connections: Dividend announcements, Stock market returns, and major sporting events. *Review of Quantitative Finance and Accounting*. (In press).
- Hung, M., and Wang, J. (2005). Asset Prices Under Prospect Theory and Habit Formation, *Review of Pacific Basin Financial Markets and Policie*, 8(1), 1-29.
- Kahneman, D., and Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk, *Econometrica* 47, 263-291.
- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes, *American Economic Review*, 46, 97-113.
- Baker, M., Ruback, R. S., and Wurgler, J. (2004). Behavioural Corporate: a Survey, National Bureau of Economics Research, Working Paper, 10863.
- Markowitz, H. (1959). *The Utility of Wealth, portfolio selection*, New York: Wiley, 1959.
- Mehrani, S., Moradi, M. and Eskandar, H. (2011). Ownership structure and dividend policy: Evidence from Iran. *African Journal of Business Management*, 5(17), 7516.
- Mullainathan, S. and Thaler, R. (2000). Behavioral Economics, Working Paper, National Bureau of Economic Research: 7948.
- Miller, M., and Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares, *Journal of Business* 34, 411-433,
- Miller, M. and Rock, K. (1985). Dividend Policy Under Asymmetric Information, *Journal of Finance*, 40, 1031–52.
- Park, H. and Sohn, W., (2013). Behavioural Finance: A Survey of the Literature and Recent Development, *Seoul Journal of Business*, 19(1), 3-42.
- Ricciardi, V., and Simon, H. K. (2000). What is Behavioral Finance?, *The Business, Education and Technology Journal*, 2, 26-34.
- Rozeff, M. (1982). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios, *Journal of Financial Research*, 5, 249–59.
- Benartzi, S., Michaely, R., and Thaler, R. (1997). Do changes in Dividends Signal the Future or the Past, *Journal of Finance*, 52(3), 1007-1034.
- Stephen, P. F., Narayanan, J., and Sanjiv, S. (2009). Catering effects in corporate dividend policy: The international evidence, *Journal of Banking and Finance*, 33(9), 1730-1738.
- Stephen P. Ferris, Gregory Noronha and Emre Unlu. (2010), The More, the Merrier: An International Analysis of the Frequency of Dividend Payment, *Journal of Business Finance & Accounting*, 37(1 & 2), 148–170.
- Subrahmanyam, A. (2007), Behavioural Finance: A Review and Synthesis, *European Financial*

Management, 1468-036X.2007.

Thaler, R. (1980), Toward a Positive Theory of Consumer Choice, *Journal of Economic Behavior and Organizations*, 1, 39–60.

Tobin, J. (1958). Liquidity Preferences as Behavior Towards Risk, *Review of Economic Studies*. 26, 65-86.