

Moderating Effects of Financial Transparency on Accounting Information's Transmission to Share Prices: The Case Study of Non-Financial Companies Listed at BRVM

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Abstract

The study of the moderating effect of non-financial companies' financial transparency on their share values in the context of African stock exchanges is part of a dual perspective. At a first stage, it questions financial theory's state of art on financial statement disclosure practices of listed companies and their anticipated influence on their shares' prices. Thereafter, based on the investigation of the specific case of the WAEMU's Regional capital market (BRVM), a financial place common to eight countries, it highlights the level of transparency in financial communication of companies listed in Africa's capital market. In doing so, it provides a dual enrichment. First, it highlights the enrichment that researches on Africa's context can provide to financial theory and its contribution to the reading of African Management practices. In a complementary fashion, it helps to discover the specific practices in Africa and their consequences on market functioning. It also questions the validity of the conclusions drawn from researches made in international environment in the African context.

Keywords: financial transparency, financial statements, value relevance, event study, developing markets, BRVM

1. Introduction

WAEMU's economies have a regional capital market which is gradually emerging as funding support of wealth creation in the area. The stock market has an important place in this device. It aims at enabling companies to fund; and investors to invest their resources and support for their business development. This market, despite the structural difficulties that limit its expansion, has undergone significant changes in recent years. This is, among others, the transition to continuous time trading, the establishment of credit rating agencies, the IPO of companies and the noticeable evolution of its market capitalization. On 31st of December 2016, there were 43 listed companies.

It has been object of various studied that, among other things, questioned the level of informational efficiency. The findings of these researches raise the issue of the way by which financial information are used in stakeholders' investment decision and their involvement in asset prices' evolution in the specific context of developing capital market. The financial transparency level of companies listed in this market has not yet fully included in the studies that questioned the efficiency of the BRVM. While, observing these accounting documents reveals a strong heterogeneity in financial communication policy of listed companies. Indeed, if we put aside those that do not broadcast information, we can identify companies that apply a minimum disclosure policy and those that provide the most exhaustive information disclosure policy to guide investors decision.

Depending on the nature of their business, companies listed at BRVM can be grouped into two categories: non-financial companies and Bank and financial Institutions. In the second category, we find companies whose business is subject to banking regulations and are under the supervision of the Central Bank (BCEAO). In this study, we limit ourselves to the situation of non-financial companies for two main reasons. First, it was not possible to simultaneously study both groups of companies in one paper. Indeed, enacted framework for financial information disclosure to stakeholders obey to different logics because of the nature of their activities. Their joint consideration would have required to assimilate concepts that have different meaning for each companies group or making a development for each group. In addition,

the comparison of financial statements disclosed highlights different propensities of the two groups to disclose relatively detailed information on their activities. The Financial institutions provide more information following a relatively homogeneous framework while others have more heterogeneous practices. For these reasons, we decide in this study to focus on the specific situation of non-financial companies.

Financial transparency plays an important role in corporate governance. Indeed, the information asymmetry between shareholders and managers and various scandals experienced by the business world over last thirty years led shareholders to require a lot of transparency from managers. When a company is not (or less) transparent, shareholders demand compensation for the additional risk supported by their heritage. In doing so, they require a risk premium before providing their resources to this company. Barth and Schipper (2008) have established that more transparency leads to a lower cost of capital for a given company. Financial transparency of non-financial companies listed at BRVM in their information disclosure policy on their financial performance is likely to bring a different enlightenment to actors; and therefore, generate different reactions of market participants. The price reaction of listed companies' at financial statements disclosure depends on their transparency level and the level of market efficiency. Our contribution aims at shedding light on the financial transparency level of the financial statements published in the context of a developing capital market. It focuses on the following issues: what is the level of transparency of the financial statements disclosed at BRVM and its influence on Non-financial companies' share prices?

This research brings a double contribution. First, a review of the literature reveals a lack of documentation on stylized facts on the transparency of financial disclosure policy of companies listed on developing capital markets, particularly those of Africa. This paper, with a zoom in developing countries practices brings an enrichment to the literature on the specific practices in developing countries. Then, based on the work that questioned the level of efficiency of the regional capital market, this study put on the role of financial transparency in the establishment of a regional financial market that can support the wealth creation in WAEMU zone. It makes some recommendations to listed companies' managers, market participants and regulator. It aims at contributing to harmonize of the financial communication practices and to improve the financial information transmission to the stock prices of non-financial companies listed at BRVM.

Based on data available on the website of the BRVM, we build financial transparency indicators of companies listed at BRVM. We subsequently conducted an event study and association study to estimate its moderating influence on the transmission of accounting data to shares prices.

The findings question the efficiency of the financial communications practice for listed companies' managers vis-à-vis stakeholders of the regional capital market. It also questions the relevancy of financial statements in investment decisions in the context of African stock markets.

The rest of the document is organized in three sections. The first presents a review of the literature on financial transparency and its influence on shares prices. The second presents the methodology used to provide an answer to the problem set. The final section presents and discusses the results.

2. Influence of Financial Transparency on the Stock Price, a Literature Review

Financial information is central to the strategies of the actors in an economy. In financial markets, it plays a central role by directing stakeholders (investors, issuers, ...) decisions. Starting from the etymological sense of the word transparency and research on the subject, we can define the financial transparency of a company as his propensity to communicate to all stakeholders a relatively detailed and understandable information about its activity and financial healthiness to guide their decision (Barth and Schipper, 2008). Several studies have examined this concept to identify its determinants (Amal and Lakhali, 2010) or to study its influence on market transaction.

The study of the influence of financial transparency on the stock price of a company's shares prices is based on three theories: the theory of informational efficiency (Fama, 1970), The value relevance theory (Ohlson, 1995) and the agency theory (Brennan and Meckling, 1976).

The findings of financial theory establish a close link between the information disclosure and the dynamics of the securities' prices in the financial markets. Indeed, the informational efficiency theory provides a framework to define and characterize the level of reaction of asset prices to the dissemination of information in general, and those relating to the financial statements. It follows from this theory that when a market is efficient in its strong form, all information (public or private), useful for investing decisions, are immediately included in their prices. Thus, when a new unexpected information is disclosed, it is instantly integrated in the security's price. So, the price adjusts automatically at the date of this information release. When the market is efficient only in its semi-strong form, only public information is reflected in actors' decisions. Thus, any information on the value of the asset causes a change in the asset classes on the day of its release. However, when the market is efficient only in its weak form, the stock prices includes only the information contains in the asset prices' history. The other information when they are made public are included in the

asset; causing its variation. When a market is inefficient, the asset price reacts slowly (or not at all) to useful investing decision making information (Summers 1982 ; Hamon, 1997). Sum up, the informational efficiency theory serves as a base for understanding the influence of the financial statements released on the securities price.

The theory of value relevance studies the influence of accounting information on a company's stock price (Ohlson 1995; Barth et al., 2001). Indeed, Easton (1999) states that the share price reflects the financial strength of the issuing company. Thus, in its absolute form, this theory states that the stock price is a combination of its total balance sheet and its net income. In its relative form, it states that the change in the company's shares (performance) reflects the ratio between its total assets and the previous course and the change in net income. This theory provides a framework for the analysis of the influence of accounting data on a given company's share price.

Three trends emerged in the wake of empirical work on the validation of this theory. The first establishes a strong association between the accounting data and the company's stock price. Thus, Ohlson (1995) proposals are relevant for studying the dynamics of the companies share prices. The second trend establishes a faltering relationship between accounting data and share prices of target companies over time. Notably, in the United States of America where the explanatory power of accounting relevancy models have declined over time (Dontoh et al., 2004). The third trend works on proving an explanation of the difference in accounting relevancy among countries. Based on Ali and Hwang (1999)'s contributions, we can recall that several factors explain the differences in price reaction to accounting data released. The authors establish, among others, that the difference in the magnitude of accounting data and stock prices association can be explained by the kind of economies and by the role played by private sector in accounting standards definition. There is a difference between economies in which public authorities defined discretionary accounting standards and the others; between Anglo-Saxon and Western countries. Authors explained the later by the fact that in the first category banks provide the most important part of the funding and hold abundant information on companies operating in the economy. Thus, accounting data provide little new information to investors (mainly banks). The association between price movements and accounting data is therefore undermined. In overall, following a Principal Component Analysis (PCA), authors conclude that there is a single factor that explains unobservable links between the country's characteristics and the extent to which stock price movements are associated to accounting data. Through a survey on the literature review, Uthman and Abdul-Baki (2014) does not provide definitive conclusions about the relationship between the company's stock price and its accounting data.

The agency theory is the third contribution to the reading of the link between the accounting data and stock prices (Patel et al., 2002). Applied to the practice of financial transparency of listed companies, it establishes that there is a conflict between the majority and minority shareholders (small investors) in the management of information disclosure to the public. Indeed, the first group has access to a much more detailed information. This group's members get specific information from their privileged position (member of the board, ...) among the shareholders. They decide with the management board the level of information to be disclosed to the public. Moreover, as established by Amal and Lakhali (2010), this first group's members are reluctant to make disposal to the other shareholders inside information that they wish to use for their own benefit. They can falsify certain information to maintain primacy on authentic information and use it to defend their interests. This situation set a need for small shareholders to implement expensive mechanisms to get the real information. So, Amal and Lakhali (2010) show that ownership concentration negatively influences the level of transparency of the French SBF 120 index's members companies. They interpret it as a desire of the majority shareholders to expropriate small shareholders investors. In this situation, small shareholders, whose transaction support the markets daily dynamics reacted little to the dissemination of financial information since they only partially (or don't) reflect the economic reality of the target company. In contrast, when the majority shareholders are transparent, the financial information published is credible. Thus it induces investors' portfolios rearrangement. This induces a change of share prices that rise if the financial results are beyond expectations and below otherwise. In this configuration, the role of regulatory bodies is critical to the efficient functioning of the market; since if they properly play their role in defending the interests of small investors, they help to ensure greater transparency in the dissemination of financial information to help investors in making their investing decision. In the same logic, they help to ensure greater transparency in financial information disclosure. In fact, Patel et al. (2002) show that in emerging markets, transparent companies, all things being equal, benefit to a better valuation than the least transparent.

Overall, the theories of informational efficiency and value relevance justify the link between the accounting data and the stock price of a listed company. The agency theory justifies the potential role of financial transparency in the influence of accounting data on the stock price. We rely on these theories to build a methodology to address the problem of this research.

3. Research Methodology

This section is dedicated to the presentation of the methodology used in this study. It is divided into three sections. In the first, we present the analytical framework and research hypotheses. In the second, the data are presented. It ends

with the presentation of analytical tools.

3.1 Analytical Framework and Research Hypotheses

Figure 01 summarizes the research's framework. Indeed, we assume that the level of a given company's financial transparency has a moderating effect on the transmission of accounting information to the assets price.

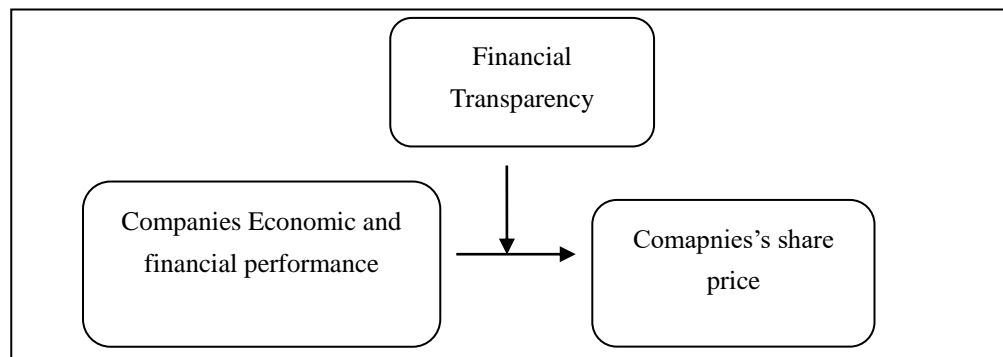


Figure 1. Research's framework

To test this assumption, we formulate two research hypotheses.

The first hypothesis states that the financial transparency level has a moderate effect on the market reaction to companies' financial statements' disclosure. This assumption results from the application of agency theory to the relationship between the majority shareholders (influencer of transparency level) and small shareholders. Adopting a transparent communication strategy improves the speed of accounting information transmission to the target company's share price.

It is formulated as follows:

H₁ : The level of a company's transparency influences the market reaction to the financial statements' disclosure

The second hypothesis is concerned with the influence of financial transparency on the association between accounting data and the target company's stock price. It is formulated as follows.

H₂ : The level of the company's transparency influences the association between the stock price and the financial performance of the target company

This hypothesis states that following the financial statements disclosure investors adjust their portfolios in order to sell the shares of the least performant companies and acquire those of the best performing companies. therefore, the company's share price adjusts to the new situation. However, the adjustment depends on the transparency level in financial reporting.

These two assumptions are designed to operationalize the analysis plan. Their validation is in the heart of the study of the role of financial transparency in the transmission of accounting information in companies' stock prices at BRVM.

3.2 The Data

The empirical analysis is based on data on the content and released date of financial statements of companies listed at BRVM and their stock price. These have been collected from the website of the Regional Stock Exchange Securities of West Africa (BRVM)ⁱ. These data covers, firstly, stock prices and subsequent information. On the other, we use financial statements information. The first were drawn from the Official Listing Bulletins (BOC) published by the BRVM.sa, the company in charge of trading and information dissemination. The data entry and processing help us get information on the stock prices (and their variation). Data on financial statements' released dates were obtained from the "notice and information" section of the website.

After compilation, the data cover companies listed on stock market over the period 04th January 2011 to 31st December 2016. The financial statements cover 2010 to 2015 financial years. We identified 164ⁱⁱ events related to financial statements release concerning 31 non-financial companies listed at BRVM.

Let us recall that financial statements of non-financial companies listed at BRVM is subject to Articles 846 and 852 of the OHADA's Uniform Act in accordance with the Instruction No. 29/2001 of the Regional Council for Public Savings and Financial market (CREPMF) which defines the format and occurrence of the disclosure. Base on Amal and Lakhali (2010)'s work, we built for each listed company a score of financial transparency subdivided in seven sub-components. Indeed, we consider the three components of the financial statements required by the regulator: balance sheet, income statement and the Cash flows statement. The items used can be obtained through tables 2, 3 and 4.

For each item of this table, we rate 1 if the firm publish its content and 0 otherwise. The balance sheet items are broken down into three categories. The first concerns the disclosure of the gross value of fixed assets, the second is the declaration of the depreciated value and the final terms is the net values. Thus, for a particular property line, a company that disclosed the gross, amortized and net values has a score of 3 out of 3, while a company which disclose just the net value is rated 1 out 3 for this item.

Once the marks are awarded, we compute the sum of the scores by subscores: IncomeStatementScore(61), BalanceSheetScore01(36), BalanceSheetScore02 (36) BalanceSheetScore03 (70), BalanceSheetScore(142), CashFlowStatementScore(81) and ScoreTotal (284). The numbers in bracket represent the number of items. In addition, to reduce the effects of the number of items per component, we standardize each score by dividing the total number of points gained by the total number of items of financial statement. Thus, the transparency scores have values between 0 and 1. A company whose financial statement for a given fiscal year includes the information for all items scores 1. In contrast, the one that has provided no information receives a score of 0.

All these data provide inputs for the conduct of mobilized analysis tools which deserve a presentation before going to result.

3.3 Analysis Tools

Two main tools were used to analyze the data collected: event and association studies with adaptations to the specificities of the regional financial market of the WAEMU zone.

3.3.1 Tools for Price Reaction to the Dissemination of Financial Information Study

The study of price reaction to the dissemination of the financial statements was made through an event study. The methodology used is that proposed by Ouattara (2017) which is an adaptation of the event study methodology to the case of less liquid markets. We recall the key points. The reader should refer to this article to get a detailed presentation.

We define four variables of interest :

- ✓ RendN: negative variation of the stock price during the trading session;
- ✓ RendP: positive variation of the stock price during the trading session;
- ✓ OCCN: occurrence of negative variation of the stock price during the trading session;
- ✓ OCCP: occurrence of positive variation of the stock price during the trading session.

Formally, these variables are defined by:

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

$$RendN_{i,t} = \text{Min}\left(\frac{C_{i,t} - C_{i,t-1}}{C_{i,t-1}}; 0\right) \quad (2)$$

$$OCCP_{i,t} = \begin{cases} 1 & \text{si } RendP_{i,t} > 0 \\ 0 & \text{sin on} \end{cases} \quad (3)$$

$$OCCN_{i,t} = \begin{cases} 1 & \text{si } RendN_{i,t} < 0 \\ 0 & \text{sin on} \end{cases} \quad (4)$$

with $C_{i,t}$ and $C_{i,t-1}$ the share price at time t and t-1

We apply the methodology of event studies to the variables defined by equations (1) - (4). We use an event window of 20 days before and 20 days after the financial statement disclosure date. Thus, it covers about one trading month before the financial statement release and one month after. In addition, to test the sensitivity of results to the window length, we analyze the results on a 10-day window before and after the date of publication and over a 5-day window before and after. After the implementation of event studies, we build a variable associated with each variable of interest and that get for each date of the event window the value 1 if the abnormal component is significant and 0 otherwise.

Subsequently, we conduct an econometric analysis that examines the mediating role of financial transparency on the price reaction to the financial statements released. Formally, we estimate a relation of the form:

$$Y_{i,t} = \beta_0 + \beta_1 X_{i,t} + \gamma Transp_{i,t} + \varepsilon_{i,t} \quad (5)$$

With $Y_{i,t}$: represents each of the variables of interest (RendN, RendP, OCCN, OCCP)

$X_{i,t}$: set of control variables measuring the company's financial health (changes in net income, Change in Value Added, Operating Income, Financial income, net income, ...)

$Transp_{i,t}$: Transparency level of the released statement.

In sum, the event study used to analyze the influence of financial transparency on the reaction of the target company's stock price.

3.3.2 Tools for the Analysis of the Moderating Role of Financial Transparency on the Association between the Stock Price and Companies' Financial Performance

To study the moderating effect of financial transparency on the association between the stock price and accounting data, we draw from the work of Easton (1999) that suggests a nonlinear relationship between the stock price and accounting indicators. Thus, we adopt an analytical framework that rely stock price to the financial performance indicators like in the equation defined as:

$$\log(C_{i,t}) = \alpha_0 + \alpha_1 \log(BV_{i,t}) + \alpha_2 \log(EP S_{i,t}^+) + \alpha_3 \log(-EP S_{i,t}^-) + \varepsilon_{i,t} \quad (6)$$

We introduce the financial transparency variable that leads to the following entry:

$$\log(C_{i,t}) = \alpha_0 + \alpha_1 \log(BV_{i,t}) + \alpha_2 \log(EP S_{i,t}^+) + \alpha_3 \log(-EP S_{i,t}^-) + \gamma Transp_{i,t} + \varepsilon_{i,t} \quad (7)$$

With

$C_{i,t}$: Stock price at 31.03.N + 1

$BV_{i,t}$: Company i's total assets per share in year t

$EP S_{i,t}^+$: Company i's positive earnings per share in year t

$EP S_{i,t}^-$: Company i's negative Earnings Per Share in year t

$Transp_{i,t}$: Company i's Financial Statement Transparency level in year t

It is worth noting that in the estimation we have taken two forms for inclusion transparency variable. It was taken into account with a linear form as specified in equation (7). Thereafter we incorporated it as a categorical variable. Its inclusion with a linear form postulate that one unit change on the level of transparency influences the stock market price of the company. This assumption seems limited in the sense that the inclusion of transparency in the valuation of the company by investors might not be at a figure approximation (the item) but rather inclusive term. Thus, in the second formulation, we subdivide the financial statements transparency level in classes. To achieve this, we rely on a hierarchical classification with active variables the transparency scores.

The use of this framework is aimed at evaluating the influence of a belonging in a given transparency class. Note however that this group approach results in a loss of information. Thus, either of the approaches has advantages and disadvantages. Their combination enriches the understanding of the influence of financial transparency on company's stock prices in BRVM's context. We compare the two approaches.

This section was used to present the approach to build and analyze data needed for the study. The presentation of analytical tools completes the methodology. It allows us to consider the results.

4. Results and Discussion

This third section is dedicated to the presentation of the results. It is divided into three sections. We present, first, a descriptive analysis of financial statements transparency level of non-financial companies listed at BRVM. The second section presents the results of the study of the company's stock price reaction after their financial statements disclosure. We conclude by the study of it influence on the association between stock prices and accounting data.

4.1 Non-Financial Companies Listed at BRVM's Transparency Level

As we presented in the methodology, the transparency level of companies listed at BRVM is evaluated in line with the financial statement's disclosure framework enacted by the Uniform Act of OHADA. Table 01 below summarizes the percentage of item completed by the companies that release their financial statements over the analysis period (fiscal year 2010-2015).

Tables 1. Evolution of Non-financial companies listed at BRVM's financial statements' transparency

Fiscal Year	Obs	Income Statements (Freq.)	Score (In%)						
			Balance Sheet 01	Balance Sheet 02	Balance Sheet 03	Balance sheet	CashFlowStatement	Income Statement	Both
2010	30	28	5.5	4.2	27.4	15.9	28.0	42.1	25.3
2011	29	27	5.7	4.5	27.5	16.1	28.3	42.6	25.3
2012	28	26	5.8	4.6	27.6	16.1	29.6	42.2	25.6
2013	28	28	6.7	5.8	30.8	18.3	30.3	46.6	27.8
2014	29	29	7.4	6.6	31.8	19.1	29.5	46.4	28.2
2015	27	25	4.2	3.6	27.8	15.6	29.2	41.7	25.1
Total	171	163	5.9	4.9	28.8	16.8	29.1	43.6	26.2

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

It appears from this table that, in overall, non-financial companies provide the information for the quarter (26%) of the items included in the financial statements. An analysis of variance shows that this proportion has not varied significantly over time (Fisher = 0.29, P-value = 0.9152). This result proves that the information dissemination practices on their wealth creation, their heritage and the cash flows generated remained stable over the period.

A decomposition of the overall proportion in the three components of the financial statements (income statement, balance sheet, CashFlow statement) shows that the items of the income statement (43.6%) are by far those which are most knowledgeable. They are followed by those of Cashflow statement (29.1%) and the " net " component of the balance sheet (28.8%). Items related to the gross amount (5.9%) and the amortized value (4.9%) of the balance sheet are less shared by non-financial companies listed at BRVM.

The statistical tests for mean comparison confirm the significance of the difference between the occurrence of the income statement items sharing with the other two (pvalue = 0.000). It appears from these tests that the difference between the occurrences of Balance Sheet items and Cashflow statement disclosure are not statistically different (pvalue = 0.8295). So that we can realized that non-financial companies listed at BRVM have a higher propensity to provide detailed information on the wealth created during the year; but they are less likely to provide information on the gross value of their assets and its depreciation.

To better understand the overall situation, an analysis by sub-components seems necessary. We respectively target the items of the income statement, balance sheet and Cashflow statement.

4.1.1 Transparency Level on non Financial Companies' Wealth Creation

Table 02 below presents in detail, the occurrence of the income statement's items disclosure in financial statements release.

It appears from this table that the net result, income taxes and personnel expenses are items that are found in all income statements provided by the non-financial companies over the analysis period.

Table 2. Transparency on Income statement's item of Non-financial companies listed at BRVM

N°	Items	Occ.	N°	Items	Occ.
1	Good Purchases	60.12%	1	Sale of goods	65.03%
2	inventory variation (- or +)	28.83%	2	GROSS MARGIN ON PRODUCTS	11.7%
3	Raw materials Purchases and related supplies	58.90%	3	Manufactured products Sales	48.47%
4	inventory variation (- or +)	26.38%	4	Works, services sold	69.33%
5	other purchases	73.62%	5	Production stored (or stocking)	52.76%
6	inventory variation (- or +)	18.40%	6	Immobilised production	36.20%
7	transport network	77.30%	7	GROSS MARGIN OF CONTENTS	10.4%
8	external services	84.05%	8	Accessories products	73.01%
9	Dues and taxes	77.30%	9	REVENUE	81.60%
10	Other expenses	77.30%	10	Operating grants	4.29%
11	Personnel expenses	100.00%	11	Other products	88.96%
12	EBITDA		12	ADDED VALUE	91.4%
13	Depreciation, amortization and provisions	98.77%	13	SURPLUS GROSS OPERATING	87.7%
14	Total of the exploitation charges	36.2%	14	Reversals of provisions	86.50%
15	Financial expenses	60.12%	15	Expense transfers	58.90%
16	Exchange losses	31.29%	16	Total of exploitation products	34.4%
17	Depreciation, amortization and provisions	13.50%	17	OPERATING INCOME	95.09%
18	Total financial expenses	42.9%	18	financial income	53.99%
19	Total expenses from ordinary activities	26.99%	19	Exchange gains	31.29%
20	Disposals Asset Book value	23.93%	20	Provisions Reversals	10.43%
21	charges HAO	23.31%	21	Expense transfers	6.75%
22	HAO Charges	9.20%	22	Total financial income	41.10%
23	Total expenses HAO	30.1%	23	FINANCIAL RESULT (- or +)	63.2%
24	Employee participation	0.61%	24	Total revenue	19.63%
25	Income Taxes	100.00%	25	PROFIT FROM ORDINARY ACTIVITIES	61.3%
26	Total interest and taxes	8.0%	26	NOT ORDINARY ACTIVITIES (HAO)	0.00%
27	TOTAL EXPENSES	24.54%	27	Fixed Assets Disposals	23.31%
			28	HAO products	29.45%
			29	HAO times	15.34%
			30	Expense transfers	1.23%
			31	Total HAO products	33.13%
			32	HAO RESULT	71.2%
			33	TOTAL PRODUCT	21.5%
			34	NET PROFIT	100.0%

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

We can realize that the items relating to intermediate balances are those that have a greater occurrence in the income statements published. Indeed, in addition to the listed items, we can see that Turnover (81.60%), Value Added Tax (91.4%), the EBITDA (87.7%), operating income (95.09%), financial result (63.2%), ordinary activities results (61.3%) and HAO result (71.2%) has the largest diffusion frequency in the income statements released. However, we notice that contrary to the expectations of shareholders, the publication of income statement items that help in appreciating the quality and durability of the wealth created by the company during the year are not always provided by non-financial companies listed at BRVM. Some items such as gross margin on goods (11.7%) or materials (10.4%) are not informed.

We can therefore hold that on average a less than half of the required items of the income statement are really informed. Some information such as the participation of workers are present in less than 10% of the income statements.

Thus, overall, companies are showing a certain opacity in the presentation of the wealth created by their activity during the fiscal year.

4.1.2 Transparency Level on the Heritage of Non-Financial Companies

Table 03 presents the case of the balance sheets' items released by non-financial companies listed at BRVM.

The most striking fact is the general weakness of the occurrence of balance sheets' item diffusion. Thus, with the exception of legal reserves (100%), capital (95.05%), net income of the year (96.32%), passive-translation adjustments (96.32%) of current liabilities (89.57%), financial liabilities (77.30%) of the total debt (77.30%), premiums and reserves (64.42%), retained earnings (80.25%) and dividends (64.97%) who receive a relatively high diffusion rate, the other items are not filled by around the third of non-financial companies listed at BRVM. The low occurrence of balance sheet's items disclosure is striking.

Table 3. Transparency on balance sheet's items of Non-financial companies listed at BRVM

N°	Active	Occ.	N°	Passive	Occ.
1	immobilized loads	15.75%	1	CAPITAL	95.09%
2	Formation expenses and accrued leave	3.89%	2	Shareholder uncalled capital	0.61%
3	bond redemption premiums	0.41%	3	Premiums and reserves	64.42%
4	intangible assets	34.56%	4	contribution premiums, issuance, merger	12.88%
5	Research and development Expenses	1.43%	5	Revaluation	17.18%
6	Patents, licenses, software	5.11%	6	unavailable reserves	22.09%
7	Commercial funds	0.61%	7	free reserves	14.72%
8	Other intangible assets	4.29%	8	Retained earnings + or -	22.70%
9	tangible assets	36.20%	9	Net income for the year (+ profit or loss -)	96.32%
10	grounds	4.29%	10	Other equity	30.06%
11	buildings	4.91%	11	Investment grants	4.91%
12	Fixtures and fittings	6.13%	12	Regulated and assimilated funds Provisions	1.84%
13	Equipment	6.13%	13	TOTAL CAPITAL (I)	36.81%
14	Transportation equipment	6.13%	14	Borrowings	23.93%
15	Advance payments on capital	13.91%	15	leasing debts and assimilated contracts	1.84%
16	financial assets	31.29%	16	Other borrowings	41.72%
17	Equities	8.59%	17	Financial provisions for risks and charges	37.42%
18	Other financial assets	9.82%	18	TOTAL DEBT (II)	77.30%
19	TOTAL ASSETS (I)	19.43%	19	TOTAL STABLES RESOURCES (I + II)	23.31%
20	Current assets HAO	3.89%	20	Current debts and related resources HAO	12.27%
21	stocks	34.97%	21	Customer advances received	19.63%
22	Merchandise	7.16%	22	Other Suppliers	37.42%
23	Raw materials and other supplies	7.77%	23	tax liabilities	23.31%
24	In progress	0.82%	24	social liabilities	15.95%
25	factories products	2.86%	25	Other debts	30.67%
26	Receivables and assimilated jobs	33.54%	26	Provisioned risks	5.52%
27	Suppliers, advances	9.41%	27	TOTAL CURRENT LIABILITIES (III)	89.57%
28	customers	13.29%	28	Banks, discount credits	0.00%
29	other receivables	12.88%	29	Banks, cash loans	1.23%
30	TOTAL ASSETS (II)	22.29%	30	Banks found	8.59%
31	Investment securities	4.70%	31	CASH-PASSIVE TOTAL (IV)	4.91%
32	Values in cash	4.29%	32	Goodwill Agreement and Liabilities (V)	96.32%
33	Banks, postal check, cash	6.13%	33	TOTAL (I + II + III + IV + V)	17.79%
34	CASH-ACTIVE TOTAL (III)	39.67%	Proposed distribution of their results		
35	Translation adjustments-Active (IV) (likely foreign exchange loss)	11.04%	1	Legal reserve	100.00%
36	TOTAL (I + II + III + IV)	40.29%	2	statutory reserves	1.84%
			3	Other reserves (available)	6.37%
			4	dividends	64.97%
			5	Retained earnings	80.25%
			6	Total	47.77%

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

This weakness could be interpreted as a reluctance of listed companies to disclose the details of their heritage. We easily guess the difficulty of minority shareholders to get a clear idea of the book value of the companies whose shares are traded on the regional financial market.

4.1.3 Transparency Level on Financial Flows Generated by Non-Financial Companies

Table 4 shows the result on the propensity of non-financial companies listed at BRVM to inform on Cashflow statement's items.

Tables 4. Transparency on Non-financial companies listed at BRVM's Cashflows statement items

N	items	Occ.	N	items	Occ.
1	Financial expenses	52.15%	1	Other liabilities (jobs)	12.88%
2	Exchange losses	38.04%	2	Other liabilities (resource)	14.11%
3	Charges HAO	36.81%	3	provisioned Risks (jobs)	6.75%
4	Participation	7.36%	4	provisioned Risks (resource)	6.13%
5	Income Taxes	52.15%	5	Translation differences - Liabilities (1) (jobs)	6.75%
6	Total (I)	55.21%	6	Translation differences - Liabilities (1) (resource)	5.52%
7	EBE	55.83%	7	overall net change in circulating debts	51.53%
8	Transfers of operating expenses	41.10%	8	Changes BFE = (A) + (B) + ©	55.21%
9	financial income	49.69%	9	EBITDA	43.56%
10	Transfers of financial costs	7.36%	10	Change BFE	42.94%
11	Exchange gains	38.65%	11	Immobilized production	15.95%
12	HAO products	41.10%	12	Surplus from operating cash	41.10%
13	Expense transfers HAO	7.98%			
14	Total (II)	51.53%	13	immobilized charges (increase in exercise)	14.11%
15	Overall CashFlow	55.83%	14	Acquisitions / Disposals of intangible assets (jobs)	36.20%
16	Goods (jobs)	8.59%	15	Acquisitions / Disposals of property, incorp. (resource)	6.75%
17	Goods (resource)	9.82%	16	Acquisitions / Disposals of tangible fixed assets (jobs)	47.85%
18	Raw materials (jobs)	11.66%	17	Acquisitions / Disposals of property and equipment (resource)	31.90%
19	Raw materials (resource)	9.20%	18	Acquisitions / Disposals of investments (jobs)	38.65%
20	Work in progress (jobs)	6.13%	19	Acquisitions / Disposals of investments (resource)	33.74%
21	In-process (resource)	4.91%	20	Total investment	69.33%
22	manufactured products (jobs)	7.36%	21	II. Changes in Operating borrowing	98.77%
23	manufactured products (resource)	7.36%	22	III. / Use (BF, HAO)	55.21%
24	net overall inventory change	50.92%	23	IV. Jobs financial forced	58.28%
25	Suppliers, advances paid (jobs)	12.88%	24	B - Total jobs finance	85.89%
26	Suppliers, advances paid (resource)	11.66%	25	Dividends (jobs)	69.94%
27	Customers (jobs)	14.72%	26	Overall CashFlow (Resources)	98.77%
28	Customers (resource)	10.43%	27	Capital increases by acquisitions	22.09%
29	Other receivables (jobs)	15.34%	28	Investment grants	4.29%
30	Other receivables (resource)	10.43%	29	Capital levies	9.20%
31	Translation differences - assets (1) (jobs)	6.13%	30	borrowings	42.94%
32	Translation differences - assets (1) (resource)	7.36%	31	Other financial liabilities	34.97%
33	Net change in receivables	51.53%	32	C - Net Capital Resources	90.18%
34	Customer advances received (jobs)	7.98%	33	D - Or surplus Capital resources failure	95.09%
35	Customer advances received (resource)	14.72%	34	Net cash at the year end	36.81%
36	Other Suppliers (jobs)	12.88%	35	Net cash at the opening of the financial year	36.81%
37	Suppliers of (resource)	14.72%	36	Change in Cash	39.88%
38	Tax liabilities (jobs)	11.04%	37	working capital variation (Cdf): Cdf (N) - Cdf (N-1)	18.40%
39	Tax liabilities (resource)	16.56%	38	Change in total BF (BFG) BFG (N) -BFG (N-1)	14.72%
40	social liabilities (jobs)	11.04%	39	Change in cash (T): T (N) - T (N-1)	14.72%
41	social liabilities (resource)	16.56%	40	TOTAL	14.72%

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

Target companies seem to focus mainly on the dissemination of information concerning the Change in Operating Funding Requirement (98.77%), surplus or lack of resources (95.09%), Net financing resources (90.18%), Overall CashFlow (98.77%), Dividends (69.94%) and total investment (69.33%).

We note that companies tend to limit the released information's to the gross masses of Cashflow statement without giving more details on the flows that contribute to their creation. As for the other two components, the companies listed at BRVM are not transparent about the flows generated by their activity.

For the following analysis, we perform a categorization of published financial statements based on their level of transparency. To achieve this, we rely on a classification based on transparency scores. We end up with a categorization into three classes whose characteristics are presented through Table 05 below.

Tables 5. Characteristics of financial transparency groups

Transparency level	Indicator	Bilan01	Bilan02	Bilan03	Balance sheet	CashFlow Statement	In result	Total
Low	N	77	77	77	77	77	77	77
	Mean	2.06%	1.48%	26.23%	13.74%	13.92%	19.66%	19.58%
	SD	8.17%	5.40%	8.98%	6.71%	4.19%	5.20%	5.17%
Medium	N	72	72	72	72	72	72	72
	Mean	0.46%	0.46%	28.64%	14.25%	40.90%	29.44%	29.30%
	SD	1.55%	1.55%	8.26%	4.37%	11.13%	5.67%	5.59%
high	N	14	14	14	14	14	14	14
	Mean	58.13%	49.01%	60.35%	56.89%	68.96%	60.80%	60.80%
	SD	14.72%	14.11%	15.09%	14.27%	30.74%	4.23%	4.23%
Total	N	163	163	163	163	163	163	163
	Mean	6.17%	5.11%	30.23%	17.67%	30.56%	27.51%	27.41%
	SD	17.48%	14.60%	13.16%	13.83%	21.09%	12.45%	12.44%

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

Each class, in terms of its characteristics, includes different levels of transparency as named in column 01. It is not surprising that most of the financial statements are classified in the group of "low transparency" (77 of 163). In addition, the supplementary part of the financial statements that have a level of "Medium transparency" (72 of 163) allows us to account for the reluctance of non-financial companies listed at BRVM's managers to share with minority shareholders information concerning the target companies.

This classification is used later to study the influence of financial transparency on the price reaction to the dissemination of the financial statements. Note that the financial statements classified as "High transparency" are composed essentially by two companies : Sonatel SN and ONATEL BF. These companies tend to disseminate financial statements with a high level of detail. On average, they inform 61% of the items contained in the template for statement release. The financial statements of Total Senegal for the fiscal year 2014 and Tractafric Motors Ivory Coast for fiscal 2013, with high levels of transparency, complete this group.

Sum up, financial transparency seems to be at relatively low level among non-financial companies listed at BRVM. It would be interesting to study the determinants of the practice of financial communication at BRVM to propose some actions to provide richer information to investors in the WAEMU zone and facilitate the resources' mobilization to finance wealth creation. Otherwise, investing decisions in the stock of companies listed at regional financial market that could be akin to a lottery.

4.1.4 Influence of Financial Performance on the Financial Transparency of Non-Financial Companies Listed at BRVM

To provide preliminary information on potential causes of financial opacity of the companies listed at BRVM, we study the influence of the net income of the fiscal year on the propensity to disseminate detailed information on the financial statements. To achieve this, we estimated the parameters of a model with endogenous variable, the transparency score and explanatory variable the financial health indicators while controlling the individual and temporal effects.

The results are shown in Table 06 below.

Tables 6. Influence of financial performance on the financial statements transparency by Non-financial companies listed at BRVM

variables	scribilan01	scribilan02	scribilan03	scribilan	scrtafire	scr	scrtot
dca	-0.0991	-0112	0.00222 ***	0.000941	-0.000206	0.000369	0.000443
	0.0000	0.0000	(0.000803)	(0.00104)	(0.000737)	(0.000717)	(0.000682)
dva	0.0416	0.0451	-0.000165	-0.000123	4.03e-06	-5.28e-05	-6.94e-05
	0.0000	0.0000	(0.000160)	(0.000208)	(0.000147)	(0.000143)	(0.000136)
logRN +	0.0321	0.0278	0.00157	0.00388	0.00630 **	0.00325	0.00352
	0.0000	0.0000	(0.00322)	(0.00418)	(0.00298)	(0.00287)	(0.00274)
logRN-	0.0976	0.0793	0.00215	0.00592	0.00770 *	0.00408	0.00461
	0.0000	0.0000	(0.00440)	(0.00571)	(0.00406)	(0.00392)	(0.00374)
logRex	-0.00185	-0.0139	-0.000156	-0.000642	-0.00133	-0.000682	-0.000573
	0.0000	0.0000	(0.00242)	(0.00314)	(0.00222)	(0.00216)	(0.00205)
RentFin	0.283	0.223	-0.000378	-0.000673	-0.00316	-0.000637	-0.00132
	0.0000	0.0000	(0.00385)	(0.00500)	(0.00353)	(0.00343)	(0.00327)
Constant	1198	-0990	0498 ***	0235 ***	0501 ***	0406 ***	0402 ***
	0.0000	0.0000	(0.0180)	(0.0233)	(0.0165)	(0.0160)	(0.0153)
Obs	159	159	159	159	159	159	159

scribilan01: gross immobilization score; scribilan02: depreciation of fixed assets score; scribilan03: Net amortization score; scribilan: overall balance sheet score; scrtafire: Cash Flow statement,t score; scr: income statement Score; scrtot: overall Income statements score; logRN+: logarithm of net income; Rentfin: profitability; dca : Variation of turnover; logRex: logarithm of operating results; dva: variation value added

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

It appears from these results that almost all financial performance indicators used in the regression have no influence on the financial statements transparency. Indeed, apart from inventories variation (DCA) and the logarithm of net income (logRN +) which positively influences the propensity to provide details on the net values of balance sheets items (scr bilan03) and the cashflow generated (ScrCashFlow statement), the influence of other variables are not statistically significant. Thus, the level of companies listed at BRVM's financial transparency does not depend on their performance, measure as the net income of the fiscal year. In addition, an analysis of variance revealed that each company, with two exceptions, hold the same level of financial statements transparency along the time period.

Sum up, the financial reporting of non-financial companies listed at BRVM deserve to be significantly improved to provide to investors a full information that is likely to guide their investing decisions. Indeed, the situation of BRVM regarding the level of financial transparency of companies listed is the antithesis of that of advanced markets where the difference between financial transparency from one company to another is on voluntary information provided by listed companies. Indeed, to study the financial transparency of companies listed at France's capital market, Amal and Lakhel (2010) based their analysis on voluntary information disclosure by the target companies. In the case of BRVM, the level of transparency cannot be assessed only in relation to the basic information essential for investing decision's making.

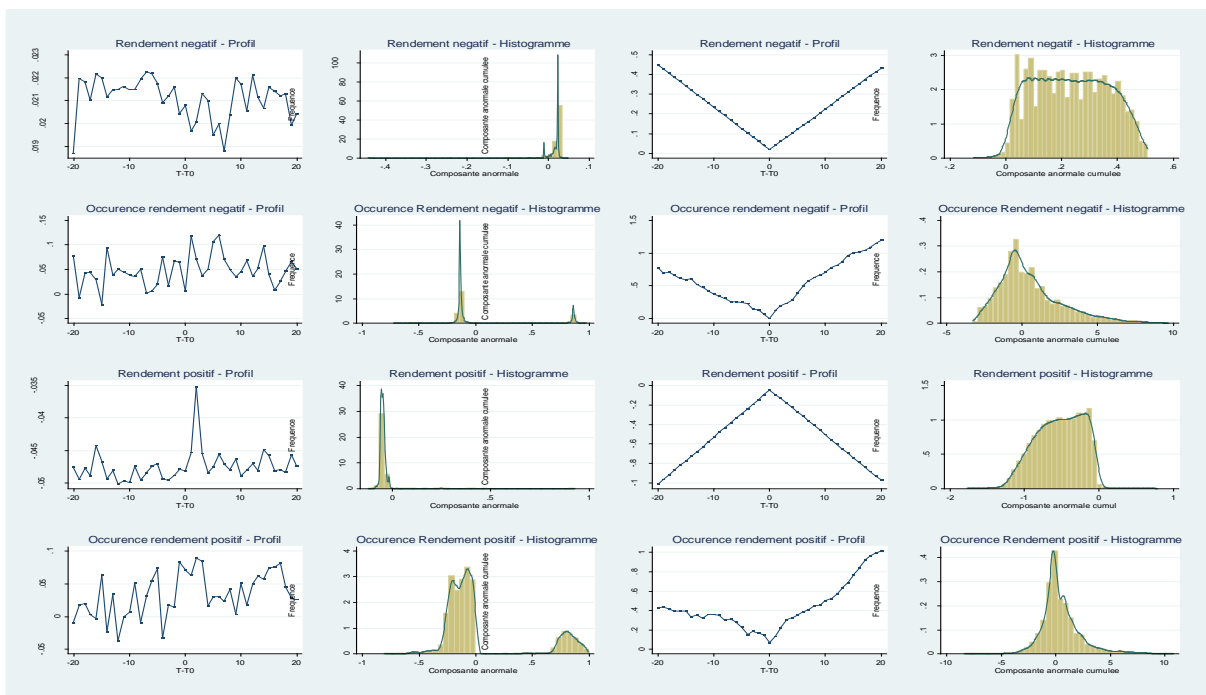
4.2 Influence of Financial Transparency on Share Prices of Non-Financial Companies Listed at BRVM

In this second section we study the influence of financial transparency on the market reaction to financial statements' release. We proceed in two stages. First, we look at the market reaction to the dissemination of such information. We discuss the role of financial transparency thereafter.

4.2.1 Market Reaction to the Publication of Non-Financial Companies Listed at BRVM's Financial Statements

This section presents the results of the analysis of the influence of BRVM's listed companies financial statements' transparency level on the share prices. To achieve this, we present the results of the event study. Figure 2 shows the profile of instantaneous and cumulative abnormal components of the interest variable on the event window. It is supplemented by Table 07.

It is clear from this graph that the financial statements disclosure generates mostly losses. Indeed, some financial statement broadcast is accompanied by abnormal gains (0.41%) while 30% of the dates of the event windows recorded unusually significant capital losses on the event window as evidenced by the results in table 07.



Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

Figure 2. Abnormal and cumulative abnormal components generated by the financial statements' release

The figure shows the average value of the instantaneous and cumulative abnormal components of the variables of interest (negative profitability, occurrence of negative returns, positive profitability and occurrence of positive returns) on the event window. Each line presents the results of the analysis of each of the variables of interest. For a given line,

the profile of the abnormal components, the histogram of the abnormal components, the profile of the cumulative abnormal components and the histogram of the cumulative abnormal components of the variable of interest are respectively presented.

This result is also evident on the abnormal returns occurrence. The spreading to the left of the abnormal losses histogram on the event window is an illustration.

Tables 7. Synthesis of the influence of the financial statements on abnormal components

Variable*	Window	Obs	instantaneous		Cumulative	
			Mean	Standard Deviation	Mean	Standard Deviation
RendP	-20 j, 20 j	6765	0.41%	6.42%	0.07%	2.72%
	-10 j, 10 j	3465	0.38%	6.11%	0.12%	2.72%
	-5 j, 5 j	1815	0.28%	5.24%	0.11%	3.40%
OCCP	-20 j, 20 j	6765	10.64%	30.84%	12.67%	33.26%
	-10 j, 10 j	3465	8.51%	27.91%	10.53%	30.70%
	-5 j, 5 j	1815	5.12%	22.05%	7.49%	26.34%
RendN	-20 j, 20 j	6765	30.48%	46.04%	58.20%	49.33%
	-10 j, 10 j	3465	21.21%	40.89%	64.39%	47.89%
	-5 j, 5 j	1815	15.92%	36.60%	64.90%	47.74%
OCCN	-20 j, 20 j	6765	17.58%	38.06%	7.10%	25.68%
	-10 j, 10 j	3465	16.97%	37.54%	6.09%	23.92%
	-5 j, 5 j	1815	16.91%	37.50%	4.90%	21.60%

* Positive Return (RendP), Occurrence of positive returns (OCCP), Negative Return (RendN), Occurrence of negative return (OCCN)

Source: Official listing Bulletin, <http://www.brvm.org/>, authors' calculations

The profile of accumulated abnormal components on the event window revealed an influence of the financial statements is noticeable. The tendency to generate losses is illustrated by the growth of cumulative abnormal components of the magnitude and occurrence of negative returns over the event window.

In addition, to study the sensitivity of results to the choice of the event window, Table 07 shows the results according to different window. Overall, the results remain the same but with different magnitudes. Indeed, the reduction in the length of the window reduces the fraction of significant abnormal components which pass from 0.41% to 0.28% for the instantaneous components of Positive profitability. This decline could be explained by the fact that choosing a long window involves estimating the normal component of the interest variable on a distant period that tends to characterize many variations as abnormal. The event window reduction induces the inclusion of more recent dynamics in the assessment of normal components. Beyond the difference in magnitudes, the stylized facts about the market reaction to the financial statements' publication are robust to the choice of the event window. The event window reduction induces the inclusion of more recent dynamics in the assessment of normal components. Beyond the difference in magnitudes, the stylized facts about the market reaction to the publication of the financial statements are robust to the choice of the event window. The event window reduction induces the inclusion of more recent dynamics in the assessment of normal components. Beyond the difference in magnitudes, the stylized facts about the market reaction to the publication of the financial statements are robust to the choice of the event window.

To understand this trend, we connected these abnormal components and indicators measuring the financial health of target companies (Table 08, 09, 10 below).

As we can see in the first four columns, the market reaction to the financial statements' publication depends on the economic and financial performance of the company during the past year; as evidenced by the significance of certain variables in the regression model.

However, we find that the signs of the coefficients are not those expected for certain variables. Indeed, we find that the financial statement with an increased value added or a positive operating income tend to generate a low amplitudes capital gains as evidenced by the significance and sign of the coefficients of these variables in model (1). Similarly, the publication of a negative operating result tends to generate losses of high amplitudes as evidenced by the significance and sign of coefficients of the variables in the model (3).

Overall, it is clear from this analysis that the financial statements disclosure generates a drop in target companies share prices in the period around the release date. Certainly the transparency level on financial performance components is related to the observed evolution. To explore this issue, it is necessary to study the influence of the financial statements transparency's level on the market reaction. A comparative analysis of results of Tables 8, 9 and 10 shows a sensitivity of these results to the choice of the event window. Indeed, when limited to a 10-day window, the change in sales, net income and operating income do not have a statistically significant effect on the market's reaction to the publication of the financial statements (equation 2 table 09).

We can recall that the publication of financial statements entails a market reaction. It is necessary to study the role of financial transparency in this influence.

4.2.2 Influence of the Financial Transparency of Non-Financial Companies Listed at BRVM on Their Price Reaction

This section presents the influence of the transparency level on the market reaction to the publication of financial statements. To achieve this, we integrate the financial transparency variable in models whose results are included in the models (1), (2) and (3). The result is estimated and recorded in Tables 8, 9 and 10.

It appears from this table that by controlling the variables that measures economic and financial performance of the target companies, the transparency level influences the market reaction to the publication of financial statements. The transparency variable is significant in model (5), (7) and (8).

Their interpretation helps us conclude that the growth of transparency level generates an increase of capital gains magnitude (3.369 **), reduced the scale of losses (-0.885 ***) but increases the occurrence of capital depreciation (1.429 ***) on the event window. These findings are induced from the analysis of the linear relationship of the transparency variable on the market reaction.

The analysis of the nonlinear link through the equations (9), (10), (11) and (12) to conclude that the influence of the transparency level is not linear. Indeed, the significance of the modality "Low" of financial transparency variable in the equation (9) indicates that a low level of transparency reduces the amount of capital gains (1.893 ***) on event window. In contrast, the significance of the term " Strong " of the financial transparency variable in equation (10) indicates that a high level of transparency reduces the occurrence of gains (-0.383 **) on the event window. Similarly, the significance of the terms " Low " and " Strong " of financial transparency variable in the equation (11) indicates that low levels of transparency (0.599 **) or higher (0.246 **) increases the magnitude of the losses on the event window. The influence of the transparency level on the creations of losses on the event window is like a U curve.

Moreover, to confirm the moderating effect, we test the modification of the influence of economic and financial performance variables on market reaction. The Hausman test reveals that the coefficients of the influence of economic and financial performance variables on the extent of capital gains and losses are significantly modified by the inclusion of the financial transparency variable. We can therefore conclude that the first hypothesis is accepted. The level of transparency is therefore to drag on market reaction to the financial statements publication.

In Overall, the level of transparency influences the market reaction to the financial statements publication.

Tables 8. Influence of transparency on the market reaction to the dissemination of the financial statements on a 20-day window

VARIABLE	Without transparency variable				With linear variable transparency				With variable transparency group			
	RendP (1)	OCCN (2)	RendN (3)	OCCN (4)	RendP (5)	OCCN (6)	RendN (7)	OCCN (8)	RendP (9)	OCCN (10)	RendN (11)	OCCN (12)
dca	-0.0511 (0.0396)	-0.0559 ** (0.0275)	-0.0263 *** (0.0101)	-0.0209 (0.0159)	-0.0501 (0.0406)	-0.0600 ** (0.0285)	-0.0298 *** (0.0104)	-0.0140 (0.0150)	-0.0596 (0.0438)	-0.0528 * (0.0272)	-0.0388 *** (0.0107)	-0.0188 (0.0159)
dva	1.324 *** (0.511)	-0.000952 (0.00155)	-0.00376 *** (0.00109)	-0.00444 *** (0.00148)	1478 *** (0.0551)	-0.00111 (0.00155)	-0.00411 *** (0.00108)	-0.00420 *** (0.00156)	1972 *** (0.635)	-0.000902 (0.00156)	-0.00400 *** (0.00106)	-0.00450 *** (0.00151)
RN	0.000208 (0.000153)	6.36e-05 *** (2.34E-05)	-8.45e-05 *** (1.60e-05)	4.79e-05 ** (1.94e-05)	0.000197 (0.000148)	6.43e-05 *** (2.33e-05)	-8.03e-05 *** (1.61e-05)	4.27e-05 ** (1.98e-05)	6.37e-05 (0.000165)	5.27e-05 ** (2.38e-05)	-4.81e-05 *** (1.67e-05)	4.94e-05 ** (2.03e-05)
REX	-8.23e-05 (0.000107)	-3.26e-05 ** (1.60e-05)	6.29e-05 *** (1.08e-05)	-3.24e-05 ** (1.29e-05)	-7.18e-05 (0.000105)	-3.29e-05 ** (1.59e-05)	6.09e-05 *** (1.08e-05)	-3.03e-05 ** (1.32E-05)	3.82e-05 (0.000117)	-2.49e-05 (1.63e-05)	3.93e-05 *** (1.13E-05)	-3.42e-05 ** (1.36e-05)
RentFin	0.162 (1.498)	-0.0417 (0.0523)	0.0659 ** (0.0335)	0.0102 (0.0389)	-0315 (1.264)	-0.0397 (0.0519)	0.0688 ** (0.0335)	0.00244 (0.0397)	0.248 (1.489)	-0.0454 (0.0515)	0.0832 ** (0.0347)	0.00852 (0.0398)
Transp					3.369 ** (1.341)	-0.382 (0.341)	-0.885 *** (0238)	1.429 *** (0258)				
Transparency												
Low									1.893 *** (0.613)	-0.121 (0.0864)	0.599 *** (0.0614)	-0.0138 (0.0735)
Strong									1.710 (1.041)	-0.383 ** (0.168)	0.246 ** (0.108)	0.507 *** (0.116)
Constant	5.110 *** (0.382)	2.566 *** (0.120)	-0.878 *** (0.0700)	2.285 *** (0.109)	6.217 *** (0.626)	2.462 *** (0.151)	-0.642 *** (0.0938)	2.681 *** (0.132)	4.703 *** (0.376)	2.490 *** (0.126)	1.161 *** (0.0776)	2.326 *** (0.116)
observations	4428	6601	6601	6601	4428	6601	6601	6601	4428	6601	6601	6601

This table shows the results of estimation of the influence of transparency level on the market reaction to the financial statements

release. In overall, the models can be written as $Y_{i,t} = \beta_0 + \beta_1 X_{i,t} + \gamma Transp_{i,t} + \varepsilon_{i,t}$. Y is the dependent variable represented in each of equations by the positive return (RendP), Occurrence of positive return (OCCP), negative return (RendN) and Occurrence of negative return (OCCN). The block X represents a set of control variables considered in the model. These are variables that measure

economic and financial performance of the target company's published financial statements. These are the variation of total sales (DCA), change in value added (DVA), net income (RN), operating results (REX) and financial profitability (RentFin).

Tables 9. Influence of transparency on the market reaction to the dissemination of financial statements on a 10-day window

VARIABLE	Without transparency variable				With linear variable transparency				With variable transparency group			
	RendP (1)	OCCN (2)	RendN (3)	OCCN (4)	RendP (5)	OCCN (6)	RendN (7)	OCCN (8)	RendP (9)	OCCN (10)	RendN (11)	OCCN (12)
dca	-0.0388 (0.0628)	0.0143 (0.0152)	-0.0312 (0.0192)	-0.00587 (0.0177)	-0.0272 (0.0735)	0.0140 (0.0153)	-0.0524 ** (0.0241)	-0.00156 (0.0172)	-0.0396 (0.0969)	0.0229 (0.0152)	-0.0437 ** (0.0204)	-0.00637 (0.0179)
dva	1419 (0908)	-0.000510 (0.00211)	-0.00262 * (0.00157)	-0.00440 ** (0.00205)	1527 (1088)	-0.000561 (0.00212)	-0.00400 *** (0.00150)	-0.00420 ** (0.00213)	2.790 * (1.505)	-8.18e-05 (0.00219)	-0.00285 * (0.00149)	-0.00437 ** (0.00207)
RN	-8.39e-05 (0.000247)	4.60e-05 (3.56e-05)	3.27e-05 (2.55e-05)	3.94e-05 (2.76e-05)	3.80e-05 (0.000252)	4.62e-05 (3.55e-05)	4.85e-05 * (2.52e-05)	3.54e-05 (2.80e-05)	-0.000278 (0.000324)	1.04e-05 (3.54e-05)	5.54e-05 ** (2.64e-05)	4.81e-05 * (2.90e-05)
REX	0.000117 (0.000175)	-1.79e-05 (2.44e-05)	-2.15e-05 (1.72e-05)	-2.87e-05 (1.84e-05)	4.13e-05 (0.000180)	-1.80e-05 (2.43e-05)	-2.99e-05 (1.68e-05)	-2.72e-05 (1.88e-05)	0.000302 (0.000230)	7.14e-06 (2.42e-05)	-3.42e-05 (1.77e-05)	-3.51e-05 (1.94e-05)
RentFin	5.302 * (3.073)	0.0185 (0.0758)	0.101 ** (0.0479)	0.0288 (0.0539)	3.780 (3.517)	0.0188 (0.0756)	0.115 ** (0.0478)	0.0236 (0.0547)	4.740 (3.962)	0.00422 (0.0740)	0.119 ** (0.0481)	0.0337 (0.0550)
Transp					4.767 ** (1.987)	-0.102 (0.509)	3.849 *** (0.466)	1.109 *** (0.368)				
Transparency												
Low									4.087 *** (1.377)	-0.488 *** (0.136)	0.380 *** (0.0920)	0.0903 (0.104)
Strong									1.524 (1.224)	-0.599 ** (0.262)	3.592 *** (0.714)	0.480 *** (0.166)
Constant	6.409 *** (0.872)	2.781 *** (0.182)	1.468 *** (0.114)	2.284 *** (0.153)	8.012 *** (1.265)	2.752 *** (0.230)	-0.488 *** (0.160)	2.589 *** (0.185)	6.126 *** (0.969)	2.566 *** (0.188)	1.555 *** (0.124)	2.365 *** (0.163)
observations	2268	3381	3381	3381	2268	3381	3381	3381	2268	3381	3381	3381

Note : Standard errors in parentheses *** p <0.01, ** p <0.05, * p <0.1

This table shows the results of estimation of the influence of transparency level on the market reaction to the financial statements release. In overall, the models can be written as $Y_{i,t} = \beta_0 + \beta_1 X_{i,t} + \gamma Transp_{i,t} + \varepsilon_{i,t}$. Y is the dependent variable represented in each of equations by the positive return (RendP), Occurrence of positive return (OCCP), negative return (RendN) and Occurrence of negative return (OCCN). The block X represents a set of control variables considered in the model. These are variables that measure economic and financial performance of the target company's published financial statements. These are the variation of total sales (DCA), change in value added (DVA), net income (RN), operating results (REX) and financial profitability (RentFin).

Tables 10. Influence of transparency on the market reaction to the dissemination of financial statements on a 5-day window

VARIABLES	Sans variable de transparence				Avec variable de transparence linéaire				Avec variable groupe de transparence			
	RendP (1)	OCCN (2)	RendN (3)	OCCN (4)	RendP (5)	OCCN (6)	RendN (7)	OCCN (8)	RendP (9)	OCCN (10)	RendN (11)	OCCN (12)
dca	-0.243 (0.918)	-0.0656 (0.0789)	-0.161* (0.0958)	-0.0251 (0.0353)	-0.191 (0.599)	-0.0615 (0.0773)	-0.245** (0.0997)	-0.0289 (0.0362)	-0.200 (0.593)	-0.0507 (0.0740)	-0.175* (0.0968)	-0.0289 (0.0362)
dva	-1.289 (1.455)	0.00171 (0.00315)	-0.00107 (0.00224)	-0.00457 (0.00287)	-1.248 (1.590)	0.00190 (0.00319)	-0.00242 (0.00214)	-0.00448 (0.00283)	-1.682 (2.040)	0.00207 (0.00328)	-0.00121 (0.00218)	-0.00448 (0.00283)
RN	-0.000371 (0.000399)	4.78e-05 (6.69e-05)	7.37e-06 (4.19e-05)	2.13e-05 (3.91e-05)	-0.000263 (0.000375)	4.73e-05 (6.74e-05)	2.30e-05 (4.05e-05)	3.34e-05 (4.09e-05)	-0.000378 (0.000396)	2.45e-05 (6.84e-05)	7.43e-06 (4.19e-05)	3.34e-05 (4.09e-05)
REX	0.000309 (0.000283)	-3.30e-05 (4.69e-05)	-1.92e-05 (2.90e-05)	-2.35e-05 (2.64e-05)	0.000240 (0.000268)	-3.32e-05 (4.73e-05)	-2.60e-05 (2.76e-05)	-3.14e-05 (2.76e-05)	0.000329 (0.000282)	-1.82e-05 (4.80e-05)	-1.62e-05 (2.87e-05)	-3.14e-05 (2.76e-05)
RentFin	8.163 (4.985)	0.0993 (0.107)	0.120* (0.0674)	-0.0211 (0.0746)	6.966 (5.252)	0.0991 (0.107)	0.137** (0.0672)	-0.0129 (0.0756)	7.058 (5.014)	0.0852 (0.107)	0.123* (0.0669)	-0.0129 (0.0756)
Transp						-1.040** (0.529)	0.563** (0.246)	1.468*** (0.267)				
Transparency												
Low									0.158 (0.142)	1.526 (1.351)	-0.368 (0.239)	0.107 (0.140)
Strong									0.219 (0.245)	-0.165 (1.325)	0.164 (0.369)	3.372 *** (1.010)
Constant	6.589 *** (1.365)	2.940 *** (0.282)	1.914 *** (0.189)	2.456 *** (0.231)	7.663 *** (1.705)	3.050 *** (0.368)	-0.823 *** (0.263)	2.542 *** (0.243)	2.542 *** (0.243)	6.078 *** (1.325)	2.813 *** (0.299)	1.900 *** (0.201)
observations	902	1771	1771	1771	902	1771	1771	1771	1771	902	1771	1771

Note : Standard errors in parentheses *** p <0.01, ** p <0.05, * p <0.1

This table shows the results of estimation of the influence of transparency level on the market reaction to the financial statements release. In overall, the models can be written as $Y_{i,t} = \beta_0 + \beta_1 X_{i,t} + \gamma Transp_{i,t} + \varepsilon_{i,t}$. Y is the dependent variable represented in each of equations by the positive return (RendP), Occurrence of positive return (OCCP), negative return (RendN) and Occurrence of negative return (OCCN). The block X represents a set of control variables considered in the model. These are variables that measure economic and financial performance of the target company's published financial statements. These are the variation of total sales (DCA), change in value added (DVA), net income (RN), operating results (REX) and financial profitability (RentFin).

4.3 Moderating Effect of Transparency on the Association Between the Share Prices of Non-Financial Companies Listed at BRVM and Their Financial Performance

In this final section, we investigate the influence of transparency on the association between stock prices and accounting information. To achieve this, we use the models defined by equations (6) - (7). The results are shown in Table 11 below.

Tables 11. Influence of Non-financial companies' financial statements dissemination on abnormal components

VARIABLE	Without transparency variable		With linear transparency variable		With transparency class variable	
	Price (1)	logPrice (2)	Price (3)	logPrice (4)	Price (5)	logPrice (6)
BV	0.330 (0.226)		0.316 (0.225)		0.301 (0.225)	
EPSN	-0.448 (5.126)		-0.560 (5.097)		-0.846 (5.141)	
EPSP	3.664 *** (1.388)		3.825 *** (1.384)		3.764 *** (1.378)	
logBV		0.487 *** (0.102)		0.484 *** (0.102)		0.484 *** (0.103)
logEPSn		0.0611 (0.0587)		0.0672 (0.0591)		0.0627 (0.0592)
logEPSp		0.138 ** (0.0532)		0.143 *** (0.0535)		0.139 ** (0.0535)
Transp			-246.067 (157.413)	1488 (1522)		
Transparency						
Low					-24.696 (62.299)	-0.0831 (0.607)
Strong					-126.918 ** (61.532)	-0.433 (0.598)
Constant	161 (24824)	6279 *** (0.578)	118015 * (69712)	6895 *** (0.855)	14317 (24651)	6287 *** (0.583)
truncated Results (a)						
observations	163	163	163	163	163	163
AIC (b)	4057	290	4056	291	4056	294
BIC (c)	4178	411	4180	415	4182	420
R-squared	0635	0.834	0642	0836	0648	0835

Note. Standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.1

This table shows the results of estimation the influence of transparency level on the association between current stock exchange and economic and financial performance. In overall, the estimated models can be written as $Y_{i,t} = \beta_0 + \beta_1 X_{i,t} + \gamma Transp_{i,t} + \varepsilon_{i,t}$. Y is the dependent variable represented in each of the equations by Market value (Price) or the logarithm of the share price (logPrice). The block X represents a set of variables that measure the economic and financial performance of the target company. These are the logarithm of total assets (logBV), the log of negative net income (logEPSm) and the log of positive net income (logEPSp).

It appears from this table that there is an association between stock prices and accounting data. Indeed, the change in total assets affects 49% of share price. Similarly, a positive net income influence of the company's stock price. An increase of 1% of positive net income induce a rise of 0.138% of the share price. However, we reject the hypothesis H2 that state that the financial statements transparency has no impact on the stock price of the target companies.

Indeed, whatever shape (linear or not) of the financial transparency variable, it does not influence the association between the current stock market and accounting data. Finally, note that the association between classes and accounting data is largely satisfactory with R^2 of 0.834.

In sum, the analysis concludes that financial transparency does not influence the association between stock prices and accounting data of the issuing companies. Thus, combined with the previous results, we can conclude that financial transparency influences the market reaction to the publication of financial statements; but in the longer term, it does not influence the transmission of accounting information on economic and financial performance in the stock market of target companies.

5. Conclusion

This study was initiated to question the financial transparency level of non-financial companies listed at BRVM and its influence on the transmission of accounting information for their stock. Building on the data available on the website of the BRVM, we built financial transparency scores that were included in an econometric analysis to study its mediating effect in accounting information transmission of companies listed at BRVM's share prices.

We discovered that non-financial companies show a low level of transparency in the publication of their financial statements. This is a choice that is not influenced by the financial healthiness of the target company but is the result of a structural choice. We also conclude that financial statements transparency affects the market reaction to their publication but does not moderate the association between the stock prices and the accounting data.

The results question the effectiveness of the financial reporting of listed companies in a market vis-à-vis minority shareholders. This question is essential in a context where market authorities want to make it a national, subregional, regional and international resource mobilization pedal to finance the wealth creation in the WAEMU and to support the walk towards emergence.

The findings of this research lead us to make recommendations to listed companies, market participants and regulators of WAEMU's financial market.

We suggest to listed companies' managers to significantly improve the transparency level of financial statements in accordance with the sections 846 and 852 of the Uniform Act of OHADA and the instruction No. 29/2001 of the Regional Council for Public Savings and Financial Markets (CREPMF) relative to the financial statement disclosure template. This improvement should strengthen investor confidence in these companies and ensure their adherence to their IPOs and help them fund their projects. On another hand, it is an effort to comply with their commitment to inform fairly market participants.

We suggest to shareholders a greater sophistication in taking into account the information relative to the real economic and financial healthiness of companies listed at BRVM. Otherwise, securities' purchases or sales disconnected with economic reality of listed companies is likely to entertain speculative bubbles whose role in the occurrence and amplification of financial crises in advanced markets were highlighted.

In the direction of market supervisor, it appears that it is necessary to enact minimum financial information disclosure standard on the regional capital market; from listed companies in order to prevent majority shareholders to benefit from privileged information at the expense of small investors. To this end, the Instruction No. 28/2001 relative to financial statement documents that companies listed at BRVM must submit to the Regional Council and the instruction No. 29/2001 on information disclosure by listed companies at BRVM should be reviewed in order to provide a uniform framework for transmitting information to investors. In addition, an attention must be pay to ensure that listed companies comply with these commitments or their amended versions. This policy should increase the confidence of small investors to the market, ensure the efficiency of IPOs and ensure the mobilization of public savings to fund organizations and wealth creation. It is, moreover, a requirement related to their role in protecting public savings.

It also allows to direct companies' financial communication policy of non-financial companies listed at BRVM, and beyond, on developing markets.

Our contribution suffers some methodological and conceptual shortcomings which deserves a lifting to enhance its contribution to knowledge's creation in the field of financial theories, to enhance financial reporting practices and to their used in securities portfolio's management strategies. It opens the way to a better understanding of the determinant of financial transparency's which is a research perspective that need to be considered.

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ⁱ <http://www.brvm.org/Default.aspx?TabId=85&language=fr-FR>, page viewed 31 July 2017

ⁱⁱ It should be noted that this figure is lower than the potential number of financial statements (186) which is obtained by multiplying the number of years of analysis (6) by the number of companies (31). This discrepancy is explained by the delisting during the period of analysis of certain companies available at start of period (CEDA Côte d'Ivoire and SARI Ivory Coast), the lack of information on the publication of financial statements of some companies over the period and by the IPO during the period (Total Senegal in 2015). In the second case, we observed that AIR Liquid Ivory Coast (2015), Movis Ivory Coast (2010, 2011, 2012), SICOR (2010, 2011, 2012, 2015), Total Senegal (2015) and UNILEVER Ivory Coast (2015) hasn't published financial statement for some period.

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