

Influence of Dividend Policy of Companies Listed At Developing Stock Exchange on Their Share Prices: A Case Study of BRVM

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ARTICLE INFO	ABSTRACT
<p>corresponding Author: A. OUATTARA Assistant professor in Finance Centre Africain d'Etudes Supérieures en Gestion (CESAG)</p>	<p>This study presents the characteristics of share price reaction to dividends announcement at West African Regional Stock Exchange (BRVM). To achieve this goal, data on dividends and stock prices over the period 2011-2016 have been collected. These were analyzed using the event study methodology, descriptive statistic and econometric techniques.</p> <p>This analysis shows that the dividend announcement generates on average a decline in the share price over the event period, which is defined as a trading month before and after the announcement. Following dividends announcement, stock prices fallen is due to investors' disappointment on the dividends yield.</p> <p>These results provide an answer to the problem the identification of the parameters that can be considered in dividend policy definition for companies listed at developing stock exchange, like BRVM. Managers should imperatively consider its influence on company's value as perceived by investors after dividend announcement.</p>
KEYWORDS: dividend policy, event study, developing stock exchange, BRVM	
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Introduction

Company's dividend policy is part of its overall strategy for wealth creation and financial communication with its stakeholders (shareholder, employers, etc.). Market participants scrutinize dividend data insofar to capture the information on the economic performance and financial healthiness of the target company. It is even more important that in developing countries financial analysts and asset managers face a lack of information.

Financial theory does not provide a uniform framework for the analysis of the influence of company's dividend policy on its value and therefore its share price. Contributions in this sense are extreme and contradictory. Lintner (1956) supports the neutrality of the dividend policy on the value of the target company. Gordon (1959) finds that it has an influence on the value of the target company. Miller and Scholes (1978) also defend the influence of the dividend policy on the value of the target company. The controversy does not seem to have found a firm and definitive

answer. The work of Bushra and Mirza (2015) on the Pakistan Stock Exchange, Firer and al. (2008) on the Johannesburg Stock Exchange, Gordon and Kwame Nkrumah (2010) on Ghana and Musa and Fodio (2009) on Nigeria exchange show that emerging or developing stock exchange are not immune to this controversial. The specificities of the company, the environment and investor preferences have roles to play in analyzing the influence of dividend policy on share prices.

The reaction of share prices of companies listed at West African Regional Stock Exchange (BRVM) deserves a specific study to guide companies in identifying the parameters to be considered in the definition of their dividend policy. It is in this perspective that this study has been initiated. It proposes an answer to the following question : what is the influence of the dividend policy of companies listed at BRVM on their share price ?

It looks at clarifying in what extent the decision of companies listed at BRVM to pay a dividend (or not) and its characteristics influence the dynamics of share prices. It makes a triple contribution: managerial, analytical and methodological. Firstly, from the managerial point of view, the results should orient managers of companies listed at developing stock exchange, such as BRVM, on the modalities of dividend policy definition. It is intended to give a critical look on investors' reaction to the dividend decisions announcement of companies listed at BRVM. Its conclusion provide some recommendations about the parameters to be considered in their portfolio selection strategy. Secondly, from a conceptual point of view, the results of the research question the validity of the theories that explains the reaction of share prices to dividend announcement in the case of a developing stock exchange. Finally, from a methodological point of view, the specificities of the stock exchange studied have led to an amendment of the methodology commonly used to estimate the parameters of

company's share prices reaction to dividends announcement.

The remainder of the paper is organized as following: in the first section, the main points of the literature on the expected influence of the dividend policy and its implications are discussed. The methodology adopted is presented in the second section. The results of the research are presented before concluding with a discussion and studies that could enrich the understanding of the dividend policy in the WAEMU zone.

1 Influence of dividends announcement on share prices, a literature review

This first section presents the financial literature on the influence of dividends announcement on share price. The objective is to discuss the existing literature on the study of the influence of dividends announcement on share prices.

Financial theory has long been interested in the influence of dividend policy on company's value. The subject has received several contributions which foster a real controversy. That highlights the fact that shareholders' reaction depends on the tax environment and their preferences.

Seven main theories structure the financial theory on the impact of dividend policy on the company's value, and therefore on its share price. These include Gordon (1959)'s dividend preference theory, Miller and Modigliani (1961)'s dividend neutrality theory, tax effect theory (Miller and Scholes, 1978; Kalay and Roni, 2000), agency theory (Roomans, 1993), signaling theory (Albouy, 2010), and Market Efficiency theory (Grossman and Stiglitz, 1980). Tanushev (2016) presents a review of these different theories.

The dividend preference theory stipulates that the dividend payment has a positive impact on the target company's value. It proposes a forecast of share price's reaction to the dividend announcement. At the event of dividend payment, the target company's share price is likely to rise if

its amount is growing. The share price is prone to a decline otherwise (Gordon; 1959).

The dividend neutrality theory argues that dividend policy has no impact on the company's value. Indeed, according to Miller and Modigliani (1961), in an ideal world, the investor is indifferent between the reception of liquidity in the form of dividend and an increase in his assets by the increase of the share price. Thus, the dividend payment has no influence on the companies' share price.

The underlying assumptions of Miller and Modigliani (1961)'s conclusions constitute its weakness; including the assumption of no tax on dividends and capital gains or equivalently no tax differential between the two shareholders' liquidity provider means .

The tax effect theory shows that the dividend payment has a negative impact on the company's value. Its conclusion is drawn from the difference in the tax treatment of dividends and capital gains. In most economies, dividends are heavily taxed than capital gains. In addition, tax on capital gains is only payable in the case of securities' sale. Thus, the dividend payment destroys value and thus influences negatively the company's share price. Conversely, the earnings reinvestment in the company increases its value and therefore its share price.

Alongside these three analytical frameworks, signaling theory suggests that the share price reacts to the dividend announcement since it conveys information about the company's financial healthiness and prospects. The announcement of a decline or an increase in dividend amount compared to its previous evolution inquires if it is transient or permanent. It provides insight into the strength of the company's financial position. Consequently, there is a variation in the company's share price, taking into account investor interpretation (Firer et al., 2008).

The empirical tests of these theories do not provide uniform conclusions. Some argue that

dividends do not convey information. Firer et al. (2008) provide a literature review on these findings on companies listed at Johannesburg Stock Exchange (JSE).

The agency theory (Roomans, 1993) states that managers have more information about the company's financial healthiness than shareholders. The dividend announcement is an opportunity for managers to provide a signal to shareholders. Thus, the share price reacts to the information that the announced dividend conveyed compared to investors' forecasts. If the decision conveys a good information on the company's financial healthiness, it leads to an increase in the share price.

As for information efficiency, it states that the share price includes all the information needed to invest (Grossman and Stiglitz, 1980). Thus, in its semi-strong form, it stipulates that all public information is systematically integrated in the stock price. Therefore, the stock price will react only if it conveys an unanticipated information.

Similarly, the agency theory stipulates that shareholders claim dividends from companies to discipline managers (Albouy, 2010) and avoid investing idle liquidity in projects that destroys value. For example, a dividend payment, which is drawn on a significant part of current fiscal year net profit has a positive effect on the value of the company since it informs the stakeholders about the managers' rigorous.

In parallel with the study of the influence of dividend announcement on share prices, other studies have investigated their influence on volatility and therefore the risk associated with shareholding (Nkobe et al., 2013). The results of these studies establish, inter alia, that the payout ratio, the dividend yield and the volatility influence stock price. However, their influence is subject to controversy. Some studies show a positive influence of the payout ratio and yield; others shows a negative influence (Suwanna, 2012 ; Ndung'u et al., 2014).

Sum up, the analysis of dividend announcement influences on target company's share price is subject to an authentic controversy in financial theory, named a "Dividend puzzle". It is an enrichment for the discipline.

2 Research methodology

Following the literature review, this section presents the methodology used to analyze the dividend announcements influences on target companies' share prices. It discusses successively the data and the methodology used to estimate the influence of dividends announcement on share prices.

It is retained that the company's directory board, based on its economic and financial performance, determine the amount to be paid as dividend. This decision is dictated by its dividend policy. Once the information is brought to the attention of investors, they adjust their portfolios that induces a change in share prices.

To validate this assumption, suitable data were collected.

2.1 The data

The empirical analysis was based on the data collected on the website of the West African Regional Securities Exchange (BRVM). These data are related to shares' capital gain and dividends announcement. The first ones were collected from the Official Cotation Bulletin (BOC) published by BRVM Inc; company's in charge of quotation and information dissemination. Data collection and processing provide information on capital gain (and their variation). The data on the dividends announcement dates were obtained from the 'notice and information' page of the BRVM Inc's website. The characteristics of the dividends were obtained through the disclosed financial statements.

At the end of the compilation, the data cover the period from January 4th, 2011 to December 31st, 2016. They are suitable to answer the research problem.

375 events relating to dividends announcement concerning 40 companies listed at BRVM have been identified. A careful analysis has established that there are some double dividend announcements or corrective announcements. We eliminate dual events. In addition, the events corresponding to the implicit announcement of dividend non-payment have been added since the latter are not subject to an explicit announcement. The exploitation of the draft assemblies' resolutions served in this context. At the end of this step, it remains 256 events related to dividend payment. These announcements concern credit institutions (banks and financial institutions) and non-financial companies. For each of them, financial statement information has been added to highlight the financial characteristics of the target company. These have been considered in the study of the difference in share prices reaction to dividends announcement.

2.2 Methodology to analyze the influence of dividend announcements on share prices

In this section, we discuss the methodology used to estimate the influence of dividend announcement on share prices. The study is based on event study as an analytical tool.

To carry it out, we postulate that the dynamics of the share prices is described by the following equations:

$$R_{i,t} = \begin{cases} R_{i,t}^* & \text{si } R_{i,t}^* < 0 \\ 0 & \text{si } R_{i,t}^* \geq 0 \end{cases} \dots\dots\dots(1)$$

$$R_{i,t} = \begin{cases} R_{i,t}^* & \text{si } R_{i,t}^* > 0 \\ 0 & \text{si } R_{i,t}^* \leq 0 \end{cases} \dots\dots\dots(2)$$

$$R_{i,t}^* = \alpha_i + \beta_i R_{m,t} + \gamma_{i,k} D_{k,i,t} + \varepsilon_{i,t} \dots(3)$$

With $R_{i,t}$: stock i's capital gain at date t

RendP_{i,t} : positive (or nil) share i's capital gain at date t

RendN_{i,t} : negative (or zero) share i's capital gain at date t

R_{m,t} : market return at time t

α_i : market model's constant

β_i : share i's beta

D_{k,i,t} : variable that takes value 1 if date t is in event k's window and 0 otherwise

ε_{i,t} : model's error term

This framework is inspired by the methodology proposed by Lesmond and al. (1999) and Sarr and Lybek (2002) to study the price dynamics of securities quoted in developing stock exchange.

Equation (3) reflects the influence of dividend announcements on company's share prices. It is Sharpe (1964) and Lintner (1965)'s market model relationship; in which it is added an indicator variable representing the period during which the dividend announcement is supposed to have influenced share price.

This equation only reflects the potential dynamics of share prices. Indeed, the predominance of zero values in BRVM share's capital gain distribution induces the use of a nonlinear model for the study of their dynamics. We recall for all intents and purposes that the share's capital gain is defined as :

$$R_{i,t} = \frac{C_{i,t} - C_{i,t-1}}{C_{i,t-1}} \dots\dots\dots(4)$$

with C_{i,t} et C_{i,t-1} shares prices at date t and t-1

Thus, the return is decomposed in two components according to equations (1) and (2). At a given date, the share price may remain constant, increase or decrease. Two variables RendP and RendN are built. Their values are equal to the potential capital gain if it is strictly positive for the first and negative for the second. Each value is null if the condition is not fulfilled. Formally, these variables are defined as :

$$RendP_{i,t} = \text{Max}(R_{i,t}; 0) = \text{Max}\left(\frac{C_{i,t} - C_{i,t-1}}{C_{i,t-1}}; 0\right) \dots\dots (5)$$

$$RendN_{i,t} = \text{Min}(R_{i,t}; 0) = \text{Min}\left(\frac{C_{i,t} - C_{i,t-1}}{C_{i,t-1}}; 0\right) \dots\dots\dots (6)$$

with C_{i,t} et C_{i,t-1} shares prices at date t and t-1

This formalization is well suited to BRVM's liquidity level. The form of these equations corresponds to that of a Tobit model (Amemiya, 1979 ; Smith and Brame, 2003).

The empirical analysis is based on four dependent variables :

- ✓ RendN : share's negative capital gain during a trading session ;
- ✓ RendP : share's positive capital gain during a trading session ;
- ✓ OCCN : occurrence of negative capital gain during a trading session;
- ✓ OCCP : occurrence of positive capital gain during a trading session.

The last two variables are added to enrich the understanding of the influence of the dividends announcement on share prices. Formally, these variables are defined by:

$$OCCP_{i,t} = \begin{cases} 1 & \text{if } R_{i,t} > 0 \\ 0 & \text{sin on} \end{cases} \text{ and}$$

$$OCCN_{i,t} = \begin{cases} 1 & \text{if } R_{i,t} < 0 \\ 0 & \text{sin on} \end{cases} \dots\dots\dots(7)$$

The low level of BRVM's liquidity induces days without transaction. The use of capital gain alone as dependent variable would not allow an effective evaluation of the real effect of the dividend announcement since it can induce a greater transactions occurrence without an abnormal capital gain (negative or positive). While the methodology of event studies seeks to study the propensity of the event to cause so-called abnormal returns defined as the difference from the level expected under usual conditions. Thus, the study of the influence of dividends announcement on share prices is enriched by its influence on the occurrence of price change.

In equation (3), parameters $\gamma_{i,k}$ measure the influence of the dividend announcement on share prices. These parameters are estimated by the event study's methodology.

To do this, it is necessary to define the event windows represented by the indicator variable $D_{i,k,t}$. This window is a crucial factor in event study's methodology.

The literature uses several possibilities that range from one day before and after the event date ($t = 0$) to three years before and after the event (Freitas and Minardi, 2013). The window's selection obeys to a double requirement: not too long to avoid the contagion with other events that occurred in the interval, not too short to avoid a confusion between the event's impact and the idiosyncratic part of share price dynamics (Simoes et al., 2012).

In this study, a window of 20 days before and 20 days after the dividend announcement's date is used. This choice is made to allow the window to cover a period of approximately two trading months around the event date ($t = 0$). The estimation period is defined as the period between the end of the last event window and the start of the new one. This choice is made to isolate dividend announcement event and allow to estimate parameters that characterize the dynamics.

The approach consists in estimating the other parameters (except those that measures the influence) on the estimation window. These are used thereafter to estimate the values of dependent variables that would have been observed if the event had not occurred. This value is denoted as $E(Y_{it})$ with Y the dependent variable. Thereafter we compute the difference between the observed values and the expected value on the event window. These component are called abnormal component and are defined as :

$$AY_{i,t} = Y_{i,t} - E(Y_{it}) \text{ for } T_0-L \leq t \leq T_0 + L \quad (8)$$

With T_0 event date and L the length of the event window

The study of the influence of the dividends announcement on share prices is based on abnormal components' nullity test. The final decision on the significance (or not) of dividend announcement influence is based on classical statistics tests of the nullity of an observed value. The appropriate test depends on the influence of the event on the variance of the abnormal components. If their variance on the event window is the same as on the estimation window, a classical student test is used. When it has changed, the student test on standardized abnormal components is used.

The test strategy is schematized on figure 1 below.

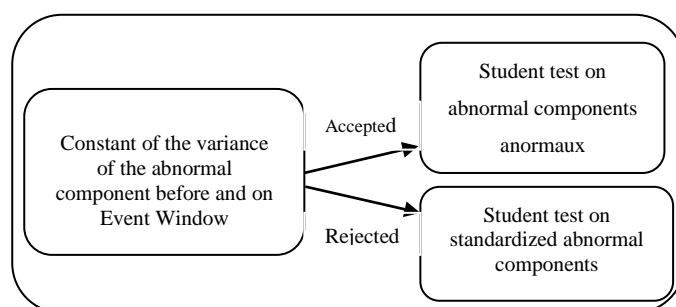


Figure 1: Abnormal significance's test strategy

A details on statistics used in each tests can be found in Serra (2002).

The abnormal components analysis is supplemented by that of its cumulative on the event window. An event may have an influence on a dependent variable on a given date without having a significant effect overall the period because the instantaneous effect has been absorbed by an opposite evolution over the period. Contrarily, an event can have a diffuse effect that is significant on the overall event window but not at each instantaneous date on the period. The cumulative abnormal components analysis shed light on this specific dynamic. It is defined as :

$$CAX_{i,t} = \begin{cases} \sum_{k=t}^0 AX_{i,t} & \text{for } T_0 - L \leq t \leq 0 \\ \sum_{k=0}^t AX_{i,t} & \text{for } 0 \leq t \leq T_0 + L \end{cases}$$

.....(9)

With T_0 event date and L the length of the event window

An identical test strategy is used to appreciate their statistical significance.

Thereafter, a new variable is generated. It's values depend on the test's result : non-significant (0), significantly negative (-1), or significantly positive (+1).

Finally, an explanatory analysis of this variable is made by taking as independent variables the characteristics of the dividend announced: *the dividend payment which is worth 1 if the company has paid a dividend and 0 otherwise (PayDiv)*, *the logarithm of the dividend amount per share paid by the company (LogDiv)*, *the payout ratio (TauxDistr)*, *the evolution of the company's dividend per share compared to the previous year (EvolDiv)*, *the dividend yield relative to the share price on the announcement day (RendAnno)* and *the dividend yield relative to the price at 31.12.N (Rend31)*.

This section has presented the strategy used to construct and analyze the data required for the

study. We can thereafter envision the presentation of the results.

3 Research results

Following the methodology, we present in this section the results of the research. The section is divided in three points. We, firstly, present the characteristics of companies listed at BRVM's dividend policy. The results of the analysis of their influence on the share prices are subsequently presented. We conclude by studying the determinants of the share price reaction to dividends announcement.

3.1 Characteristics of dividends paid by companies listed at BRVM

This first sub-section is devoted to the study of the characteristics of dividends paid by companies listed at BRVM. It is explicitly focus on the occurrence of dividend payment, the payout ratio, the annual change in dividend per share amount and the yield of the dividend.

Table 1 below presents the descriptive statistics of these variables.

Table 1: Descriptive statistics of dividend's characteristics

Variable	N	Mean	Standard déviation	Minimum	Maximum
Occurrence	256	71.48%	45.24%	0.00%	100.00%
Net amount paid (in €)	182	5.87	5.31	0.46	24.97
Payout ratio	180	76.65%	234.16%	-1,603.62%	1,150.31%
Evolution	168	16.15%	64.54%	-94.13%	443.54%
Yield at 31.12	180	7.12%	4.79%	0.23%	29.76%
Performance at the announcement day	182	6.28%	3.67%	0.13%	20.84%

On average, a shareholder receives yearly an amount of 5.87 € per share with a strong annual and company's heterogeneity. The minimum dividend per share paid is 0.46 € compared to a

maximum of 24.97 €. This can be explained by differences between listed companies and by time. Companies listed at BRVM puncture a relatively large portion of their current net profit to pay a

dividend. Indeed, the dividend amount represents on average 77% of their current net profit. Their dividend payment behavior is like that of mature companies that have little need for liquidity to finance their project. It could also be a translation of the desire to satisfy shareholders and attract their trust in future projects financing.

We can note a specific behavior of companies which maintain dividend payment despite a negative current net profit. Indeed, this situation is shown by the minimum of the distribution which is -1,603%. The maximum value of the distribution illustrates the case of companies that pay a dividend greater than the current net profit. These decisions imply to puncture this amount on company's reserves and it question market reaction after its announcement.

It should also be noted that, on average, companies listed at BRVM provide annual growth of 16% in the amount of the dividend per share. This trend ensures that investors receive an increasing amount of liquidity as dividend. Its distribution between companies and over time reveals a strong heterogeneity, as proved by the difference between the minimum (-94%) and the maximum (443%).

In contrast, dividend yields are relatively low. Compared to the share price on December 31st, the dividend amount yields only 7.12%. This yield is just greater than government bonds interest rate available on the market. Let's recall that the average interest rate of these bonds is between 6 and 6.5%. Moreover, the analysis of its evolution shows a sharp decline over the period. This downward trend is the proof that the increase in dividends has not been sufficient to offset the increase in the shares prices. The analysis of the

yield in relation to the price on dividend announcement day reveals similar characteristics. These characteristics of the dividend policies of companies listed at BRVM are also highly heterogeneous. Indeed, the dividend paid represents for some of them a slightly lower than 30% of December 31st's price and 21% of announcement day's price. These yields are relatively comfortable.

The study of the characteristics of the dividends distributed shows that the amounts paid are generally increasing with a relatively high annual growth rate but not sufficient to remunerate the shareholders in relation to the price paid to hold the asset.

The analysis of investors' reaction would help to understand the market reaction to dividend announcement.

3.2 BRVM's investor reaction to dividend announcement

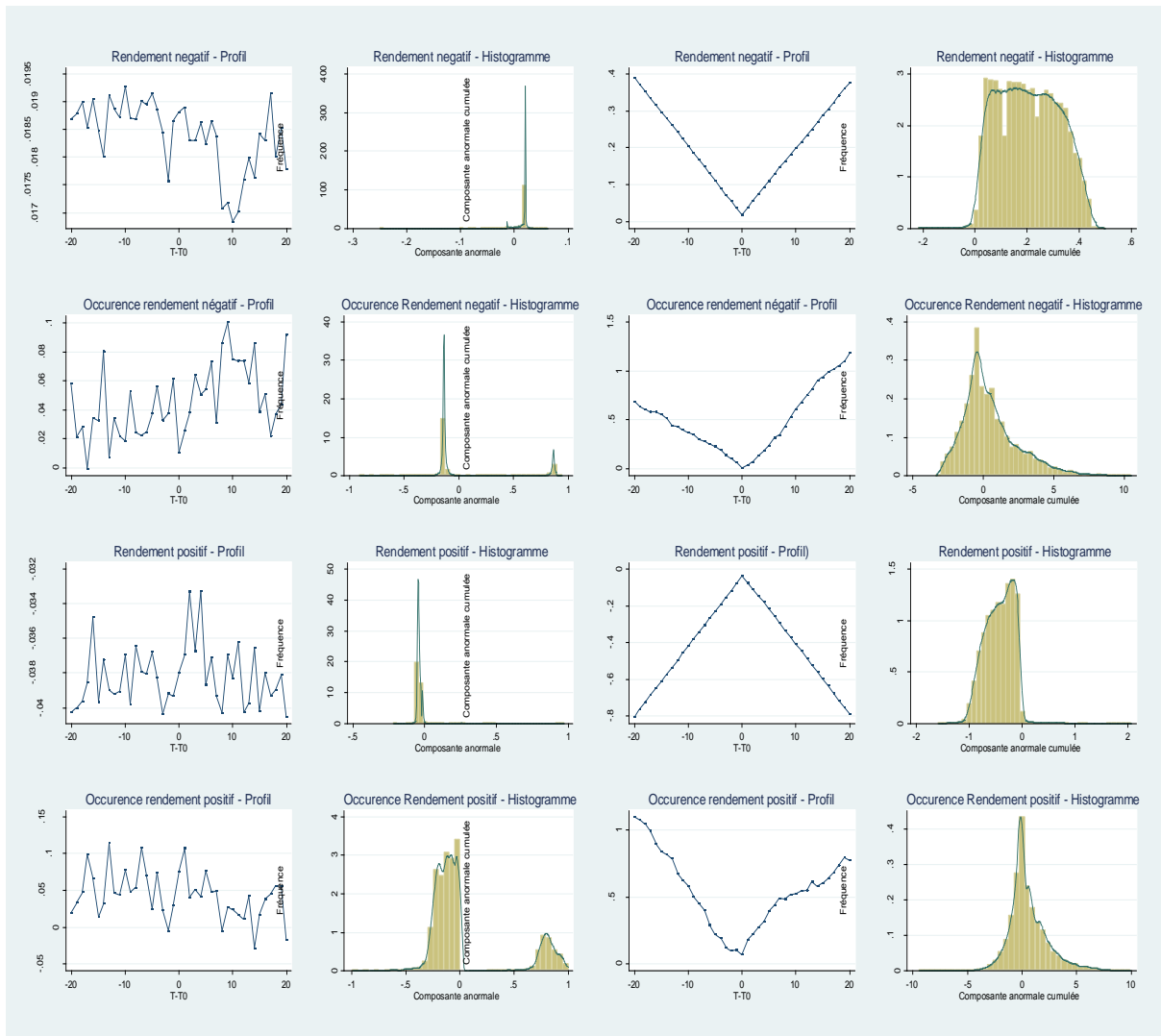
In this study, we postulate that the dividend payment announcement results in investors reaction. This one induces portfolios readjustment with an influence on share prices.

This section introduces a discussion on the validation of this assumption. It describes the price change on the event window. It focuses on the abnormal components and its cumulative, as key variables, on the event window.

As presented in the methodology, we study the influence of dividend payment announcement on a window of 20 trading days before and after the announcement. Figure 2 below presents the profile and histogram of the abnormal components and its cumulative for the four key variables.

Figure 2 : Abnormal components generated by dividend announcement

The figure shows the profiles (columns 1 and 3) and the histograms (columns 2 and 4) of the abnormal components and its cumulative for key variables on the event window. Each line corresponds to one key variable



The histograms show abnormal component concentrations around non-zero values. The profiles of the abnormal components do not reveal any specific configuration. As for the profiles of the cumulative abnormal components, they reflect the specificities of the key variables. Thus, we find that the amplitudes and occurrences of positive capital gain and occurrences of negative capital gain are decreasing before the announcement date and increasing afterwards. Whereas the amplitude of positive capital gain has a reversed profile.

The presentation of the profiles is supplemented by the results of the significance tests shown in Table 2 below. It emerges from these results that, on average, dividend announcements result in greater occurrence and magnitude of negative capital gain. Indeed, slightly lower than one third of the trading days of the event window record negative abnormal capital gain. Slightly less than 20% of these days recorded an abnormal negative capital gain.

Table 2 : Influence of the dividends announcement on the abnormal components

Variable	N	Instantaneous Frequency	Cumulative Frequency
RendP	10415	0.39%	0.00%
OCCP	10415	9.87%	18.43%
RendN	10415	36.66%	50.03%
OCCN	10415	17.51%	6.18%

The table shows the frequency of statistically significant of abnormal and cumulative abnormal components for the variables of interest: Positive capital gain (**RendP**) ; Positive capital gain's occurrence (**OCCP**) ; Negative capital gain (**RendN**) ; Negative capital gain's occurrence (**OCCN**)

The positive abnormal returns have been infrequent (10% of the event window) and amplitude are not significant. Indeed, the positive abnormal capital gain only occurred in 0.39% of the event window.

We can conclude that companies listed at BRVM's dividends announcement generally results in a decrease in the target companies' share price. This price's decrease can be interpreted as a value destruction of dividend policies.

It is therefore necessary to study the characteristics of the dividend policy that explain most of the decline in prices following the dividends announcement.

3.3 Influence of dividend policy on investors' reaction to dividend announcement

This sub-section presents the results of the study of the influence of the dividend policy on the share price response. It is divided into two points. The first one concerns the study of the influence of the dividend payment announcement on share prices. The second presents the results of dividend amount and its variation, the payout ratio and the dividend yield on share price reaction after dividend announcement.

3.3.1 Influence of dividend announcement on target company's share prices

To appreciate in depth the influence of dividend payment announcement on target company's price share, this section proposes an econometric analysis of its influence on key variables which measures the significance (or not) of the abnormal components of key variables. Note that we have included in the regression a variable that reflects the type of the target company and the fiscal year. These last two variables capture the differences in investors' reaction depending on the type of target company (financial or non-financial) and the effect of structural annual changes.

The results of the estimation are shown in Table 2 below

Table 3 : Influence of dividends announcement on share prices

VARIABLES	RendP (1)	OCCP (2)	RendN (3)	OCCN (4)
PayDiv	1.343** (0.529)	0.0319 (0.0784)	-0.530*** (0.0475)	0.564*** (0.0686)
Company's type				
Nonfinancial	2.388** (1.014)	-0.0855 (0.0836)	-0.199*** (0.0528)	0.370*** (0.0716)
Fiscal Year				
2011	-0.00903 (0.411)	-0.198 (0.135)	0.501*** (0.0764)	0.108 (0.119)
2012	-0.606 (0.502)	0.141 (0.127)	-0.173** (0.0793)	0.0935 (0.121)

2013	-0.860 (0.534)	0.183 (0.125)	-0.00894 (0.0778)	0.0724 (0.120)
2014	-0.707 (0.502)	0.314** (0.122)	-0.232*** (0.0796)	0.690*** (0.109)
2015		0.130 (0.124)	-0.313*** (0.0788)	1.010*** (0.105)
2015		-0.0810 (0.132)	0.495*** (0.0763)	1.422*** (0.103)
Constant	-8.091*** (1.147)	-2.265*** (0.132)	-0.0343 (0.0806)	-2.890*** (0.122)
N	7,167	10,128	10,128	10,128

Note: error- type in bracket *** p<0.01, ** p<0.05, * p<0.1

Positive capital gain (**RendP**) ; Positive capital gain's occurrence (**OCCP**) ; Negative capital gain (**RendN**) ; Negative capital gain's occurrence (**OCCN**)

From this table, it appears that the dividend payment announcement significantly influences the target company's share price. At the same time, it increases the occurrence of negative capital gain but reduces the magnitude of negative capital gain. This result is drawn from the interpretation of the variable *PayDiv* which is statistically significant in models (1), (3) and (4). This result is the translation of WAEMU's zone investors preferences for dividend payment. When a company announces dividend payment, its share price increases. Conversely, when it announces a decision of no dividend payment, the share price falls. The dividend payment's decision is not a fortuitous decision for market participants. The managers of companies listed at BRVM should include this parameter in their financial strategy. Alternatively, we can point out the significant difference in the market response to dividend announcements by non-financial corporations compared to financial corporations. All other things being equal, the reaction to dividend announcements is amplified for non-financial corporations. The significance and the sign of the coefficient of the variable *Nonfinancial* translate this difference.

We can therefore recall that BRVM's reaction to dividend announcements is explained by the dividend preference theory (Gordon, 1959).

3.3.2 Influence of the dividend policy on BRVM investors' reaction

In this subsection, we study the influence of the dividend policy on target company's share price reaction. To achieve this goal, we estimated a logistic model between the four key variables and the characteristics of the dividends paid (amount, payout ratio, dividend's evolution, dividend yield).

The results of the analysis are shown in Table 03 hereafter.

The result shows that the dividend value significantly influences the target companies' share price as shown by the statistically significant of coefficient associated to this variable in the four models. The dividend amount increase generates a higher occurrence and a higher amplitude for the positive capital gain, as demonstrated by the sign of this variable in models (1) and (2). At the same time, the announcement of a high dividend reduces the occurrence of negative capital gain (negative sign in model 4) but increases the magnitude of the observed negative capital gain (positive sign in model 3). This result confirms WAEMU zone's investors' preference for dividends.

In contrast, we note that investors do not care about the relationship between the amount of the dividend paid and the current net profit, as shown by its non-significance in models (1), (2) and (3). Its growth increases the occurrence of negative

capital gain on the event window (significance and sign of the coefficient in model 4).

Investors reaction to dividend amount change compared to the previous year is surprising. Indeed, the estimations show that it tends to reduce the occurrence of positive capital gain

(sign in equation 2) and increase the magnitude of negative capital gain (sign in equation 3). This result contradicts investors' preference for dividend as derived from previous analyzes. Further analysis is needed to understand this apparent contradiction.

Table 4: Influence of dividends' characteristics on the abnormal components

Variables	RendP (1)	OCCP (2)	RendN (3)	OCCN (4)
Lmontant	0.736*** (0.216)	0.0877* (0.0494)	0.531*** (0.0340)	-0.237*** (0.0388)
Payout	0.0424 (0.0855)	0.000290 (0.0196)	-0.0157 (0.0121)	0.0460*** (0.0148)
Evolution	0.154 (0.321)	-0.230*** (0.0894)	0.371*** (0.0493)	-0.0301 (0.0634)
Rend31	-5.722 (9.411)	4.036 (2.674)	1.335 (1.785)	0.223 (2.224)
RendAnn	12.17 (13.56)	2.211 (3.615)	-0.413 (2.491)	11.52*** (2.969)
<i>Company's type</i>				
Nonfinancial	2.034** (1.024)	-0.106 (0.0972)	-0.0720 (0.0626)	0.142* (0.0813)
<i>Fiscal year</i>				
2011	0.0686 (0.464)	-0.359** (0.163)	0.515*** (0.102)	-0.100 (0.145)
2012	-0.773 (0.624)	0.289* (0.152)	0.469*** (0.106)	0.317** (0.145)
2013	-0.595 (0.667)	0.111 (0.169)	-0.303*** (0.118)	0.433*** (0.154)
2014	-0.0793 (0.621)	0.484*** (0.159)	0.229** (0.111)	1.134*** (0.139)
2015		0.183 (0.178)	-0.185 (0.121)	1.518*** (0.146)
Constant	-13.19*** (2.062)	-3.360*** (0.395)	-5.216*** (0.271)	-1.380*** (0.319)
N	4,715	6,803	6,803	6,803

Note: error- type in bracket *** p<0.01, ** p<0.05, * p<0.1

Positive capital gain (RendP) ; Positive capital gain's occurrence (OCCP) ; Negative capital gain (RendN) ; Negative capital gain's occurrence (OCCN)

We may also note with surprise the lack of the influence of end of year yield of the dividend announced. Thus, we can conclude that WAEMU zone investors are prone to monetary illusion, since their reaction to dividend announcement is only partially determined by the yield obtained on the announcement day; Unless they are fully

anticipated to readjust their portfolios before the announcement.

Lastly, there is a difference in market reaction depending on the type of the target company. Indeed, the significance of the coefficient of the variable and its positive sign in model (1) leads us to conclude that, all other things being equal, the market tends to react positively when the

announced dividend concerns a non-financial corporation.

Overall, the study of the influence of dividend policy on BRVM's investors reaction shows that the market response to dividend announcements is explained by the dividend preference theory (Gordon, 1959). It reveals that investors are indifference to the yield of the dividend announced and an intuitive reaction with regard to the evolution of the dividend announced compared to that of the previous year. This result deserves a specific study to understand this apparent paradox. Lastly, there is a difference in market reaction depending on the type of the target company.

Conclusion

The objective of this research is to shed light on the market response to dividend announcement. Its ambition is to test the validity of the conclusions of financial theory in a developing stock exchange like BRVM.

The analysis of the influence of the dividend announcement on the target company's share price is subject of a controversy in financial theory, called "Dividend puzzle" and is an enrichment for the discipline.

The literature on share price reaction to dividend announcement has brought an enrichment in the interpretation of dividend policies of companies listed at BRVM. It provides some possible explanations for the difference, from one company to another, an investors reaction to dividend announcement. The diversity of methodological tools used in empirical studies is enriching. The methodology adopted in this research is inspired from the available tools.

The data on dividends paid and share prices between 2010 and 2016 were mobilized. The estimation of the analysis framework's parameters allowed to test the assumption underlying the research.

The study of the characteristics of dividends distributed shows that they are globally increasing with a relatively high annual growth rate but not sufficient to remunerate the shareholders in relation to the price paid to hold the asset as evidenced by the dividends' yield.

We can therefore retain that BRVM's reaction to dividend announcements is explained by the dividend preference theory (Gordon, 1959).

We can conclude that the dividends announcement commonly results in companies listed at BRVM's share price drop. This decline in price can be interpreted as a values destruction by their dividend policy.

However, this contribution should be reinforced by supplementary work to enrich researches in management's practices, models and methodology. Promising researches could be oriented towards studying CFOs' and listed companies' treasurer's dividend policy's perception. The understanding of these perceptions and that of financial analysts is likely to shed some light on their contribution to the definition of dividend policy and the determinants of share prices reaction.

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