

The reputational impact of a public scandal in the Portuguese Banking Sector

Leonor Draiblate

Dissertation written under the supervision of Professor Geraldo Cerqueiro

Dissertation submitted in partial fulfilment of requirements for the MSc in Finance, at the Universidade Católica Portuguesa, April 2022.

Abstract

When new information is released in the market, investors' reactions are reflected in stock prices, according to the assumption of efficient markets of the semi-strong form.

Baring this in mind, this thesis' objective is to measure the reputational effect a public scandal has on Portuguese banks' stock performance. The tested hypothesis is that the announcement that the banks have engaged in some kind of financial fraud or crime will impact its market value as a consequence of the reputational damage. The approach deployed to investigate the effects on the bank's financial performance is the event study methodology, as it allows to measure any reputational effect in the form of extra financial loss/gain beyond the expected. The event selected will be the first time it was official that the banks engaged in some kind of fraud or misconduct. The actions that took place after the day of the scandal will be equally studied resourcing to multivariate regressions. The banks chosen to be studied were Millennium bcp and Banco Espírito Santo, since both banks got themselves into two of the biggest banking scandals in Portuguese history. The results proved the initial hypothesis to be correct, as the majority of the results in the event window showed an overall statistically significant negative impact on the stocks' expected returns.

Title: The reputational impact of a public scandal in the Portuguese Banking Sector

Author: Leonor Draiblate

Keywords: Scandal; Fraud; Corruption; Media; Financial Performance; Banking Sector; Event Study; Main Event; *Event window*; Sub-event; Multivariate Regression.

Abstract (Portuguese Version)

Quando nova informação circula no mercado, as reações dos investores são refletidas nas cotações das ações, segundo a hipótese dos mercados eficientes na forma semi-forte.

Assim, esta tese objetiva quantificar o efeito reputacional que um escândalo público tem na cotação das ações dos bancos portugueses. A hipótese testada é como é que o conhecimento público de algum tipo de fraude ou crime financeiro cometido por um banco, irá impactar o seu valor de mercado, sob a forma de estragos reputacionais. A abordagem para investigar os efeitos causados na *performance* financeira do banco baseia-se na metodologia de um *event study*, uma vez que permite medir o efeito reputacional na forma de perdas ou ganhos financeiros, além do expectável. O evento selecionado é o dia em que se tornou oficial que os bancos tinham atuado de forma fraudolenta. As ações tomadas nos dias seguintes ao escândalo são igualmente analisadas, com recurso a regressões multivariadas. Os bancos estiveram envolvidos em dois dos maiores escândalos da banca portuguesa. Os resultados provararam que a hipótese colocada se confirma, dado que a maioria dos resultados na *event window* mostraram ter um efeito negativo e estatisticamente significante nos retornos esperados das ações em estudo.

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Autor: Leonor Draiblate

Palavras-Chave: Escândalo; Fraude; Corrupção; Meios de comunicação social; *Performance* financeira; Banca; *Event Study*; *Event window*; Evento Principal; Evento Secundário; Regressão multivariada.

Acknowledgements

The completion of this thesis wouldn't have been possible without the help and support of some special people.

Many thanks to my mom, dad, sister, and boyfriend for the continuous support along the way and for giving me the indispensable guidance and motivation I needed to go through with this research.

Thanks to Católica Lisbon School of Business and Economics and supervisor, Professor Geraldo Cerqueiro, for providing me with the education and resources required to finish my dissertation successfully.

Table of Contents

| Int | trodu | ction. | | . 7 |
|-----|-------|--------|--|-----|
| 1. | Li | teratu | re Review1 | 10 |
| | 1.1. | Cris | is Management1 | 10 |
| | 1.1 | 1.1. | Crisis1 | 10 |
| | 1.1 | 1.2. | Crisis Management1 | 1 |
| | 1.2. | Cor | porate Reputation1 | 1 |
| | 1.2 | 2.1. | Definition 1 | 1 |
| | 1.2 | 2.2. | Media Coverage & Efficient Market Hypothesis 1 | 12 |
| | 1.2 | 2.3. | Reputational Risk 1 | 12 |
| | 1.2 | 2.4. | Measurements1 | 13 |
| | 1.3. | Rep | utational Losses & Misconduct Announcements 1 | 13 |
| | 1.4. | The | sis Framework: hypothesis, context, and additional value 1 | 4 |
| 2. | M | ethodo | ology 1 | 15 |
| | 2.1. | Frar | nework1 | 15 |
| | 2.1 | 1.1. | Hypothesis 1 | 15 |
| | 2.1 | 1.2. | Underlying assumptions 1 | 15 |
| | 2.1 | 1.3. | Data 1 | 16 |
| | 2.2. | Esti | mation, event, and post-event windows1 | 16 |
| | 2.2 | 2.1. | Notations 1 | 16 |
| | 2.2 | 2.2. | Event Window1 | 17 |
| | 2.2 | 2.3. | Estimation Window1 | 17 |
| | 2.2 | 2.4. | Post-event Window 1 | 8 |
| | 2.3. | Met | hod1 | 18 |
| | 2.3 | 3.1. | Main event1 | 8 |
| | | | | 1 |

| | 2.3.2. | Sub-events 1 | 9 |
|------|----------|--------------------------|-----|
| 3. | Backgr | ound2 | 20 |
| 3 | .1. Mil | llenium BCP2 | 20 |
| | 3.1.1. | Introduction to the bank | 20 |
| | 3.1.2. | Scandal | 21 |
| | 3.1.3. | The aftermath | 25 |
| 3 | .2. Bar | nco Espírito Santo2 | 26 |
| | 3.2.1. | Introduction to the bank | 26 |
| | 3.2.2. | Scandal | 28 |
| | 3.2.3. | The aftermath | 31 |
| 4. | Results | and Analysis | \$2 |
| 4 | .1. Mil | llenium bcp | \$2 |
| | 4.1.1. | Stock returns' evolution | \$2 |
| | 4.1.2. | Main event results | 34 |
| | 4.1.3. | Sub event results | 36 |
| 4 | .2. Bar | nco Espírito Santo | 38 |
| | 4.2.1. | Stock returns' evolution | 38 |
| | 4.2.2. | Main event results4 | 40 |
| | 4.2.3. | Sub event results | 12 |
| 4 | .3. Dis | cussion of results4 | 4 |
| Con | clusion | | 6 |
| Lim | itations | and Future Research4 | 17 |
| Refe | erences | | 8 |
| | Eletron | ic Newspaper Articles5 | 50 |
| Арр | endix | 5 | 54 |

Figures

Tables

| Table 1 Event, estimation and post-event windows notation | |
|---|--|
| Table 2 BCP's main event results | |
| Table 3 BCP's sub-events results | |
| Table 4 BES' main event results | |
| Table 5 BES' sub-events results | |
| Table 6 BES and BCP's absolute abnormal results | |

Graphs

| Graph 1 BCP's stock returns' evolution during the event and post-event window | . 32 |
|---|------|
| Graph 2 BCP's abnormal returns and CARs | . 35 |
| Graph 3 BES' stock returns' evolution during the event and post-event window | . 38 |
| Graph 4 BES' abnormal returns and CARs | .41 |
| Graph 5 BCP and BES' CARs evolution during the event and post event window | . 44 |

Abridgements

| AR | Abnormal Return | | | |
|------|---|--|--|--|
| CAR | Cumulative Abnormal Return | | | |
| BdP | Bank of Portugal | | | |
| CMVM | Portuguese Securities Market Commission | | | |
| ВСР | Millenium bcp | | | |
| BES | Banco Espírito Santo | | | |
| GES | Espírito Santo Group | | | |
| ESI | Espírito Santo International | | | |
| ESC | Espírito Santo Control | | | |
| ESFG | Espírito Santo Financial Group | | | |

Introduction

People around the world are constantly exposed to information through social media, e-mails, websites, television, newspapers, and other types of media. The internet made the spread of information much wider, faster, and easier, as people can so quickly come across different news about happenings on the other end of the globe. In the financial world, more specifically in the investment area, information and timing are key to grasp good investment opportunities as stock market shifts can happen so quickly that investors might miss their chances in the blink of an eye. In the first decade of 2000 information did not run as fast as it does nowadays, but it was still notable how the market reacted to news concerning people, companies, banks and so on. Actually, Portugal had plenty of financial scandals involving a lot of people in high places to entertain its citizens during this period. As a matter of fact, the Portuguese banking sector suffered 8 big scandals from 2007 to 2015 (Guerreiro & Vicente; 2015), some with repercussions until this day. From that list of scandals, two of them were selected for the purpose of this thesis for two reasons: the first being the relevance of the case and the second the availability of information and data to perform a complete and meaningful analysis. The two chosen banks are Millenium bcp (BCP) and Banco Espírito Santo (BES).

BCP was accused of financing its own capital raises, in 2000 and 2001, by conceding loans to clients who owned offshore accounts which would use them to buy the bank's shares. The Bank of Portugal (BdP) as well as the Portuguese Securities Market Commission (CMVM) investigated the case and accused the ex-administrators of the bank of market manipulation crimes and falsification of documentation. Beside this major scandal, one of the founders of the bank, the ex-president of the Supervisory Board, repaid the debt that BCP had written off to his son's company after being put under the spotlight and questioned about it.

BES case was more complex as it involved a big group of companies spread internationally. Nevertheless, the main focus is going to be around what affected BES more closely. In this sense, the scandal circulates around a prospectus that CMVM released in 2014 concerning a BES' capital raise exposing the bank of several fraudulent schemes in different layers of the group. Additionally, the ex-CEO, Ricardo Salgado, besides being involved in the misconduct in the Espírito Santo Group (GES), also had accusations and investigations about his own and sole wrongdoings, more specifically, his involvement in the biggest money laundering

scheme in Portugal at the time, which investigation was publicly called Monte Carlo operation.

As expected, both these scandalous events had strong and deteriorating reputational impacts on these institutions. As obvious as it might appear, it still is not easy to define or even measure reputational effects. In fact, the concept of reputation is widely discussed among researchers, who still find it hard to conceptualize it, for its vague particularities and low level of exploration (Rose & Thomsen, 2004).

For this paper and analysis' sake, reputation will be faced as an empirical concept, as according to Schultz, Mouritsen, Gabrielsen and Rasmussen (2000) research. Otherwise, it would not be possible to measure it.

The instrument that will be used to identify the events and their reputation's extent will be media coverage. In this sense, the event days and selected sub-events to analyse will be picked on based on what newspapers at the time published about the different cases.

This thesis goal is to study the impact of the previously mentioned scandals on the financial performance of these banks, which will be used as a measure of reputational damage.

According to Perry and Fontnouvelle (2005), it is possible to indirectly measure the consequences of a reputational event, by calculating its announcement's impact on a firm's equity value. Taking this into consideration, it is possible to carry out an event study to measure the reputational effect of the banks' scandals on their financial performances. This methodology lays on the assumptions that markets are efficient and of the semi-strong form, which entails that new information impacts stock markets and hence the information is reflected in stock prices (Fama, Fisher, Jensen, & Roll, 1969).

To perform an event study, it is crucial to determine the main event first. For each bank, this event day will be the first day it was officially confirmed that the bank was engaging in fraudulent practices. As the effects of the event may precede and follow the actual day when the scandal came out publicly, an event window period is set to analyse this post and prior periods to the main event. Getting into more detail in the method, it is necessary to compute abnormal returns for each day of the event window since they capture the difference between what was expected the stock returns to be and what they actually were. In a further analysis, the cumulative abnormal returns, which is basically the sum of all the abnormal returns since the first day of the event window until the day under analysis, will help realise the cumulative

impact the scandal had over time. When a scandal occurs, many other important actions are taken by all the stakeholders involved in the case. These happenings are also worthy of attention, as they might also affect stock prices in the event and post event window. From now on, they will be mentioned as sub-events and will be similarly analysed, using abnormal returns and multivariate regressions. To end the analysis and retrieve solid conclusions, test statistics are going to be performed on the abnormal returns, to determine if they actually explain the stock returns' behaviour.

The initial hypothesis being tested is that when a scandal becomes public, it has a reputational impact on the bank, which is translated in significant changes in the stock returns. The result from the research carried out in this paper proves that this hypothesis holds for the two cases under analysis, as the majority of the abnormal returns in the event window had a negative statistically significant impact on stock returns.

1. Literature Review

1.1. Crisis Management

1.1.1. Crisis

A crisis is an event that is not expected and jeopardizes organization's endeavours, threatening its financial performance and reputational position. Crisis often adversely affect a substantial number of stakeholders whether in a physical, emotional and/or financial way. This leads people to perceive an organization badly and thus damaging its reputation.

Crisis management gambles with the value of reputation. One important concept that helps to comprehend this relation is the concept of reputational capital, which is an organization's "stock of perceptual and social assets – the quality of the relationship it has established with stakeholders and the regard in which the company and brand is held" (Fombrun and van Riel, 2004: 32).

Still according to Fombrun and van Riel (2004), this source of capital can be accumulated through the passing of time and possibly aid the organization in the post-crisis management. As expected, a crisis will cause reputational damages which entails reputational capital lost. If an organization was able to hold a favourable pre-crisis reputation, it has created a safety net against the reputational loss it suffers as the crisis hits. It will be in a better position than organizations which could only built a neutral or unfavourable reputation, since it will have more reputational capital to spare. This beneficial position leads to less losses and a quicker rebound. Finally, these researchers also report that event-based studies provide evidence that holds the theory of reputational capital's effect while examining stock prices (e.g., Gregory, 1998; Knight and Pretty, 1999). This is a particularly interesting finding for this thesis, since it will provide a ground of comparison between the effects on the stock prices during the results analysis.

1.1.2. Crisis Management

Crisis management is key to a firm's survival, since a crisis can make irreparable damages to its organizational reputation and hence impact the way stakeholders interact with the organization (Barton, 2001; Dowling, 2002). When used properly, post crisis communication can repair/avoid reputational damage (Coombs and Holladay, 2005). Since this field of expertise is based on case studies, there is not too much information on how stakeholders react to crisis or even to the used response strategies (Ahluwalia et al; 2000; Dean, 2004), so it is necessary to use evidence-based guidelines for crisis management, with a scientific scope from empirical research (Rousseau, 2006).

1.2. Corporate Reputation

1.2.1. Definition

An organization's reputation is a valuable intangible asset since it can attract new investments, clients, employees; enhance financial performance and can bring several other advantages to the firm (Carmeli and Tishler, 2005; Davies et al., 2003; Fomrun and Gardberg, 2000; Fombrun and van Riel, 2004). Anyhow, it is driven by the image that stakeholders create of the organization based on the information they gather about it (Fombrun and van Riel, 2004). This can come from multiple sources (reports, weblogs, advertising, second hand information, ...), but it is mainly retrieved from the news media. This entails why media coverage is key for reputation management (Carroll, 2004; Carroll and McCombs, 2003; Meijer, 2004).

Thus, reputation has an evaluative core and, therefore needs a reference to be determined. It is largely influenced on how stakeholders feel about how the organization is being able to fulfil their expectations for treating stakeholders.

1.2.2. Media Coverage & Efficient Market Hypothesis

As mentioned previously, media coverage is one of the main channels from which stakeholders retrieve information about firms. It is usually used to portray companies as good or bad and firms take advantage of this channel to share messages and announcements too.

This thesis will follow an event study methodology, which entails market's efficiency is of the semi-strong form. This implies the underlying assumption that stock prices react to new information that is made public about a company (Fama, 1969).

Taking into consideration the above mentioned, media coverage will be used as the tool to define the reputational events, hence when the scandals came out public for the first time in the media.

1.2.3. Reputational Risk

Banks and financial institutions face a wide variety of risks on their endeavours when dealing with their variated products, services, and lines of business. In order to prevent failure and for an institution to be perceived as safe and carry a good conduct, it is of great importance to adequately manage these risks and implement a proper management structure that includes correctly identifying, measuring, monitoring and implementing controls to the entire span of emerging and existing risks. These risks include, mainly but not solely, credit, market, liquidity, operational, legal and reputational risk (Basel Committee on Banking Supervision, 2008). For this paper, the focus will lay mainly on the latter.

Due to its intangibility, difficulty in defining, measuring, and understanding its underlying mechanisms, reputational risk is still a very intriguing area of research.

According to the Board of Governors of the Federal Reserve System (2008) the regulatory definition of reputational risk is "the potential that negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation, or revenue reductions".

1.2.4. Measurements

As stated above, reputation is highly related with the way stakeholders perceive a firm, therefore, when discussing reputational risk, it can be shortly defined as any risk that can most likely damage the image or view of the firm by third parties. Most of the damage has an intangible nature and may take time to emerge, but there is evidence that equity markets quickly respond to events that deal with reputational risk.

There are many ways for reputational risk to influence a firm's expected cash flows (basically it reduces all of the above-mentioned perks of having reputational capital) and if a reputational event minimizes a firm's cash flows, it will consequently reduce the firm's equity value. Thus, an indirect way to measure the consequences from a reputational event is to calculate the impact of an announcement on a firm's equity value, which will be the procedure carried out in this paper (Perry & Fontnouvelle, 2005).

1.3. Reputational Losses & Misconduct Announcements

Karpoff and Lott (1993) criticize the way corporate fraud is conventionally thought of. One of their arguments is that corporate fraud presents large reputational costs to a firm and represent most of the costs when a firm is charged or condemned of fraud. They use a database composed of 132 cases of alleged and actual corporate fraud from 1978 to 1987. Their findings entail that initial press reports of allegations or investigations of corporate fraud lead to an average decrease of 1,34% in the values of common stocks. When the fraud is against government agencies, this value amounts to 5,05%. As a matter of fact, they also found that only less than 10% of the total market loss is due to actual court-imposed costs, penalties, and criminal fines.

Murphy, Shrieves and Tibbs (2004) examined the determinants of stock price reactions to firm's allegations of committing illegal acts and misconduct. Their findings suggest that these allegations cause "the decline in reported earning, increase stock return variability, and a decline in concordance among analysts' earnings estimates". Furthermore, they conclude that

from all types of misconducts analysed, fraud is the one which has the most negative impact on stock prices. This research also adds to the theory that might me easier for larger firms to bounce back from reputational damage from a public allegation, which reduces losses.

Cummnis, Lewis and Wei (2006) analysed the impact that operational loss events have on the market values of banks and insurance companies and find that there is a strong and statistically strong negative effect on stock price reaction to these announcement events. What is most important in this paper for this thesis is the use of cumulative abnormal returns to calculate reputational loss, since it is expressed as the loss that expects normal losses. Separately but in accordance with the previous mentioned, Cumnis et al. (2006) states that market value variations are due to stakeholders' responses as a representation of their expectations in comparison to the realistic future cash flows.

1.4. Thesis Framework: hypothesis, context, and additional value

This thesis is similar to the above-mentioned event studies, since it aims to assess the market reaction to public misconduct announcements.

The hypothesis to be tested is that an event in the form of a public scandal has a significant and negative impact on the firm's equity value, as a consequence of reputational effects.

The research will extend the existing literature by providing more empirical evidence of the influence of reputational effects from misconduct scandals on financial institutions, more specifically in Portugal, which is a topic that has not been studied in much depth so far for this geographical area and sector. Besides, it can help investors to know how to better grasp investment opportunities during these times.

2. Methodology

This chapter aims to describe the research methodology of this research. Moreover, it will point out the data used as well as the explanation of how the events and sub-events were selected and how they were treated.

2.1. Framework

2.1.1. Hypothesis

This paper's goal is to measure banks' stock price reaction to a scandal announcement with the purpose of assessing the event's reputational impact. The assumption is that the mere announcement that the bank has engaged in some kind of financial fraud or crime will impact its market value as consequence of the reputational event. Resourcing to an event study methodology, it is possible to measure any reputational effect as any extra financial loss/gain beyond the expected.

Summarizing:

H₀: The announcement of a scandal has no impact on the behaviour of returns.

H₁: The announcement of a scandal has a negative impact on returns, due to reputational effects.

2.1.2. Underlying assumptions

As stated previously it is going to be assumed that equity markets are efficient and therefore information made public will be incorporated in security prices for a short period of time.

2.1.3. Data

The data used is in a daily frequency and consists of the two different Portuguese bank's stock prices, the market returns' proxy (index STOXX Europe 600 returns), and the risk-free proxy (the yields from the German's 3 months treasury bills). All the previous were retrieved from Thomson Reuters.

The time span will depend on the case in study and the information available.

2.2. Estimation, event, and post-event windows

2.2.1. Notations

Before explaining how to settle the timeframes for the event, estimation, and post-event windows, it is necessary to indicate the notation to be used from now onwards, represented in **Table 1** and **Figure 1**. τ will be used to index return in event time.

| Notation | Meaning | | | | |
|--|---------------------------------|--|--|--|--|
| au = 0 | Event date | | | | |
| $\tau = T_1 + 1$ | Start of the event window | | | | |
| $	au = T_2$ | End of the event window | | | | |
| $L_I = \mathrm{T}_1 \mathrm{-} \mathrm{T}_0$ | Length of the event window | | | | |
| $	au = T_0 + 1$ | Start of the estimation window | | | | |
| $	au = T_1$ | End of the estimation window | | | | |
| $L_2 = \mathrm{T}_2 \mathrm{-} \mathrm{T}_1$ | Length of the event window | | | | |
| $\tau = T_2 + 1$ | Start of the post-event window | | | | |
| $	au = \mathrm{T}_3$ | End of the post-event window | | | | |
| $L_3 = \mathrm{T}_3\text{-}\mathrm{T}_2$ | Length of the post-event window | | | | |

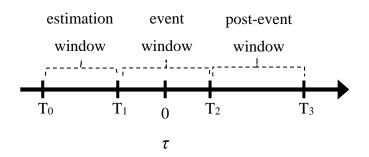




Table 1 Event, estimation, and post-event windows notation

2.2.2. Event Window

The first step to start the methodology is to define the event of interest and then the timeframe of analysis to gather security prices of the firm involved in the main event.

For this thesis purpose, the date of the event will be the best approximation of the day when each bank's scandal became public, more precisely, when the extent to which it had been carried out became widely known. This latter condition is important because in some cases there were already rumours or discussions of the scandal before it broke out. So, it is critical for this analysis to define the period that the public is most aware of the full extent of the scandal and what it compromises, to completely understand and analyse how having the most information impacts the market.

To examine the periods around the main event, it is usual to set an event window larger than just the day of the event of interest. The date of the event and the one after should be included, in other to seize the price effects which might happen after the stock market closes on the main event day. The days before the event are also interesting to analyse if it is believed that some information about the announcement is leaked before it comes out publicly.

For this thesis, the event window will be of approximately 11 days, since we will include 5 days prior and after the event date (depending on the trading days).

2.2.3. Estimation Window

When deciding on the estimation window it is important to set a period which is prior to the event window, so that the event does not influence the estimation of the normal performance model's estimates, since it is assumed that only the abnormal returns capture the event's impact.

The estimation window length will be approximately 200, meaning it will start 201 days prior to the event day and end in the day before the first day counting for the event window, so it does not overlap with the event window.

2.2.4. Post-event Window

To complement the event window analysis, a post-event window will be put under examination to access the effects of the scandal on a longer term. The short term will be considered as the 5 days after the event and the long term will be approximately two to three months later (depending on the case). The length of the time periods is short in comparison to the duration of the scandals under analysis, since the effects of an event can then be affected by other actions and incidents that occur afterwards.

2.3. Method

2.3.1. Main event

In order to access the real impact of the event on the firm, it is necessary to compute a measure of the abnormal return, which is the actual ex post return of the security, in this case daily stock prices, minus the normal return. The equation to compute it is:

$$AR_{it} = R_{it} - E(R_{it}|\mathbf{X}_t) \tag{1}$$

where AR_{it} are the abnormal returns, R_{it} are the actual returns and $E(R_{it}|X_t)$ are the normal returns, for time period *t* and each firm *i*.

This way, it is necessary to first compute $E(R_{it}|X_t)$ based on the estimation window's data.

 X_t refers to the conditioning information for the normal return model. Between the choices for modelling the normal return, the one used in this methodology is the *market model*. Thus, entailing that X_t is the market return and that there is a linear relation between the market return and the security return. This one-factor model can be translated as the following equation for each security *i* at time *t*,

$$R_{it} = \alpha_i + \beta_i R m_t + \varepsilon_{it}$$
(2)
$$E(\varepsilon_{it} = 0) \quad var(\varepsilon_{it}) = \sigma_{\varepsilon_i}^2$$

Where R_{it} is the return on the security *i* at time *t* and Rm_t represents the market portfolio, and ε_{it} is the zero mean disturbance term. α_i , $\beta_{i \text{ and }} \sigma_{\varepsilon i}^2$ are the model's parameters.

18

To properly represent the market's returns index STOXX Europe 600 Banks will be used. For each security over the estimation window period, equation (2) is estimated using Ordinary Least Squares (OLS) regressions, from which the parameters are derived.

After having the parameters estimates ($\hat{\alpha}_i$ and $\hat{\beta}_i$) it is possible to compute the abnormal returns for each period within L₂ and L₃, using the following equation:

$$ARit = rit - (\hat{\alpha}_i + \hat{\beta}_i Rmt)$$
(3)

To fully assess the impact of the announcement over the event window, it is necessary to aggregate abnormal returns. This measure is called the cumulative abnormal return (CAR) over the event and post-event window for each security i, using the abnormal returns computed in (3). The CAR can be computed with the following equation:

$$CAR_{i[T1;T2]} = \sum_{t=T1}^{T2} AR_{it}$$

$$\tag{4}$$

To test each banks' abnormal return's statistical significance at each point in time, will be used the following test statistic:

$$t_{AR_{it}} = \frac{AR_{it}}{S_{AR_i}} \tag{5}$$

Being S_{AR_i} the abnormal return's standard deviation in the estimation window, which can be calculated with the following equation:

$$S_{AR_i}^{2} = \frac{1}{M_i - 2} \sum_{t=T_0}^{T_1} (AR_{it})^2$$
(6)

Where M_i represents the number of non-missing returns.

2.3.2. Sub-events

A sub-event is an event that either happens in the event or the post-event window, after the main event takes place, hence the period chosen to pick the most important sub-events stretches approximately until two to three months after the event day. Even though the scandals' developments endured for years, it was not considered the sub-events after the two to three months after the event date, because it would most likely capture effects of other events and market shifts that would interfere with the results and the goal of this specific analysis.

The same methodology and estimation window was used to compute the sub-events' abnormal returns. Instead of using a rolling-window, a fixed estimation window was preferred

as most of the sub-events happened one or few days after the previous, thus a rolling-window would lead to the overlapping of one sub-event's event window with another's estimation windows. This would lead to the estimation window of some sub-events capturing the effects of other sub-events.

A multivariate regression was performed to measure the effect of each sub-event on the stock's returns, using an individual dummy variable for each sub-event to estimate the coefficients. The event window for each sub-events consist of one day since the subevents are very often followed one another.

3. Background

In this sections the scandals' event and subevents will be described and analysed. For each bank will be provided a brief introduction on the bank's history, where it is possible to know more about the bank's origins and endeavours; the scandal's framework, where will be explained what lead to the scandal and how it was dealt with at the time; and its aftermath, where will be described the sequence of events that followed.

3.1. Millenium BCP

3.1.1. Introduction to the bank

Banco Comercial Português (BCP) was founded on June 17th, 1985, as a limited company, with Jorge Jardim Gonçalves as its president. It was founded by a group of over 200 shareholders and an expert team of bankers. In the beginning, the bank's development was mainly focused on organic growth. Overtime, to assure its position in the Portuguese market and to increase the products' offer, it redirected to strategic acquisitions.

In March 1995, BCP acquired Banco Português do Atlântico S.A. ("Atlântico"), which was by then the biggest private bank in Portugal. By June 2000, Atlântico was embedded by BCP. In that same year, it took over Império, Banco Mello and Banco Pinto & Sotto Mayor.

After stating its position on the Portuguese banking market, BCP focused on expanding its business and reaching significant positions in Europe and Africa. It centred around businesses with strong growth perspectives and with a tight historical relation with Portugal, as Angola, Mozambique, United States of America, Canada, France, Luxemburg e Macau. In the other hand, it also centred in markets where it could export its business model, as in Poland, Greece and Romania.

By October 2003, the bank started replacing all the different brands by a single one: Millenium BCP. This rebranding took 3 years and was only finished by 2006. In Portugal, the bank also operates under the brand "ActivoBank".

In March 2005, Jardim Gonçalves left his position as president of the executive board of BCP to become the president of General and Supervisory board of BCP. The remaining managers only left three years later.

3.1.2. Scandal

The findings concerning BCP wrongdoings appeared in the aftermath of the internal fight occurring at the time between the bank's stockholders, which were split between the supporters of Paulo Teixeira Pinto, the president of the Executive Board of Directors ("Conselho de Administração") at that moment, and Jorge Jardim Gonçalves' supporters, the then president of the Supervisory Board ("Conselho Geral e de Supervisão"). The two parties could not see eye to eye on what the bank's corporate governance should be, not agreeing with each other's recommendations and future changes. Furthermore, the media published news exposing that the Jardim Gonçalves's party was planning to take Paulo Teixeira Pinto from his position, and stated it was not the first time they had tried (Robalo, 2007).

This tumultuous sequence of events ultimately ended in the beginning of September 2007 with Teixeira Pinto's resignation along with the selection of Filipe Pinhal to fill his position, as suggested by the Supervisory Board. Jardim Gonçalves rise to victory showed clearly where the power inside the bank laid (Diário de Notícias, 2007).

Shortly after his glorious victory, Jardim Gonçalves' dominance was about to be shaken.

At the weekend of 13th October 2007, newspapers headlines were claiming that BCP was going to be investigated by the Portuguese Securities Market Commission (commonly referenced as "CMVM") and the Bank of Portugal (commonly referenced as "BdP") for the accusation of having written off a debt to Jardim Gonçalves's son's firm and forgiving a loan's repayment from shareholder José Goes Ferreira.

According to the press, the amount forgiven to Filipe Vasconcelos Jardim Gonçalves's firm, Grupo V, amounted to twelve million euros and fifteen million euros for Goes Ferreira's case.

BdP was involved to investigate whether banking rules were violated in the process. According to the legislation in force at the time, financial institutions cannot grant credit directly or indirectly to the supervisory and management body's members. This prohibition is extended to the spouses and first-degree relatives or similar of any member of said bodies or to firms controlled by the same. In this sense, BCP was not acting accordingly. Even though at first the bank refused to provide information about when the loan was given and the amount considered unrecoverable or if it was approved by the Executive Board, was stated in the media to have been approved by Filipe Pinhal, the new Executive Board of Directors' president.

CMVM investigated the case to figure out if Goes Ferreira was receiving any sort of special treatment in comparison to the other shareholders, since the interest that was written off was linked to a loan that was provided to the shareholder to allow him to purchase BCP's shares in 2000 and 2001's capital increase. Other BCP's clients were put in the same situation and were accusing BCP of having mislead them into this process of buying shares with the bank's financing, however without receiving the same aid Goes Ferreira did. Goes Ferreira denied these allegations, stating not having been favoured but rather having renegotiated and readjust the loan's contract.

At the beginning of the night of 15th October 2007, BCP published a press release, signed by the Executive Board of Directors, in response to the allegations, stating that no irregularity or outline were reported by the control and audit mechanisms concerning the cases above mentioned (Millenium bcp, 2007). Anyhow, it decided to pursue with an internal investigation to reach full clearance about the matters in order to provide clarifications to the supervision authorities (Campos & Soares, 2007).

The fuzz around these allegations naturally brought back the division inside BCP, being even desired by some the resignation of Jardim Gonçalves. Nevertheless, the bank's shareholders were waiting for the authorities' feedback from their investigations to choose their position (Cordeiro, 2007).

On 19th October 2007, almost a week after the accusations against BCP first surfaced, Jardim Gonçalves saw himself pressured to pay his son's debt to the bank, even though he did not resign at the time as some were demanding. On 22nd October 2007, rumours started to spread in the media affirming he would leave his position as president of the Supervisory Board, (Cordeiro, 2007), which was quickly denied by a BCP's press release that same day (Millenium bcp, 2007).

Paying his son's debt was synonymous of assuming the fault in the accusations of the illegal act. Even though Jardim Gonçalves did not leave his position immediately, his reputation and power were being weakened and thus his dismissal was not yet out of the picture.

In the beginning of November, BCP and Banco BPI started to negotiate a possible merger agreement between the two banks, as announced on 6th November 2007. This announcement caused a positive impact in the stock price for both banks (Antunes, 2006). Unfortunately, the talks between these two institutions did not lead to the merge happening, which was announced by BCP on 25th November 2007 and afterwards by the media (Millenium bcp, 2007).

This left BCP in a difficult situation, because without the merge happening, the bank is left with a small amount of time to decide on its future governance (Cordeiro & Cabrita).

The suspicion concerning Jardim's dismissal was increasing and often discussed in the media. The rumours were soon confirmed when on 4th December 2007 Jardim Gonçalves presented his resignation letter. He would officially leave his positions of president of the Supervisory Board and president of the Executive Board of Directors on 31st December 2007 (Carregueiro, 2012).

In that same day the bank released other press releases, presenting proposals for the new management team (Millenium bcp, 2007).

On 1st December 2007, the media published several articles concerning the Goes Ferreira's case, revealing new shocking details. Goes Ferreira was one of BCP's biggest shareholders, holding 2,3% of its equity, who invested on BCP's stock, in 2000 and 2001's capital raise, using the bank's borrowed money and when the stock market crashed, lost his investments. The bank ended up covering his investment losses, registering it as unrecoverable loan in its financial reports. This happened when Jardim Gonçalves was at the forefront of the organization.

In 2005 the external auditor, KPMG, alerted to the fact that the bank had cover the liabilities of some of its biggest clients. The bank had granted loans to some clients which had offshore accounts and used them to buy the bank's shares. When BCP's shares lost their value as a consequence of the stock market crash, these clients did not had assets or any other sort of compensation to amortize the bank's loan, so the bank reduced its capital by 54 million euros to cover these losses. Nevertheless, and contrary to what the bank did with many of its big clients and investors, it did not forgive the debt of others in the same circumstances but with smaller negotiating power (Ferreira, 2007).

On 26th December 2007, Banco de Portugal detected suspicious facts that occurred in previous years carried out "at the highest level" of BCP's Board of Directors and on 28th December 2007 published a press release stating that based on a recent complaint, the launching of an administrative offense process against BCP and its administration members due to bank activities related to 17 offshore entities, which were never disclosed to BdP in prior investigations (Cordeiro, 2008). Up until that moment, BdP was only aware of 20 offshores which were disclosed on the bank's financial reports. On the same press release, BdP made clear that this action was not a development of previous investigations (Banco de Portugal, 2007).

On 28th December 2007, the media reported that Jardim Gonçalves headed his last Supervisory Board and Conselho Superior do Banco's meeting, and Carlos Santos Ferreira, former Caixa Geral de Depósitos' (CGD) President, took his successor. The remaining Board of Administration members were to be known in the following days in the upcoming BCP's general meeting, that was held on 15th January of 2008.

On 4th July 2008, Goes Ferreira did not deny that, during a parliamentary financial inquiry committee in the BCP case, he empowered Jardim Gonçalves, as the shares of his offshore

companies were used in Jardim Gonçalves' favour in General Meetings voting (Correio da Manhã, 2008).

One year later, on 22nd December 2008, BdP, alleged that those 17 offshores entities were fully controlled and managed by BCP and their exclusive use was only for artificial BCP and other institutions of the group's capital raise, through the purchase of their own shares.

According to BdP's allegations, for four years, BCP's amounted to 520 million euros in provisions, in order to deliberately hide the existence of the 17 offshores and the controlling power BCP had over them, with this relation never being registered in the bank's accounting reports (Jornal de Negócios, 2012).

3.1.3. The aftermath

Throughout the investigation, many of BCP's administrators were convicted to pay fines and were prohibited from exercising positions of any function on any financial company for five to nine years. As for Jardim Gonçalves, BCP's founder, he abandoned the bank completely in 2008 and was condemned in 2010 to pay a one million euros penalty for irregularities committed during his time in the forefront of the bank.

On 11th April 2011, the trial started at the "Tribunal de Pequena Instância Criminal de Lisboa", which turned out to be a long legal battle, going back and forth many times before settling down.

In the beginning of 2014, the Jardim Gonçalves's trial came to an end, where he was not convicted due to the fact that the judge had considered that all accusations had prescribed. Hence the trial only continued with accusations against other administrators.

During that time, CMVM accused all BCP's administrators for disclosing wrong information to the market through the "Sistema de Difusão de Informação" (system provided by CMVM where is possible to consult companies' press releases and public announcements), which lead to each of them having to pay a 500 000€ fine.

Nowadays, and after a decade and half has passed since the scandal, BCP has been able to stabilize its ownership structure, even though it is still adjusting the rest of its structure, as a consequence of the 2008's scandal impacts, 2008's international financial crisis and, also, the

adaptation to the institution's digital transformation. Nevertheless, these adjustments did not stop BCP from reaching, in 2021, a profit of 138,1 million euros.

3.2. Banco Espírito Santo

3.2.1. Introduction to the bank

Dating back to Lisbon of 1869, José Maria do Espírito Santo e Silva held "Caza de Cambio", a small currency exchange and securities business, which would later become Banco Espírito Santo (BES). Throughout the years, more specifically until 1920, the business expanded through the foundation of many banking institutions. When World War I ended, the business became a public limited liability company named Banco Espírito Santo, SARL. During the 20s, despite of the global political, economic, and social unrest which lead many banks to bankruptcy, BES strengthened its position, ending up among the five biggest private banking institutions by 1926.

The new governance model implemented in 1932 introduced a new phase of consolidation and expansion for BES. The bank reached in just four years the forefront of the Portuguese private banking sector, by, among other factors, growing its retail business branch, increasing its market share, and diversifying its baking transactions. In 1937, after the bank merged with Banco Comercial de Lisboa, its name changed to Banco Espírito Santo e Comercial de Lisboa (BESCL).

In the 50s BES was deeply involved and had a significant role in the internationalization of the Portuguese economy, but only expanded the bank internationally in the 70s, by confounding the Libra Bank and the Banco Inter Unido, in Luanda with the First National City Bank of New York.

Still during the 70s, a decree-law was put in force which nationalized all the institutions holding national credit with headquarters in Portugal. As it prevented the Espírito Santo Group (GES) from operating in Portugal, BESCL focus its business internationally, more particularly with Brazil, Switzerland, France, United States and Luxembourg.

When the private banking section reopen in Portugal during the 80s, GES returned to Portugal and jointly with the Caisse Nationale du Crédit Agricole (CNCA) founded the Banco Internacional de Crédito (BIC), the Espírito Santo Sociedade de Investimentos (ESSI), the Companhia de Seguros Tranquilidade and the Banco Espírito Santo (BES).

During the 90s the bank enhanced a major expansion after being reprivatized, operating in twenty-five countries, in more than 650 branches and in several sectors (Commercial Banking, Investment banking, Fund Management, Insurance, Brokerage, between others), reaching an average market share of 20,3 per cent. All this granted the bank the second place as the largest Portuguese bank and the most well-known Portuguese bank internally, besides being the ninth largest contributor to the NYSE Euronext Lisbon.

During the reign of Ricardo Salgado, commonly referenced to as the "Dono Disto Tudo" ("Owner of all this") and officially considered the most powerful businessman in Portugal, the bank witnessed the highest and lowest points of its existence.

BES continuing having a key role in the Portuguese economy, reaching a 25,5% market share in the enterprise market in 2013. It had a major influence in enhancing the Portuguese small and medium enterprises and had major stakes in large non-financial companies, such as Portugal Telecom.

3.2.1.1. Espírito Santo Group's corporate structure

The Espírito Santo Group (GES) is composed of many institutions in a chain of direct and indirect investments, so it is necessary to explain its structure to get a solid grasp of the scandal.

Institutions such as Espírito Santo International (ESI), Espírito Santo Control (ESC), Espírito Santo Financial Group (ESFG), Rioforte, Banco Espírito Santo (BES), were part of the GES, acting in the financial and non-financial sectors.

ESC was the top holding of GES, through which the Espírito Santo family controlled the group's firms, which in 2014 held 56,6% of ESI (Jornal de Negócios, 2014), that functioned as the intermediate holding and had a key role in the unveiling of the scandal. Under the control of ESI laid the rest of the GES, through direct and indirect investments. ESI held 100% of Rioforte, a firm that acted both on the financial and non-financial sector. It controlled

dozens of commercial companies (such as the Tivoli hotels, as well as other firms in the health, energy, real estate and agriculture sectors). Besides this non-financial branch, Rioforte also controlled, in 2014, 49,3% of ESFG (Jornal de Negócios, 2014), which was based on Luxembourg. The ESFG owned 25% of BES and 100% of the insurance company Tranquilidade, at the time.

The GES' complex structure was built to benefit and aid the Espírito Santo family, since it allowed them to cover and engage in fraudulent acts, misconduct, and corruption.

3.2.2. Scandal

Many events contributed to the disastrous end of BES, which created a snowball effect that ended up crashing the management of the bank while exposing the magnitude of the actual crisis that existed in the different hierarchy the group. For that reason and for the sole purpose of this thesis, the scandal will be described briefly and only focus on the main events related with the BES during a relative short period of time, in comparison with the development and antecedents of the whole GES case.

In the beginning of 2014, BdP demanded an external audit on ESI, to guarantee that national retail investors which had invested in commercial paper were not in risk (Visão, 2017). On May 20th of 2014, the results of the investigation were made public in the CMVM's prospectus concerning the BES future capital raise, for the first time. The main findings suggested several problems inside GES.

First, irregularities were detected in ESI's financial reports and the GES's holding was in a severely bad financial situation. ESFG, the top firm of the financial branch of GES, decided to also execute an internal audit and reported to have also found irregularities in ESI accounts and publicly admitted fearing that these circumstances would affect BES reputation and share price. The risk of reputational contamination was relevant, according to the bank, since some of the previous members of ESI's board of directors were current members of the ESFG and BES's board, at that moment. Nonetheless, the bank emphasized that it was not responsible for ESI's financial situation since ESFG had enforced measures to preserve BES from possible defaults from ESI that could affect the bank. At stake was the 700 million euros provision took by ESFG at the end of 2013, as imposed by BdP, with the intent to shield BES

from the potential risk it was exposed to from ESI, more specifically, the commercial paper that ESI issued and was held by BES's retail clients, which amounted to 395 million euros (Gago, 2014). The supervisor worried if the GES' non-financial companies, such as ESI, were not capable of repaying the BES' clients' commercial paper (Lusa, 2014).

Secondly, the prospectus acknowledged that the Angolan government wrote off a major part of BES Angola (BESA)'s credit, around 74% of the outstanding debt, to protect BESA of possible delays and infringements.

Finally, the prospectus referred to the ongoing and previous investigations on the bank. Started by mentioning that the Espírito Santo Bank, the BES's bank in Florida, was being accused of illicit practices and not complying with money laundering legislations (Diário de Notícias, 2014), carried out by the board members of the Banco Santos, a Brazilian bank which became insolvent in 2005 (Jornal de Negócios, 2014). A lawsuit against Espírito Santo Bank was filed and at stake was a fine of 38,7 million euros to compensate for losses and damages. BES contested the allegations (Jornal de Negócios, 2014).

Along these lines, the capital raise's prospectus also mentioned that the BES's London branch needed to review its money laundering procedures and that there were ongoing investigations on the board and management members of BES, concerning inside trading.

On the following day, May 22nd, the then President Ricardo Salgado stated in an interview with Jornal de Negócios that assumed part of the responsibility with ESI's administration for what had happen but emphasized that he was the leader of the financial branches of the group, which left ESI out. Nevertheless, he refused to leave his position, justifying that many others had also committed errors in the group. Additionally, the responsible for ESI's accounting, Francisco Machado da Cruz, had already assumed the mistakes he committed. He also justified the actions that took place with the 2008 crisis, saying it took a hard hit on the group which lead to poor judgment and giving less attention to the non-financial business area. Concerning the allegations regarding BESA, he defended himself and BES by stating there had been management issues and he had been prevented from realizing of the existing problems sooner because he could not access the computer services of that subsidiary (Jornal de Negócios, 2014).

On May 27th , occurred the capital raise of 1045 million euros, stained by the financial irregularities presented on the CMVM's prospectus (Lusa, 2014). Still in this day, having a

week passed since the announcement that ESI was in a bad financial state, BES passed the first rating test by Moody's.

Later, on June 13th, after KPMG had detected several anomalies on the bank's accounts, it became public by Salgado's accountant that the bank's CEO knew about this all along.

June 20th was the first time it was confirmed that Ricardo Salgado as well as most of the rest of the Espírito Santo family would leave their positions in BES for good, to finish with the renovation of the bank's administration triggered by BdP months ago. Discussions concerning Ricardo's succession started off, being Morais Pires the preferable choice of the ex-president (Antunes, Machado, & Carregueiro; 2014).

The new BES administrators, Amílcar Morais Pires and Joaquim Goes, convene a conference call with market analysts to smooth market reactions, which worked miserably, at the end of June. (Jornal de Negócios, 2014)

July started off positively for BES, as in the first day of the month news sparked that BES had a safety-net to guarantee its clients savings were secure, as it could always seek for liquidity near the European Central Bank or source public aid, in case of need (Jornal de Negócios, 2014).

The latter good news shortly prevailed, as only nine days later the trading of BES and ESFF's stocks and obligations were suspended. July 10th started with steep downfalls on the share prices which were already affecting the European market overall. (Jornal de Negócios, 2014)

Concerns related with GES financial capabilities emerged as news regarding Banque Privée Espírito Santo, in Switzerland, announced, in that same day, it was struggling with paying back to some of its clients which had investments in ESI. BES quickly responded to these scandalous news, declaring that same night that the potential losses BES could suffer from its exposure to GES would not comprise its financial and accounting ratios. (Diário de Notícias, 2014)

The bad news kept on coming, as only a week after, the Portuguese Finance Minister guaranteed that GES nationalization was completely out of the picture, and that no recapitalization plans fund publicly would take place. (Diário de Notícias, 2014)

On July 24th, Ricardo Salgado was held defendant and took to court, at the Tribunal Central de Instrução Criminal, after being detained at his own home, as a result of the Monte Carlo operation that had been taking place for years. The Monte Carlo operation was investigating the biggest money laundering scheme in Portugal so far. He was bailed out with a fee of 3 million euros (Visão, 2017).

Unfortunately for BES, July did not end as gracefully as it began, in just the last two days of the month BES registered a record loss of 3 577,3 million euros in the space of six months, compared with the 237,4 million losses of the first semester of 2013. Additionally, BdP released a press release alleging that recent findings expose extreme prejudicial management actions in BES which would lead to penalties and criminal consequences for the previous administrative team lead by Ricardo Salgado. Moreover, BdP retrieved all the voting rights from the Espírito Santo family, ultimately ending their control over the bank. CMVM discussed the suspension of the trading of BES's shares, which actually occurred on the first day of august (Diário de Notícias, 2014).

The cherry on top was the official announcement of the bank's resolution on August 3rd (Visão. 2017).

3.2.3. The aftermath

BdP proposed BES resolution on August 3rd deciding to split the bank in two different banks. Given BES had no longer a counterparty status with ECB and taking in consideration the systematic risk involved in the possible BES' bankruptcy, this decision ended up being quickly approved by the European Commission.

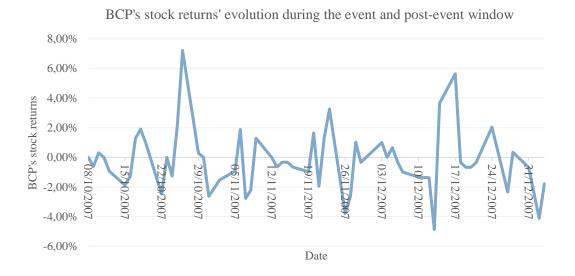
In summary, BES remained as the "bad bank" with the toxic assets and Novo Banco was created and incorporated the enduring healthy assets, staff and so on, having received a 4,9 million euros injection from the "Portuguese Resolution Fund".

These resolution plan's goal was to guarantee the endurance of BES's ongoing services at that time, meanwhile arranging it to be sold in the future to private parties (Visão, 2017).

4. Results and Analysis

In this chapter, the results of this study and respective analysis will be presented. The analysis will be performed for both banks equally and separately. For each bank, the stock return's evolution during the event and post-event window will be firstly analysed to depict how the price reacted in the days of the events under analysis. Only in the following section it will be possible to determine if, in fact, the main event caused a significant change on the expected stock returns. Afterwards, the sub-events regressions' outputs will be presented and examined.

4.1. Millenium bcp



Graph 1 BCP's stock returns' evolution during the event and post-event window

4.1.1. Stock returns' evolution

The stock price started to decline mid-July, most likely due to the internal stockholder's fight that occurred during the summer of 2007. The price never recovered to the same level during the event and post-event window, as it kept decreasing through time.

October 15th was the first Monday after the weekend when it was first made public that BCP was going to be investigated by the authorities due to possible fraud and law violations. Not only the allegations themselves were troublesome, but also stakeholders were worried that the

two cases exposed were not the only ones. Moreover, these news' release brought back friction inside the board plus the public was concerned about the administration's stability (Campos & Soares, 2007). As illustrated in **Graph 1**, the return became negative that same day which might represent exactly all the worries and insecurity the shareholders and possible investors were dealing with at the time. As a matter of fact, by the end of that same day each share was worth 1,87% less than the last trading day. It is also possible that the news were buffed by the press release published by BCP in that same night alleging that no misconduct had been detected.

Less than a week after these scandalous news came out, the returns increased reaching a peak in October 18th, the day BCP released the results from the 3rd trimester of the year. Meanwhile, trimestral results from Intel, United Technologies and JPMorgan Chase positively impacted the North American and European stock markets that same day. Lisbon was also positively impacted by this effect, having the PSI-20 recovered 0,8%, annulling the previous day devaluation, being BCP and EDP the main responsible for this rebound (Santos, 2007).

From October 19th to the 22nd, Jardim Gonçalves paid the debt that had been forgiven to his son and rumours concerning his dismissal started to spread in the media. The decline in the stock price is notable during this period, as the returns suffer a sharp decline, as this act could be perceived as the ex-president of the Supervisory Board indirectly admitting his fault in the public's eye.

On October 25th and on November 6th the returns reached considerable peaks, which is in line with the days that BCP announced it would analyse the merger offer with BPI and the beginning of negotiations in that sense, respectively. These statements appear to have risen hope among investors, as BPI was also one of the banks being suggested by financial analyst to overweight after the market's rebound previously mentioned. The returns were oscillating from that point onwards, until it suffered a sharp decline on November 26th, a day after the banks revealed that the negotiations had ended, deciding on not sealing the merger, after a month of investors receiving uplifting and demotivating news concerning the possible merger.

Surprisingly, on December 1st and 4th, the days new information was made public concerning Goes Ferreira's case and when was announced publicly that Jardim Gonçalves was leaving his positions at the end of that same year, the market does not seem to have reacted much.

During the last days of the year, the returns started to decrease again since in these days was announced several game changing news, such as BdP releasing a press release stating it would launch an administrative offense process against BCP, based on new findings.

4.1.2. Main event results

The main event selected for BCP would have to be the first time it was made public that the bank did some kind of misconduct. In accordance with the scandal description in section 3.1.2., the first time the press wrote about BCP's wrongdoings, concerning the particular scandal under analysed, was at the weekend of October 13th in 2007. Since it was on a weekend, the event day chosen to perform the event study had to be October 15th in 2007, the first trading day after.

| | t | E(R) | AR | CAR | t-stat | Significance level | | |
|------------|-----|--------|--------|--------|--------|--------------------|------|------|
| Date | | | | | | α=10% | a=5% | α=1% |
| 22/10/2007 | t+5 | -6,40% | -1,47% | -1,26% | -1,20 | YES | YES | YES |
| 19/10/2007 | t+4 | -3,00% | 1,55% | 0,20% | 1,27 | YES | YES | YES |
| 18/10/2007 | t+3 | -2,03% | 2,56% | -1,34% | 2,09 | YES | YES | YES |
| 17/10/2007 | t+2 | -2,71% | 0,77% | -3,90% | 0,63 | YES | YES | YES |
| 16/10/2007 | t+1 | -5,12% | -0,57% | -4,66% | -0,46 | YES | YES | YES |
| 15/10/2007 | t | -5,80% | -1,06% | -4,10% | -0,87 | YES | YES | YES |
| 12/10/2007 | t-1 | -4,85% | -1,32% | -3,04% | -1,08 | YES | YES | YES |
| 11/10/2007 | t-2 | -3,92% | -0,81% | -1,73% | -0,67 | YES | YES | YES |
| 10/10/2007 | t-3 | -3,70% | 0,21% | -0,91% | 0,17 | YES | YES | YES |
| 09/10/2007 | t-4 | -4,53% | -1,12% | -1,12% | -0,92 | YES | YES | YES |

Table 2 BCP's main event results

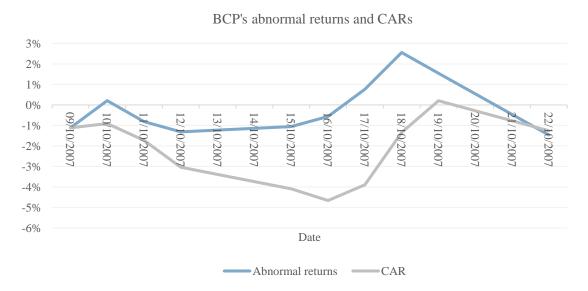
In **Table 2**, it is possible to see the event window chosen to analyse if this event had a significant impact on the stock returns or not. The event window stretches from four days prior to the event (t-4) until five days after (t+5). This period of time was chosen, as mentioned before, to capture the event's effects around its date of occurrence. Moreover, it is also illustrated the expected returns [E(R)], the abnormal returns (AR), the cumulative

abnormal returns (CAR), the t-statistic and the testing results for each significance level chosen (10%, 5% and 1%).

To perform the analysis, it is necessary to look more specifically to the AR, CAR and the significance levels, since it is only possible to determine if in fact the event had an impact on the stock returns if the abnormal returns in the event window are statistically significant.

According to the results, the abnormal returns were all significant in the event window. This entails that the event had an impact on the stock returns before, during and after the day it was made public that BCP was going to be investigated by BdP and CMVM for committing fraud and law violations.

As illustrated in **Graph 2**, the cumulative abnormal returns kept becoming more and more negative during the event window but recovered around the day the third trimester results were announced, suffering a steep increase starting two days prior to it, probably due to speculation and/or insider trading information coming out before the results actually became public. As a matter of fact, by comparing the abnormal returns in absolute terms, October 18th was the day that had the biggest impact on the stock normal returns, which will be later analysed in more detail in the sub-events section. However, this rebound effect did not last long, as in the following day the CARs started to decrease constantly as more negative and upsetting news about the scandal emerged.



Graph 2 BCP's abnormal returns and CARs

During the event window, the CARs were almost continuously negative, except for the days around the trimestral report release day, when this trend was shortly reversed. Nevertheless, it is clear that the event had a significant negative impact in the stock returns, which validates the initial hypothesis that "an event in the form of a public scandal has a significant and negative impact on the firm's equity value, as a consequence of reputational effects".

4.1.3. Sub event results

The sub-events analysis will allow to determine if the actions taken after the main event had or not a significant impact on the stock's returns.

| Date | Coefficient | Sigr | nificance lev | /el |
|------------|-------------|-------|---------------|------|
| Date | Coefficient | α=10% | α=5% | α=1% |
| 31/12/2007 | -1,65% | YES | YES | NO |
| 28/12/2007 | 0,73% | NO | NO | NO |
| 03/12/2007 | 1,34% | NO | NO | NO |
| 04/12/2007 | 1,21% | NO | NO | NO |
| 26/11/2007 | -2,93% | YES | YES | YES |
| 06/11/2007 | 1,50% | NO | NO | NO |
| 25/10/2007 | 1,15% | NO | NO | NO |
| 22/10/2007 | -1,40% | NO | NO | NO |
| 19/10/2007 | 1,61% | NO | NO | NO |
| 18/10/2007 | 2,62% | YES | YES | NO |

Table 3 BCP's sub-events results

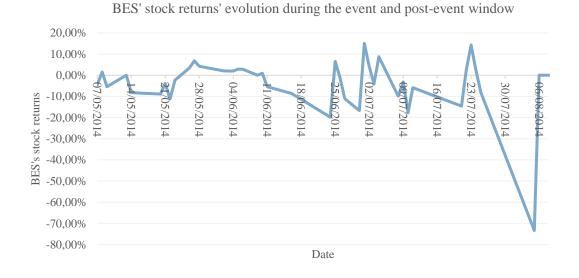
The results presented on **Table 3** were derived from a multivariate regression composed of ten dummy variables (one for each sub-event), thus each coefficient should reflect the actual impact each sub-event had on the stock's returns that day, presented on Appendix 1. As the results show, only three sub-events had a statistically significant impact on the stock returns, which were the day the third trimester results were published (18/10/2007), the first trading day after BCP and BPI announced that the merger between the two institutions was not going to happen (26/11/2007) and the day Jardim Gonçalves officially left his positions in BCP (31/12/2007).

In accordance with the previous analysis, October 18th had a great positive impact on the stock returns, as if it did not happen, the stock return would not have increased, on average, 2,62% that day. This explains why the stock price increased shortly after the scandal came out public (13/10/2007), contrary to what was expected. This indicates that there is a 95% probability that the stock returns increased, on average, 2,62% that day due to the result's release, and if it had not happened, the stock price would have dropped more drastically.

The sub-event with the greatest impact on the stock returns, in absolute terms, was on November 26th. There is less than 1% probability that the stock returns did not react due to the announcement of the merger's annulation. In fact, the expected stock returns were, on average, 2,93% lower that day, due to this announcement. These results are not shocking, as investors and shareholders were hopeful that this merger would happen to help fix the bank's current governance situation, at the time, as the bank was going through a hard time not only due to the scandal itself but also because it reignited the internal fight for power inside BCP's administration. Without the merger, BCP had to figure out in a short time what should be the solution for their decadent governance structure.

Lastly, Jardim Gonçalves leaving BCP permanently and officially caused the stock returns to decrease, on average, 1,35% that day, with a 95% level of confidence.

4.2. Banco Espírito Santo



4.2.1. Stock returns' evolution

Graph 3 BES' stock returns' evolution during the event and post-event window

BES' stock price started to decline in the beginning of February, when it was announced that the GES' holding company would be the target of an investigation performed by Banco de Portugal.

However, it was on May 7th that the price started to decline more harshly when BES' shareholders reinforced their trust on the bank's leadership. Looking backwards, this did not seem to be positively perceived by the market, which responded with a negative stock return of -4.51% in that day.

From then on, more relevant events took place. On May 15th, BES would announce a capital raise of 1 045 million euros for 0.65 euros a share (1 607 million new shares at a 38.5% discount price). This capital raise would be supported by Credit Agricole, which would mark the last action of the French bank as part of the alliance between the two banks. Furthermore, on May 15th, it became public that the family that owns BES would use this capital raise to reduce its position in the ownership of the bank.

On May 20th, it became public that the internal and external audit would find that the bank is in significant financial trouble, resulting on a -8.93% stock price decrease.

On May 22nd, on an interview, the then BES president Ricardo Salgado would mention the bank's poor situation and partially take the blame for the undergoing crisis. Nevertheless, he refused to step down as CEO. As a result, the market undercut the stock price by -11.22%.

On May 27th the situation would get a little better for BES before it got worse, as the credit rating agency Moody's alleged that the overall public protection around BES would protect the bank from major risks, which resulted on a 6.82% stock price increase.

Then, between the 17th and the 24th of June, several events took place that took down the share price even further. Firstly, the annual shareholder meeting was postponed. And then, as it became public that the CEO would finally step down, so would the rest of the family members step back from the bank's management and following the rumours of a hostile environment within the family regarding the CEO's successor, the stock would suffer a serious devaluation of nearly 20% on June 24th.

On a failed attempt to smooth the market's concerns, BES' conference call would dig a deeper hole on the stock returns, resulting on a -16.67% stock return on June 30th.

On July 1st, several news announced that the clients' credit would not be at risk, as the bank could possibly reach out to European Central Bank (ECB) or public funds to seek liquidity, which boosted the stock price on 15%.

On July 9th and 10th, the good news would be short-lived. On these days, several clients file complaints against the bank, and Moody's downgrades severely BES' rating. This would result on a suspension of the stock's trade on the market, after it had devaluated 17.74%.

On July 17th, Portugal's Finance Minister announced no recapitalization through public funds would be performed, which resulted on a -16.67% stock return.

On July 25th, after it was announced that the former CEO Ricardo Salgado faced criminal charges for money laundering, the bank would be on the lookout for another audit by the BdP and CMVM.

Finally, on July 31st criminal charges would be brought up against the former management team, and as of August 1st, all trading of BES' stock would be suspended, following a -73.33% stock devaluation.

4.2.2. Main event results

Following the same train of thought as in BCP's analysis, the main event selected would have to be the first time it was unveiled the fraud schemes carried out by BES. In BES' case, this was on May 20th, 2014, the day the CMVM's prospectus concerning BES capital raise was published and revealed several problems inside the group. Even though some other actions and accusations had taken place before this event, this was the chosen one as it was the event that unleashed the series of consequences that ultimately end with the resolution of the bank.

In **Table 4** the results of the event study for BES are presented. In this case, the event window starts five days prior to the event (t-5) and finishes five days after (t+5).

| | | | | | Signi | ificance level | | | | |
|------------|-----|--------|-----------------|------------|-------|----------------|-----|-------|------|------|
| Date | t | E(R) | Abnormal return | return CAR | | CAR t-stat | | a=10% | a=5% | a=1% |
| 27/05/2014 | t+5 | 0.83% | 5.98% | -44.45% | 1.83 | YES | NO | NO | | |
| 26/05/2014 | t+4 | 1.37% | 2.10% | -50.44% | 0.64 | NO | NO | NO | | |
| 23/05/2014 | t+3 | 1.03% | -3.38% | -52.54% | -1.03 | NO | NO | NO | | |
| 22/05/2014 | t+2 | 0.65% | -11.94% | -49.16% | -3.65 | YES | YES | YES | | |
| 21/05/2014 | t+1 | 1.74% | -5.70% | -37.22% | -1.73 | YES | NO | NO | | |
| 20/05/2014 | t | -0.17% | -8.80% | -31.52% | -2.69 | YES | YES | YES | | |
| 14/05/2014 | t-1 | 0.97% | -9.22% | -22.73% | -2.82 | YES | YES | YES | | |
| 13/05/2014 | t-2 | 1.06% | -1.10% | -13.51% | -0.34 | NO | NO | NO | | |
| 09/05/2014 | t-3 | 0.00% | -5.48% | -12.40% | -1.68 | YES | NO | NO | | |
| 08/05/2014 | t-4 | 2.70% | -1.20% | -6.92% | -0.36 | NO | NO | NO | | |
| 07/05/2014 | t-5 | 1.14% | -5.72% | -5.72% | -1.75 | YES | NO | NO | | |

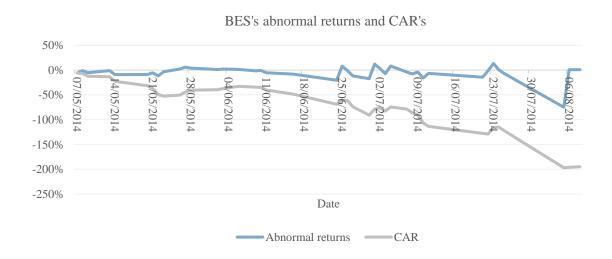
Table 4 BES' main event results

BES' results show that not all days in the event window were statistically significant (only 7 out of 11). At a 90% confidence level, it is possible to state that information concerning the case was already circulating around investors as three of the days prior to the event date are statistically significant (10%), being even the trading day prior to the main event statistically significant at 1%. These results are not surprising, since the bank and the then president were under surveillance of supervisors for the past year. The two days that followed the event day

were statistically significant, which shows the immediate and strong negative impact that the CMVM capital raise prospectus had on investors.

The CARs plot on **Graph 4** illustrates the almost continuous negative impact that each day in the event window had on the stock's returns, as the abnormal returns downfallen. However, it is possible to see some short-lived bounce backs, per example, on the day that Moody's asserted that the BES' safeguard shielded it from major hazards, and the day it was announced that BES could possibly seek support from ECB or public funds, which might have formulated positive and temporary expectations from investors.

The day that seems to have had the biggest impact on stock returns, in absolute terms, was the first trading day after it was announced that the former management team was criminally prosecuted (on 31/7/2014), that CMVM was going to suspend the trading of BES stocks (on 1/8/2014) and that the bank's resolution was made public (on 3/8/2014), as on August 5 is registered the higher abnormal return, in absolute terms. Only in the following sub-event analysis it is possible to determine if these announcements were in fact in the nature of this impact.



Graph 4 BES' abnormal returns and CARs

As in BCP, here is also notable that the event had a significant negative impact in the bank's reputation which ultimately is reflected on the statistically significanT abnormal returns' negative values and the increasingly negative CARs value's evolution during the event and post-event window. That stands in line with the initial hypothesis.

4.2.3. Sub event results

As previously mentioned, the following analysis will contribute to the conclusion of what actions that occurred after the main event actually impacted the stock returns.

On **Table 5** are presented the results from the multivariate regression with the 11 dummies for each of the 11 sub-events under analysis (Appendix 2). For BES, only four sub-events are not statistically significant. For the sake of the main event analysis, only the sub-events which were previously mentioned will be analysed since they are the most interesting to discuss and less straight forward.

| Date | Coefficient | Sig | gnificance level | | | |
|------------|-------------|-------|------------------|------|--|--|
| Date | | α=10% | a=5% | α=1% | | |
| 05/08/2014 | -73,7% | YES | YES | YES | | |
| 25/07/2014 | -5,9% | NO | NO | NO | | |
| 21/07/2014 | -13,1% | YES | YES | NO | | |
| 10/07/2014 | -15,0% | YES | YES | YES | | |
| 09/07/2014 | -2,9% | NO | NO | NO | | |
| 01/07/2014 | 13,2% | YES | YES | NO | | |
| 30/06/2014 | -16,2% | YES | YES | YES | | |
| 24/06/2014 | -19,2% | YES | YES | YES | | |
| 16/06/2014 | -7,2% | NO | NO | NO | | |
| 27/05/2014 | 7,1% | NO | NO | NO | | |
| 22/05/2014 | -10,8% | YES | YES | NO | | |

Table 5 BES' sub-events results

As previously mentioned, August 5th was the day with the greatest impact on stock returns of the post event window, in absolute terms, and since its coefficient is statistically significant at a 1% level. Therefore, it is possible to be 99% confident that the declaration that the former management team was criminally prosecuted, that CMVM was going to suspend the trading of BES stocks and the announcement of the bank's resolution was made public caused the returns to be, on average, 73,7% less than expected.

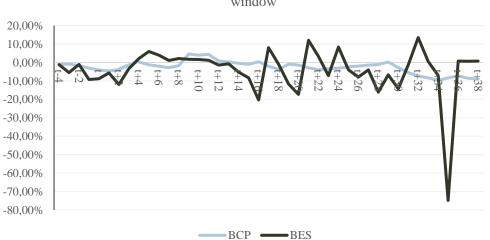
Interestingly, only the day (1/7/2014) that rumours started sparking concerning BES guarantees on securing its clients savings with the aid of the European Central Bank had a statistically significant impact on the stock returns. The Moody's similar confirmation that BES risk shields were reliable does not seem to have risen investors' expectations to the point of actually impacting the stock price (on 27/5/2014). The possible reason behind this may lay on the "Too Big to Fail" theory, which entails that the governments cannot allow big firms (more specifically, major banks and financial institutions) to fail, simply because the risk of the devastating consequences of the failure of an institution like that for the underlying sector or, in more general terms, the economy itself is more troublesome than enabling it to go bankrupt. BES was one of these big intuitions that impacted not only Portuguese but also European and other international markets. Thus, the rumour that ECB would help BES stand in the face of all the adversities it was being submitted to, most likely felt as a relieve for investors and fed the said theory.

4.3. Discussion of results

Once the two individual analyses are concluded, it is possible to compare the results and understand if there are any kind of similarities or interesting differences between the two cases.

Starting by the event window, in both cases the day of the event had a negative and statistically significant impact on the stock returns, as the abnormal returns in these days were negative and significant at a 1% level.

In terms of the post event window, as illustrated in **Graph 5**, the cumulative impact of each scandal behaved differently. In BCP's case, the CARs behaved much more consistently, remaining almost all the time negative. Meanwhile, BES' CARs appear to be relatively inconsistent , as there are numerous picks following one another, jumping from negative to positive values frequently. The reason that might explain this behaviour is that BCP case had less mishaps than BES. BES' case was more complex and involved much more stakeholders than BCP, which can explain the higher volatility in the results.



BCP and BES' CARs evolution during the event and post event window

Graph 5 BCP and BES' CARs evolution during the event and post event window

Nevertheless, for both cases is clear that in the event window, being the event date presented as time "t", in **Graph 5**, the scandal had an overall continuous negative impact. Also, it is possible to see in both cases that the behaviour of the abnormal returns changed after the event day took place, which makes sense as people started to react to the scandal itself as well

as to other news that kept on coming on the following days to the event. For BCP case it seems that the abnormal returns acted more inconsistently in the days right after to the event, ending up having less significant changes around the eighteenth day after the event day. Contrary to BCP, BES's CARs shows a period of general stability in the stock returns between the fourth and fourteenth day after the event, and then it became very unpredictable from that point on.

| | BES | | | BCP | |
|-----|--------|--------|-----|-------|--------|
| t | AR | % | t | AR | % |
| t+5 | 5,98% | 10,90% | t+5 | 1,47% | 12,85% |
| t+4 | 2,10% | 3,83% | t+4 | 1,55% | 13,54% |
| t+3 | 3,38% | 6,15% | t+3 | 2,56% | 22,39% |
| t+2 | 11,94% | 21,74% | t+2 | 0,77% | 6,71% |
| t+1 | 5,70% | 10,38% | t+1 | 0,57% | 4,96% |
| t | 8,80% | 16,02% | t | 1,06% | 9,26% |
| t-1 | 9,22% | 16,79% | t-1 | 1,32% | 11,53% |
| t-2 | 1,10% | 2,01% | t-2 | 0,81% | 7,13% |
| t-3 | 5,48% | 9,99% | t-3 | 0,21% | 1,82% |
| t-4 | 1,20% | 2,18% | t-4 | 1,12% | 9,81% |

Table 6 BES and BCP's absolute abnormal results

In **Table 6**, "|AR|" represents the absolute value of each abnormal return in the event window and "%" is the proportion of each |AR| in the sum of all |AR|. This proportion indicates how much each day contributed to the overall impact on the expected stock returns. This is an interesting measure, as if a pattern is found, it can tell investors what the days are where prices can be more over or under priced, allowing them to create more profitable investment decisions around scandals' days. Unfortunately, there does not seem to be a pattern, as for BES the days with the biggest excess returns are the day prior and the two days after the main event, and in BCP's case in the last three days of the event window. Nevertheless, both cases show bigger impacts on the expected stock returns after the event day.

Conclusion

This thesis used the financial scandals of BCP, back in 2007, and BES, around 2014, to conclude about the reputational effects on a firm's financial performance when a scandal announcement is made. Only the news and official press releases that were published at the time were used to conduct the research, as the methodology lays on the foundations of Efficient Market hypothesis and the assumption that markets are of the semi-strong form. Hence, only public information was used to explain and analyse the scandal, to get a better grasp of the actual information the market faced and reacted to during these periods.

From the results of the performed event studies, it is possible to retrieve some general conclusions. First, and most important, the two scandals had a statistically significant negative impact on the two bank's financial performance. Both showed negative CARs, both in the end of the event window (-1%, for BCP; and -44%, for BES) and post event window (-17,45%, for BCP; and -195%, for BES), which entails that the effect endured in the long term as well.

Evidently, the long-term results were also affected by the sub-events that happen during the post event window, as many of them were negatively significant.

All the results supported the assumptions being taken into consideration, as the market reacted to the two scandals' announcements quickly and with an overall greater magnitude in the actual event day and the close days that followed.

Unfortunately, conclusions regarding short- and long-term effects were not straightforward to cross between the two banks, in terms of when the effects were stronger and more or less negative, as each bank showed different abnormal returns trends along the event and post-event window. Thus, these results do not help investors to know precisely when to buy or sell stocks of Portuguese banks during a scandal.

Limitations and Future Research

The major difficulty detected was in finding reliable data and information sources. It was particularly hard to find data concerning Portuguese banks' stocks prices, which limited the choice of scandals to analyse, having narrowed it down to only Millenium bcp and Banco Espírito Santo. Besides, some of the newspapers' websites were missing some articles, which may be related with the fact that the cases under analysis happened almost and more than a decade ago. In this sense, a future research suggestion would be to perform this methodology and analysis in the other banks that endured in big financial scandals in Portugal, if one can access to the proper database. Even though it is possible to come across some articles discussing the management decisions, corporate governance structure, the underlying causes, future consequences, and other more theoretical aspects of the scandals, it is much rarer to find empirical analyses of the consequences of these events. Also, adding results from other Portuguese banks to this research would be the tiebreaker needed to conclude about some aspects where these two banks' results did not match.

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Appendix

Appendix 1 - Multivariate regression of BCP's subevents

SUMMARY OUTPUT

| Regression Statistics | | | | | |
|-----------------------|-------------|--|--|--|--|
| Multiple R | 0,373038598 | | | | |
| R Square | 0,139157796 | | | | |
| Adjusted R Square | 0,093610589 | | | | |
| Standard Error | 0,010366463 | | | | |
| Observations | 200 | | | | |

ANOVA

| | df | SS | MS | F | Significance F |
|------------|-----|-------------|-------------|-------------|----------------|
| Regression | 10 | 0,003283273 | 0,000328327 | 3,055243258 | 0,001288864 |
| Residual | 189 | 0,020310612 | 0,000107464 | | |
| Total | 199 | 0,023593884 | | | |

| | | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95,0% | Upper 95,0% |
|-----------|------------|--------------|----------------|--------------|-------------|--------------|--------------|--------------|--------------|
| Intercept | | -0,000684046 | 0,000754049 | -0,907163594 | 0,365475451 | -0,00217148 | 0,000803388 | -0,00217148 | 0,000803388 |
| | 18/10/2007 | 0,026239773 | 0,010393851 | 2,524547684 | 0,012407252 | 0,005736913 | 0,046742633 | 0,005736913 | 0,046742633 |
| | 19/10/2007 | 0,016141811 | 0,010393851 | 1,553015432 | 0,122092346 | -0,004361048 | 0,036644671 | -0,004361048 | 0,036644671 |
| | 22/10/2007 | -0,013978673 | 0,010393851 | -1,344898311 | 0,180269717 | -0,034481533 | 0,006524187 | -0,034481533 | 0,006524187 |
| | 25/10/2007 | 0,011454961 | 0,010393851 | 1,102090136 | 0,271823934 | -0,009047899 | 0,031957821 | -0,009047899 | 0,031957821 |
| | 06/11/2007 | 0,014997511 | 0,010393851 | 1,442921498 | 0,150697866 | -0,005505348 | 0,035500371 | -0,005505348 | 0,035500371 |
| | 26/11/2007 | -0,029337354 | 0,010393851 | -2,822568185 | 0,005273997 | -0,049840214 | -0,008834494 | -0,049840214 | -0,008834494 |
| | 04/12/2007 | 0,012141013 | 0,010393851 | 1,168095703 | 0,244239536 | -0,008361847 | 0,032643873 | -0,008361847 | 0,032643873 |
| | 03/12/2007 | 0,013398392 | 0,010393851 | 1,289069074 | 0,198949552 | -0,007104468 | 0,033901252 | -0,007104468 | 0,033901252 |
| | 28/12/2007 | 0,007270699 | 0,010393851 | 0,699519218 | 0,48508764 | -0,013232161 | 0,027773558 | -0,013232161 | 0,027773558 |
| | 31/12/2007 | -0,016513339 | 0,007368878 | -2,240956991 | 0,026192542 | -0,031049152 | -0,001977526 | -0,031049152 | -0,001977526 |

Appendix 2 - Multivariate regression of BES' subevents

SUMMARY OUTPUT

| Regression Statistics | | | | | |
|-----------------------|-------------|--|--|--|--|
| Multiple R | 0,934460668 | | | | |
| R Square | 0,87321674 | | | | |
| Adjusted R Square | 0,829634995 | | | | |
| Standard Error | 0,053966838 | | | | |
| Observations | 44 | | | | |

| ANOVA | | | | | |
|------------|----|---------------|------------|-------------|----------------|
| | df | SS | MS | F | Significance F |
| Regression | 1 | 1 0,641895098 | 0,0583541 | 20,03629567 | 2,54715E-11 |
| Residual | 3 | 2 0,093197427 | 0,00291242 | | |
| Total | 4 | 3 0,735092524 | | | |

| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95,0% | Upper 95,0% |
|------------|--------------|----------------|--------------|-------------|--------------|--------------|--------------|--------------|
| Intercept | -0,01165609 | 0,009394421 | -1,240745992 | 0,223719425 | -0,030791898 | 0,007479719 | -0,030791898 | 0,007479719 |
| 22/05/2014 | -0,107716002 | 0,054778415 | -1,966395018 | 0,05797755 | -0,219295981 | 0,003863978 | -0,219295981 | 0,003863978 |
| 27/05/2014 | 0,071487129 | 0,054778415 | 1,30502369 | 0,201191533 | -0,040092851 | 0,183067108 | -0,040092851 | 0,183067108 |
| 16/06/2014 | -0,071791285 | 0,054778415 | -1,310576179 | 0,199329795 | -0,183371265 | 0,039788694 | -0,183371265 | 0,039788694 |
| 24/06/2014 | -0,191834472 | 0,054778415 | -3,502008462 | 0,001385169 | -0,303414451 | -0,080254492 | -0,303414451 | -0,080254492 |
| 30/06/2014 | -0,161701402 | 0,054778415 | -2,951918253 | 0,005870702 | -0,273281382 | -0,050121423 | -0,273281382 | -0,050121423 |
| 01/07/2014 | 0,131914895 | 0,054778415 | 2,408154672 | 0,021969337 | 0,020334916 | 0,243494875 | 0,020334916 | 0,243494875 |
| 09/07/2014 | -0,028697729 | 0,054778415 | -0,523887543 | 0,603966633 | -0,140277709 | 0,08288225 | -0,140277709 | 0,08288225 |
| 10/07/2014 | -0,149590514 | 0,054778415 | -2,730829562 | 0,010189398 | -0,261170494 | -0,038010535 | -0,261170494 | -0,038010535 |
| 21/07/2014 | -0,131192994 | 0,054778415 | -2,394976099 | 0,022646898 | -0,242772973 | -0,019613015 | -0,242772973 | -0,019613015 |
| 25/07/2014 | -0,059078148 | 0,054778415 | -1,078493209 | 0,288876506 | -0,170658128 | 0,052501831 | -0,170658128 | 0,052501831 |
| 05/08/2014 | -0,736588566 | 0,054778415 | -13,44669374 | 1,03165E-14 | -0,848168546 | -0,625008587 | -0,848168546 | -0,625008587 |