

DIVIDEND POLICY AND TAXATION: A REVIEW

Riad Lamyaa 

University of Hassan I, Laboratory of research in Management Sciences, Settat, Morocco

lamyaa1riad@gmail.com

Touili Karima

University of Hassan I, Laboratory of research in Management and Development, Settat, Morocco

touilikarima@hotmail.fr

Abstract

For decades, the company's dividend policy has been the subject of intense researches. These researches tried to establish on one side a link between the dividend policy and other factors. From other sides, these studies also aimed to study the interaction between these factors. Such as, the existing link between the dividend policy and taxation. This article presents a literature review of recent and old researches concerning the dividend policy. It studies and analyses the contributions of the diverse currents of thought. Indeed, this paper provides a summary of the work of authors who contribute to the hypothesis of the clientele effect.

Keywords: Dividend, taxation, clientele effect, corporate dividend policy, shareholders

Résumé

Depuis des décennies, la politique de dividendes de l'entreprise a fait l'objet d'intenses recherches. Ces recherches tentent d'établir un lien entre la politique de dividendes et d'autres facteurs et la manière dont ces facteurs interagissent. Par exemple, le lien entre la politique de distribution de dividende et la fiscalité. Cet article présente une revue de la littérature sur ce thème et étudie les apports des différents courants de pensée. Aussi, il présente une synthèse des travaux des auteurs s'intéressants à l'hypothèse de l'effet de clientèle.

Mots-clés : dividende, la fiscalité, l'effet de clientèle, la politique de dividende de l'entreprise, actionnaires

INTRODUCTION

Corporate dividend policy has been and remains an important issue in the area of finance. The dividend payout decision is crucial because it not only represents an important signal about the future of business growth opportunities, but it can also influence other business decisions such as investment and financing decisions.

The dividend policy issue has been a controversial subject since the introduction of the theory of the irrelevance of dividend policy by Modigliani and Miller (1960). This theory indicates that in a perfect market and particularly in the absence of differences in taxation of dividends and capital gains; shareholders' wealth is independent from dividend policy. Despite dozens of years of researches, we have not completely understood the factors that influence the dividend policy and the interaction between them. However, (Black, 1976) notes that "*The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together.*" He found that dividend policy continued to be a puzzle in the process of development of firms.

Miller and Modigliani (1961) point out that the differential taxation of dividends and capital gains constitutes one of the main imperfections of capital markets. Moreover, in most of the countries the dividends are taxed more heavily than capital gains. Dividend tax rates vary among investors. Some investors are taxed on their dividends more heavily than others. Indeed, many researchers have conducted a series of studies covering both the effects of taxation on payout policy and the clientele effect.

Since dividends are taxed more heavily than capital gains, it seems plausible that investors would foster companies with low dividend rate because of the high tax burden. Farrar and Selwyn (1967) and Brennan (1970) concluded after many studies that ; if the tax rate on dividends is higher than that of capital gains, optimal distribution policy offers no dividend. The second form of distribution, share repurchases, thus implicitly suggested to pay the excess flow of the company. Several studies including Litzenberger and Ramaswamy (1979), Booth and Johnston (1984), Michaely and Vila (1996) and Sander (2007) presented empirical evidence to support the argument of the tax effect. Others, including Black and Scholes (1974), Miller and Scholes (1982) and Morgan and Thomas (1998) objected to this conclusion and provided different explanations.

Elton and Gruber (1970) were the first to test the hypothesis of Miller and Modigliani to the existence of clientele effect on the American market. They have compared the value of the firm before and after the dividend payment. After that they have established an arbitrary model of investors around the payment date. They have found a positive and statistically significant relationship between the dividend yield and lower stock prices on the first day ex-dividend. Their results are consistent with clientele hypothesis. Pettit (1977), Litzenberger and Ramaswamy

(1980; 1982), Eades, Hess and Kim (1984) show that for each firm, a clientele is worth another and that there is no reason to change its dividend policy. Any changes to this policy would rather have undesirable transaction costs for investors.

The empirical financial literature is abundant concerning the subject of taxation and its effect on the dividend policy. However, the results are mixed. So other studies needed to be led in order to complete other areas of divided policies. That's why we have chosen to conduct this study.

Our goal is to make a synthesis of empirical studies on the influence of the taxation of investors on the behavior of distribution. This article briefly reviews some aspects of the taxation of dividends of enterprises. Even if we present some theoretical and empirical results found in various articles and books, we do not pretend that this document is a comprehensive study; our purpose is rather to highlight certain issues that we consider as determinative about the taxation of dividends.

The corpus of this paper will therefore be limited to establish, in the first place, a global overview on the relationship between the dividend policy and taxation on the one hand. On the other hand, it presents the main approaches adopted during the analysis of this relationship. In the second place, we will give a review on the main work which handles the concept of the clientele effect.

THEORIES: DIVIDENDS AND TAXATION

The irrelevance of dividend policy in a world without taxes

The most significant thesis on neutrality of dividends was mentioned on the famous article by Modigliani and Miller (1961). The authors have demonstrated that, on a perfect financial market and particularly in the absence of differences in taxation of dividends and capital gains, dividend policy does not affect the share value; thus ,the shareholder wealth. Shareholders should be indifferent between receiving a euro in dividend or a euro in capital gain. Modigliani and Miller (1961) have developed a model in a perfect capital market environment and under certain assumptions including:

- No tax or tax distortion between the taxation of dividends and capital gains;
- The information is free and equally accessible to all (*See for example the article of DeAngelo and DeAngelo (2004), they re-examined the thesis of neutrality of distribution of MM. Harry DeAngelo, Linda DeAngelo .“The irrelevance of the MM dividend: irrelevance theorem”. Journal of Financial Economics 79, 2004, p 293–315*);
- The absence of transaction costs and issue costs;
- Investors are rational;

With these assumptions, the price of a share at the beginning of a period is defined as equal to the current value of the dividend paid to the end of the period increasing the price on the market at the end of the period. This can be expressed as follows:

$$P_0 = \frac{1}{1+r}(D_1 + P_1) \quad (1)$$

Where:

P_0 : The price of a share;

r : The rate of return required by investors;

D_1 : The expected dividend on the period studied;

P_1 : The price of share at the end of the period studied;

Assume that n is the number of shares at the beginning of the period studied and m is the number of new shares sold to the end of the period.

Equation (1) can be rewritten as follows:

$$nP_0 = \frac{1}{1+r}(nD_1 + (n + m)P_1 - mP_1) \quad (2)$$

This equation (2) means that the total value of the old shares is equal to the value of the dividend which is paid to them, plus the value of the shares the old and new, minus the value of the new shares. So for a program of investment and a financing strategy given, the amount of the capital increase must be equal in:

$$mP_1 = I - (B - nD_1) \quad (3)$$

Where:

I : The amount of investment

B : The benefits generated during the period

By replacing the amount of the capital increase (mP_1) by its expression, is obtained after simplification:

$$nP_0 = \frac{1}{1+r} ((n + m)P_1 - I + B) \quad (4)$$

Since D does not appear directly in the expression and other parameters are assumed to be independent of the value of dividends; the current share value is independent of dividend policy. Analysis of Modigliani and Miller is valid in a perfect world. It ignores, as we have seen, tax and transaction costs surrounding financial transactions. Indeed, in a world without taxes, or at least where taxation is strictly neutral in the world of realization of the income, it will be indifferent to each individual shareholder that the company performs this operation for him or that he makes himself for his personal account by selling some securities it holds.

Dividend policy in a world with taxes

The thesis of Modigliani and Miller operated in a world without taxes, or at least neutral when the realization of the income. This hypothesis is not consistent with reality. Generally, dividends are taxed as capital gains, especially for people whose tax rate is in the highest brackets. Investors necessarily include tax considerations in their choice. Their fiscal situations are not identical; they admit that some rather propose dividend and other rather suggest more capital gains. For example, Farrar and Selwyn (1967) have proven that if the dividends are consistently more heavily taxed than capital gains, companies should avoid paying dividends. They should rather satisfy the needs for liquidity of the shareholders by using other substitutes in the dividend which have distribution of bonus shares, share repurchase...(Albouy & Dumontier, 1992). Brennan (1970) - who inserts the taxation of the products of actions into a new version of the Capital Asset Pricing Model (CAPM) - also follows the same reasoning of Farrar and Selwyn (1967). They have shown that for a given level of risk, a generous dividend distribution will result in an expected return much higher than the tax difference between dividends and bigger capital gains is. Thus, Brennan finds that the more favorable tax treatment of capital gains over dividends should normally lead to a lower evaluation.

Litzenberger and Ramasway (1979), Poterba and Summers (1984), report that when the tax on the capital gain is less than the dividends, there is a linear relationship between the increase in the rate of return required on equity and dividend yields. They conclude that shareholders require an increase in pre-tax return to offset the effects of taxation. However, Black and Scholes (1974), using a different methodology, concluded a few years ago that there was no relationship between the equity rate of return and yield dividends, which is in agreement with the results of Miller and Scholes (1982).

Miller and Scholes attributed the results to Litzenberger and Ramaswamy to informational bias, rather than tax effects. They note that US shareholders may be indifferent towards the two forms of payment avoiding tax on dividends. Thus, they find that investors can avoid taxes on dividends by borrowing and investing at the same rate in assets exempt from taxes.

Some studies analyze the reactions of firms during changes of taxation and do not really see any relationship between offer and taxation of dividends (Poterba, 2004). On the other side, the empirical evidence suggests a kind of link between the taxes and the dividend policy (Lee, Liu, Richard, & Subrahmanyam, 2006). Chetty and Saez (2005) reinforce this point by showing the existence of a positive impact of the tax reduction of 2003 on the levels of distribution of dividends. The work of Chetty and Saez have revived the debate on taxation and prompted several authors to seek a new perspective of its impact on the company's dividend policy (*For*

more details refer to the work of Blouin J.L., Raedy J.S., and Shackelford D.A. "Dividends, Share Repurchases, and Tax Clienteles: Evidence from the 2003 Reductions in Shareholder Taxes" 2011, *National Bureau of Economic Research*, Vol. 86, No. 3, pp. 887–914).

The taxation of dividends is not a primary consideration for the leaders of societies in their decisions of payment of dividends and the choice between dividends and repurchases (Brav, Graham, Harvey, & Michealy, 2005). Elton and Gruber (1970) established a model of arbitration of the investors around the date of payment. The results of this study demonstrate that investors have no preference for dividends, but that on the contrary, the taxation leads them to prefer the capital gains. This is the main idea developed in the work of Desbrières (1988), Michaely and Vila (1995), Fama and French (2001), Grullon and Michaely (2002), McDonald (2001) and Sander (2007).

THE DIVIDEND CLIENTELE EFFECT

For fiscal and sometimes personal considerations, investors do not necessarily have the same behavior in the face of the financial investments. Some prefer the securities that provide regular income, while others will be more tied to capital gains. It is conceivable that high-dividend shares will be sought by the low-taxed investors while shares low dividends and high capital gains will favor investors being in high tax brackets on income. Thus the likely "clientele effect" will lead the shareholders to seek more willingly companies, which may satisfy their fiscal target. As a result, the firms will adopt a dividend policy that can satisfy their shareholders.

In general, the dividends are taxed more than the capital gains. According to Modigliani and Miller (1961), the clientele effect of dividends resulting from the differential of taxation of dividends and capital gains is one of the main shortcomings of the capital markets. They claim that *"If for example the frequency distribution of corporate payout ratios happened to correspond exactly with the distribution of investor preferences for payout ratios, then the existence of these preferences would clearly lead ultimately to a situation whose implications were different, in no fundamental respect, from the perfect market case. Each corporation would tend to attract to itself a clientele consisting of those preferring its particular payout ratio, but one clientele would be as good as another in terms of the valuation it would imply for firms"*. Therefore the existence of different taxation may allow a firm to attract a clientele of investors preferring the distribution rate offered by the company.

There is no global consensus concerning the clientele effect of dividends induced by the effect of taxation. There are studies that provide theoretical and empirical evidence to the clientele effect, others provide contradictory evidence. Researchers use two models to examine the clientele effect. The Capital Asset Pricing Model (CAPM) and the model which are favored

transactions on the day of dividend payment (Kent Baker, 2009). To understand the interpretation of the results of these models, we distinguish two types of models: static clientele models and dynamic clientele models.

- **Static clientele models:**

The effect of static clientele is attested by several empirical studies. So, Pettit (1977) demonstrated the existence of a positive relationship between age of investors and the dividend yield of their portfolios from one side. On the other sides, it shows a negative relationship between income investors and the dividend yield. Pettit also showed that investors who have high systematic risk portfolios prefer high-dividend shares.

The investors are not taxed in the same way. Those who are less heavily taxed on dividends than on the capital gains will prefer to hold shares to high rate of return, while those who present the strongest marginal tax rates will prefer to hold shares to low rates of return, or even actions that do not pay dividends. So it is from the rate of return that the companies attract a particular tax (Albouy & Dumontier, 1992). In his study Elton and Gruber (1970), found that the investors in tax rates on high dividends prefer companies with low distribution in dividends, while the investors with low tax rates choose generous companies regarding payment of dividends. Using the same database as Pettit, Lewellen et al. (1978) found a weak association between dividend yields of investors' portfolios and their marginal tax rates. They fail to find evidence of companies for the adjustment of their dividend policy, in order to meet the preferences of the investors who are in different tax brackets.

Allen and Michaely (2003) have shown that investors have a tendency to hold stocks with lower dividend than the average. Indeed, this is consistent with the fact that the rate of additional tax on dividends shareholder is high. On the other hand, there are many empirical studies that support the hypothesis of clientele effect, but other studies have shown evidence that is weak or inconsistent with this hypothesis. Dhaliwal, Erickson and Trezevant (1999) and Seida (2001) show the existence of the clients on the basis of tax on dividends.

- **Dynamic Client models:**

According to this dynamic version of clientele effect (See A. Kalay, 1982), in the absence of transaction costs, investors can exchange the actions during detachment of the dividend, so that dividends are perceived by least taxed investors. Indeed, the shareholders benefiting from an additional tax rate on low dividends do not need to own all the time actions off high dividends. It is sufficient that they hold those shares in the time where the detachment has place (Berk & DeMarzo, 2014). According to this effect, we should observe significant volumes of

trade with the approach of the date of the dividend payment, the heavily taxed investors selling their shares to less imposed investors. Lakonishok and Vermaelen (1986) observed a significant increase in transaction volumes on the day of the detachment of the Coupon. Similarly, Michaely and Vila (1995) conducted a study describing the evolution of the prices and the volume of the transactions of the day of detachment of dividend in a dynamic equilibrium framework. In contrast, Desbrières (1987), Karpoff et al., Walking (1988) find no modification of the volume of transactions on the day of the detachment of the coupon.

A number of studies have analyzed the market reactions around dividend events and confirm the existence of the clientele effect, such as the work of Michaely, Thaler and Womack (1995), Liljeblom and al. (2001), Seida, (2001), McDonald (2001) and Sander (2007). Other studies fail to find support to the hypothesis of the clientele effect, for example: Bali and Hite (1998), Lewellen and al (1978), Lakonishok and Vermaelen (1986) ,Grinstein and Michaely (2005).

Finally, we review the empirical studies on the influence of the taxation of institutional investors in the dividend distribution behavior. Jain (2007) shows that institutional investors prefer the low dividend-paying or the non-dividend paying enterprises. According to the investigation done by Brav et al. (2005) institutional investors are indifferent to dividend decisions. Grinstein and Michaely (2005) have found that institutions avoid investing in companies that do not distribute dividend but still favor companies that pay higher dividends. Also, Desai and Jin (2011), Allen, Bernardo and Welch (2000) find that the majority of institutional investors show a preference towards dividends tax. Grinstein and Michaely (2005) confirm that institutional investors are not attracted by companies that pay high dividends, but by those who pay low dividends or make share repurchase.

Michaely, Thaler and Womack (1995) found that dividend changes do not result in changes in the portfolios of institutional investors. They found that the average institutional ownership was 30% in the three years prior to the omission and was 30.9% after. By contrast, Binay (2001) observed an increase in institutional portfolios after initiations and a significant reduction of these portfolios after omission. On the other hand, Strickland (1997) showed that tax-exempt institutions have a slight preference for high dividend yield relative to taxable institutions.

Perez-Gonzalez (2000) examined changes in corporate dividend policy as a result of tax reform of 1986. He considered that the dividend policy is more influenced by the tax reform when the largest shareholder is an individual than it is when the largest shareholder is an institution or when there is no large shareholder.

In addition, there are many empirical studies on the clientele effect. Table 1 that synthesized a non-exhaustive list of empirical studies on the effect of clientele. The examination of the table has shown some mixed results.

Table 1: The empirical results of some studies on the clientele effect

Authors	Sample	Periodicity	Empirical results
Miller and Modigliani (1961)	(USA)	1961	• Clientele effect
Elton and Gruber (1970)	4148 observations (USA)	1966-1967	• Clientele effect
Black and Scholes (1974)	25 holdings of common shares listed on NYSE (USA)	1931-1966	• Clientele effect
Petit (1977)	Portfolio positions 914 Individual investors (USA)	1957-1967	• Clientele effect
Lewellen and al (1978)	2500 individual investors (USA)	1964- 1970	• No support for clientele effect
Litzenberger and Ramaswany (1979)	(USA)	1936-1977	• Clientele effect
Kalay (1982)	2540 observations (USA)	1966-1967	• No support for clientele effect
Poterba & Summers (1984)	British companies (UK)	1955-1981	• Clientele effect
Booth and Johnston (1984)	The companies listed on the Toronto Stock Exchange (Canada)	1970-1980	• Clientele effect
Lakonishok and Vermaelen (1986)	(Canada)	1970-1981	• No support for clientele effect
Desbrières (1988)	(France)	1977-1990	• Clientele effect
Hamon & Jacquillat, (1992)	(France)	1977-1990	• Clientele effect
Scholz (1992)	(USA)	1983	• Clientele effect
Morgan & Thomas (1998)	British companies (UK)	1975-1993	• No support for clientele effect
Bali & Hite (1998)	207,499 observations (USA)	1962-1994	• No support for clientele effect
McDonald (2001)	The companies listed on the Frankfurt Stock Exchange (Germany)	1989-1998	• Clientele effect
Liljeblom and al (2001)	(Finland)	1994-1996	• Clientele effect
Barclay and al (2003)	336 companies (USA)	1995	• No support for clientele effect

Anand(2004)	500 companies (India)	1999-2000	• Clientele effect
Grinstein & Michaely (2005)	79,010 observations (USA)	1980 -1996	• No support for clientele effect
Lee, Liu and Roll (2006)	The companies listed on the Taiwan Stock Exchange (Taiwan)	1995-1999	• Clientele effect
Graham and Kumar (2006)	(USA)	1991–1996	• Clientele effect
Sander (2007)	The companies listed on the Tallinn Stock Exchange (Estonia)	2000-2006	• Clientele effect
Jain (2007)	Companies of NYSE, AMEX and NASDAQ (USA)	1989-1996	• No support for clientele effect
Procianoy & Verdi (2009)	394 observations (Brazil)	1996 et 2000	• No support for clientele effect
Desai & Li Jin (2010)	(USA)	1980–1997	• Clientele effect
Oubal(2013)	(Morocco)	2013	• No support for clientele effect
Dahlquist and al (2014)	The companies listed on the Stockholm Stock Exchange (Sweden)	2001–2005	• Clientele effect
Muñoz & Rodriguez (2016)	The companies listed on the Stock Exchange of Santiago (Chile)	1999 -2012	• Clientele effect

CONCLUSION

Despite several decades of research on the concept of dividend, questions remain without answer. Among these issues is the nature of the relationship between taxation and the dividend policy. In fact, the inclusion of taxation does not conclude the theoretical debate on the dividend policy, since the existing theoretical and empirical evidence provide conflicting results.

The dividend's taxation and capital gains change from one country to another. Even within the same country and from one period to the other. Effectively, the preferences of shareholders are heterogeneous. This heterogeneity reflects the clientele effect: when a company decides to distribute dividends or buy back stock, it satisfies a certain type of shareholders at the expense of others. The dividend policy is never optimal for all shareholders. On the other hand, investors can choose stocks, taking into account their performance and distribution policies adopted by the companies.

Nevertheless, the clientele effect is limited since heavily taxed shareholders still receive dividends. This means that there are other determinants than taxation that influence the composition of the shareholders' portfolios.

As a conclusion we can say that taxation is one the most important criteria for determining a dividend Policy. However, it can not answer or satisfy all the problems and question relevant to dividend. For example, the changes of the dividend policy every time still a matter of concern. Solving the dividend puzzle doesn't seem easy as it appears; it includes a big number of factors which make it more complicated. Researchers need to focus more in the others factors that influence the dividend Policy. Factors that are related more to the market imperfections, these factors have a big impact in the establishment and development of the dividend policy.

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