



Article

# Testing Stock Market Efficiency from Spillover Effect of Panama Leaks

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**Abstract:** On 3 April 2016, Mossack Fonseca provided the historically most significant leak of its shareholder's data for owning offshore companies. Shareholders include many political and influential figures around the globe, which causes a moral hazard. The study analyses the effects of Panama leak events on five stock exchanges to ensure the market efficiency and investor perception related to the Panama leaks. Event study methodology is used on five occasions associated with Panama papers, i.e., the resignation of the Prime Minister of Iceland on 5 April 2016, Jurgen Mossack's resignation on 7 April 2016, the resignation of the Spanish Minister of Industry on 15 April 2016, the 450 personalities of Pakistan that were nominated in Panama papers on 15 April 2016, and the formation of an inquiry commission to inquire into the matter. The market efficiency of five stock exchanges was checked, i.e., the KSE 100 of Pakistan, the OMXIPI exchange of Iceland, the IBEX 35 of Spain, the New York stock exchange (NYSE), and S&P 500. The market remains efficient for most events and investor behaviour changes for one or two days around the event day (this event has concise term significant abnormal returns in all stock exchanges or concise term significant abnormal macroeconomic effects are observed in all stock exchanges).

**Keywords:** Panama papers; financial markets; political stability; investor perception; stock market efficiency; event study methodology



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## 1. Introduction

Panama Leaks provided information on tax and audit-free 214,000 offshore companies related to the Panamanian law firm Mossack Fonseca, the world's fourth largest law firm. It facilitates operating corporations in tax heaven jurisdictions, such as the British Virgin Islands, Switzerland, and Cyprus. The firm charges a yearly fee against operating offshore corporations (Anon 2016). An anonymous source gave records to the German newspaper *Suddeutsche Zeitung*, exposing them to the International Consortium of Investigative Journalists (ICIJ). Further, the ICIJ exposed these data with significant international partners, such as the Guardian, BBC, etc. On 3 April, the firm leaked 2.4 terabytes of data that contained the identities of the shareholders and directors of companies (Vermeiren and Lips 2016). WikiLeaks Cablegate, offshore leaks, and lux leaks combine comprised data much lower than the Panama Leaks, which comprise 11.5 million documents, and the period of the data is from 1970 to spring 2016 (Obermaier et al. 2016).

Offshore companies, which are opened in foreign countries to reduce tax payments, are not illegal. They promote international business. When it comes to the nature of this

type of business, it raises some moral concerns. Political figures who advocate the strict fiscal policy in their countries try to find tax heavens and take their money outside of the country. Tax avoidance and money laundering are illegal activities that are conducted under the umbrella of offshore companies.

Panama Leaks, considered as the biggest information leak in journalism history, exposed the hypocrisy of leaders towards taxation and money laundering (Shadman 2016). The list contains twelve current national leaders, their fellows, and media people. More than 450 people from Pakistan were included in the list of Panama papers. Several authors highlight the importance of the Panama papers regarding the listed companies by conservatively stating that 1 out of the 7 listed companies were involved in offshore illegal investments, and they discovered that 338 of the listed companies had undisclosed offshore vehicles. Their findings make the Panama Leaks a worldwide catastrophic event and it has highlighted the unstable political practice of many countries (O'Donovan et al. 2019).

With the Panama documents, a series of active arrangements were made to curb the money laundering activities in the countries. Al-Emadi (2021) analyzed the effectiveness of Financial Action Task Force (FATF) recommendations to stop illicit money laundering activities in the U.K. and they suggest, even after the revelations of the Panama Leaks, that the effectiveness of the FATF rules is limited due to the deep routes of money laundering trends in the U.K.

Numerous studies have been conducted on such types of leaks and other political events that affect the movement of the stock market (Kim 2003; Cutler et al. 1989; Fair 2002). All have the same motive to identify the critical factors and causes that affect the value of stocks. Economic (variation in foreign exchange and interest rate, change in dividend policy), political, natural calamities, and many other factors directly influence the stock market (Suleman 2012). Stock market movement is most often affected by catastrophic natural disasters and news of a political nature (Taimur and Khan 2015).

Political stability is a critical factor for economic growth. The Panama Leaks created political instability in many countries and twisting impacts in their stock markets. The contemporary media hype regarding investment in offshore companies also made a negative impact. The illicit activities of corrupt politicians and criminal organizations have been observed in recent media reports. So, the Panama Leaks are considered negative news in the stock market and affect the investors' behavior, ultimately resulting in unfavorable stock market movement.

Research was conducted that examined political headlines' results to check their effect on returns and volatility in the stock market due to political gossip. The news fall into two categories as "good news" and "bad news". The results of the research are that, when optimistic news prevails in the market, then the market has high returns and low volatility, and when shocking and negative news arise about political issues, it leads to low returns and a high fluctuation in the market. They also concluded that negative news has a strong impact, almost double compared to positive news of the same magnitude (Suleman 2012).

The research objective of this paper is to analyze the significance of the Panama Leaks in creating abnormalities in the stock market. Fama (1970, 1991) presented the concept of efficient market hypothesis in which the market is divided into three forms (weak, semi-strong and strong) of efficient market. Strong market prices reflect historical data, publicly and privately available information. The lack of adjustment shows the market is in semi-strong and weak forms. The paper investigates how significant stock markets are adjusted to the information provided by the leaked data of the Panama documents. It also highlights the perceptions and behaviors of investors.

## 2. Literature Review

Many researchers suggest that stock markets cannot be efficient if they allow financiers to earn more than the average pay (Khan et al. 2020). The unique situation of the stock market occurs when a deviation exists between common and usual patterns (Frankfurter and McGoun 2001) (or the deviation between common and usual patterns yields a unique situation in the stock market). Researchers' comparison of stock earnings before and after an event approve the presence of market anomalies (Boudreaux 1995). Conversely, some researchers have stated the non-happening of this unusual behavior and performance (Cadsby and Ratner 1992).

The Panama papers had a significant effect on political, economic, and social dynamics globally. Many political figures that have offshore corporations were included in the Panama papers. Politicians and national leaders' engagement in such activity creates low confidence, reduces the government's popularity, and leads to political instability.

The effect of political events on stock movement has been investigated for both emerging and developed markets. The effect of political events on stock movement from 1950 to 1966 has been checked and it was found that political events are crucial determinants of deviation of stock returns (Niederhoffer 1971). A study was conducted in which the collection of 70 news reports linked with the Quebec separation revealed how this political event was used, and they further checked their relationship of this political event with stock returns and fluctuations in the stock market. Political events have a significant effect on stock market fluxes (Beaulieu et al. 2005).

Political stability relates to the foreseeable and consistent situation of a country in which habitants feel secure, and when the country's activities are well-ordered according to law. Political conditions and stock market movement have close associations and relationships. Political instability creates risk in less developed countries as well as uncertainty in the rules, regulations, and conditions concerning the economy and business, which, ultimately, affect investors' behavior and the movement of the stock market (Kim and Mei 2001).

Unstable political conditions lead to lower capital inflows (Arfan et al. 2012), and foreign investment is reduced because investors feel unsafe to make investments in speculative conditions (Chan and Wei 1996). A study was conducted to check the relationship between political uncertainty and stock market movement in Colombia. The results concluded that political instability is a crucial determinant of stock market movement and negatively affects stock market return (Laverde et al. 2009). The political instability created by any activity may create an abnormal effect on the stock market. A study conducted by Hillier and Loncan (2019) examined the political instability created from a leaked conversation between the Brazilian president with businessmen. This news created shock and affected the stock market significantly.

The Panama Leaks are categorized as political and macroeconomic news that is part of publicly accessible data that will not disturb the efficiency of the semi-strong market (Fama 1970). Rehman et al. (2018) indicated that the Panama Leaks had a significant impact on stock returns and produced a spillover effect on other stock markets. Mehboob et al. (2020) also considered the Panama Leaks as a political event that provided significant information that affected the stock market.

The Panama Leaks influenced the prices of stock markets through the investors' behavior regarding the subsequent economic action. The reason is that economic situations can impact the inflows of cash and discounting determinants (Birz and Lott 2011). More information on macroeconomic effect terrorism and political uncertainty was discussed by Ben Moussa and Talbi (2019), who conclude that the stock market was significantly abnormal.

Furthermore, there are certainly other macroeconomic determinants of political instability, in the same manner of the Panama documents that affected the stock returns. The foremost determinant is the election effect on the stock market. Chavali et al. (2020) checked the effects of election results on the Bombay stock exchange and conducted the impact of two elections on stock abnormal returns. They suggested that the stock market remained efficient after the news of two elections results. The positive impact of positive

news in the market can also be observed: [Nasir et al. \(2020\)](#) reported the positive impact of corporate social responsibility (CSR) news in stock returns in the Pakistani banking sector.

Aside from the Panama Leaks, some international negative shocks significantly influenced the stock market. One of the major international shocks has been the impact of COVID-19 on the stock market. COVID-19 has compelled world governments to apply lockdowns, provide subsidies and make relevant policy changes to cope with the disease. [Farooq et al.](#) found a significant negative impact of COVID-19 on stock returns of the insurance sector of developing and developed countries ([Farooq et al. 2021](#)). Furthermore, the adverse impact of this pandemic on stock returns have been reported in Chinese industries ([He et al. 2020](#)), in the transportation sector ([Alam et al. 2021](#)), in the Pakistani banking sector ([Shahzad et al. 2021](#)) and in the U.S. stock market ([Alam et al. 2021](#)).

We provided references of the impact of various positive and negative news on stock returns and as mentioned above, the Panama Leaks have been negative news that, on the one hand, could impact the stock market negatively or, on the other hand, the market may remain efficient even with the announcement of said anomaly.

### 3. Theoretical Foundations

Investors' psychological behavior also causes variations in the stock market. Everyone has biases. People are judged about society, opportunities and even the stock market movement. It is difficult and almost impossible that decisions are made without bias. Investing biases are divided into two categories: cognitive prejudices and emotional biases, and these biases are attached with the Panama Leaks and affect the investors' behavior in the investment decision-making process, which creates fluctuations in the stock market. Investors make judgments and assumptions when investment decisions are made based on their experience and investment knowledge. These judgments are just assumptions of investors, and these judgments do not need to be true.

Prospect theory states that "We have an irrational tendency to be less willing to gamble with profits than with losses". It is people's behavior that they feel more pain of losses than the happiness of returns. The Panama Leaks are considered unfavorable and bad news about political and economic events because many national leaders, politicians, and important personalities are included in the list of Panama papers that revealed their engagement in money laundering. The actions and financial dealings were carried out with the special motive of concealing the true source of wealth, usually wealth earned from illegal ways. The objective was to show that wealth obtained from illegal sources is money laundering. Legally obtained money may also become money laundering if that wealth is portrayed in such a manner that it avoids lawful taxation.

The Panama Leaks led to political shock and was deemed as an unfavorable political event. It affected the stock returns and caused both events that substantially impacted the movement of the stock market adversely and the slowdown of economic growth ([Khalid and Rajaguru 2010](#)).

### 4. Research Methodology

The objective of this study is to analyze the effects of the Panama papers on the stock market. For that purpose, five stock exchanges indexes were taken as samples, i.e., the KSE 100 index of the Pakistan stock exchange. The reason for analyzing this index is that the event caused the prime minister of Pakistan to appear questionable, and investor perception may have changed due to the news. The study also focused on the impact on the OMXIPI index from the Iceland stock market because one of the news events was that the prime minister of Iceland resigned after the Panama Leaks. The IBEX 35 from the Spanish stock market was considered to analyze the impact of the Panama Leaks and related events. To see whether the Panama papers shock made global markets inefficient, the NYSE and S&P500 were taken into consideration to evaluate the spillover effect of the Panama Leaks and associated events.

The events that are taken into consideration are the following:

- On 3 April 2016, the Panama papers were leaked, exposing significant individuals with the investment in tax heavens;
- On 7 April, the responsible person for the Panama papers, Jorgen Mossack, resigned from the Panama council;
- Sigmundur Davíð Gunnlaugsson, the Prime Minister of Iceland, resigned on 5 April 2016, due to the revelation of the Panama papers;
- On 15 April, the Spanish Minister of Industry, Jose Manuel Soria, resigned;
- The Panama papers also targeted the Pakistani government, a third-world economy, and the leader of Pakistan was revealed to possess heavy investments in tax heavens, which can be a sour pill to swallow. The media and the opposition targeted the government for such activities, and on 15 April, an inquiry commission was formed to investigate the Pakistani individuals named mentioned in the Panama documents.

This study investigated the market efficiency in response to the Panama Leaks and related events on five stock exchange indexes from five countries. The events related to the Panama Leaks targeted primarily political figures, so it can be considered a political crime, instability, and corruption.

The Panama Leaks led to government instability and showed whether markets could absorb the information provided by the news. If the market absorbs the effect, then markets are efficient on such news. Event study methodology was deployed for this purpose. The market model introduced by Wong and Cheung Wong et al. was used to analyze investor perception. Five events were analyzed, and five stock exchange indexes from different countries were considered to see the spillover effect of the international news (Wong and Cheung 2009).

Nearly 272 daily index values were used for each stock index, with 1360 daily observations in total. Eight event windows were utilized to see the event's long-term and short-term impact on the stock market. The event windows for analysis were  $(-20, +20)$ , i.e., when  $t$  is the event day, 20 days before the event day ( $t - 20$ ) and 20 days after the event day ( $t + 20$ );  $(0, +20)$ ;  $(-5, +5)$ ;  $(0, +5)$ ;  $(-2, +2)$ ;  $(0, +2)$ ;  $(-1, +1)$ ; and  $(0, +1)$ . Before the event window, 252 trading days were examined for estimation, indicating the estimation window of analysis. The first step was to calculate the returns of the prices of the five indexes, which was calculated by using the continuous compounding method of calculating returns.

$$R_t = \ln(P_1/P_n) \quad (1)$$

where  $P_1$  is the index's current price and  $P_0$  is the previous day price of the index.

Secondly, the expected returns were calculated for the event window by using the average of the returns of the estimation window.

$$E[R_t] = \Sigma R_t / N \quad (2)$$

where  $E[R_t]$  is the expected return,  $R_t$  is the index's return, and  $N$  is several values. Further abnormal returns are required from the security. Abnormal returns show the change in the actual value of the firm and what is to be expected.

Equation (3) calculates the abnormal return of the index value.

$$AR_t = R_t - E[R_t] \quad (3)$$

where  $AR_{it}$  represents the abnormal return of the security. This study tested the hypothesis that the Panama Leaks and related events had a significant impact on the stock market. The significance of the abnormal return dispersion was checked by dividing it by standard deviation.

Equation (4) describes the average abnormal returns of different event windows.

$$AAR_t = \Sigma AR_t / n \quad (4)$$

The average abnormal return  $AAR_t$  provides the overall significance of the particular event window. To evaluate the further significance of estimation, cumulative abnormal returns (CAR) and cumulative average abnormal returns (CAAR) were calculated to justify the impact of Panama-Leaks-related events on stock exchanges.

## 5. Results and Discussion

From the results of the analysis of the five stock markets, it can be inferred that the stock market is efficient concerning the Panama-Leaks-related news. There were minimal significant abnormal returns reported during the substantial events of the Panama Leaks. Five stock market indexes were analyzed, but only the Pakistani stock market had significant abnormal returns after the announcement of the Panama papers. The other stock exchanges absorbed the effect of the Panama Leaks, and no significant abnormal losses were observed. The results are elaborated upon below, in a detailed explanation.

Appendices A–D represents an event. The yellow line in each table represents the event day. To analyze the behavior of investors, both big windows and small windows were calculated, i.e.,  $(-20, +20)$ ,  $(0, +20)$ ,  $(-5, +5)$ ,  $(0, +5)$ ,  $(-2, +2)$ ,  $(0, +2)$ ,  $(-1, +1)$  and  $(0, +1)$ , whereas cumulative abnormal return (CAR), average abnormal returns (AAR) and cumulative average abnormal returns (CAAR) were computed for the overall significance of the events. Appendix A represents the event of the Panama Leaks dated 3 April 2016. The Pakistani stock exchange felt the effects of the event for a short time; after the event date, there were significant abnormal returns, which means the market did not absorb the effect for a day. The news affected the intraday investor perception the day following the release of the news because the Panama Leaks contained many Pakistani individuals on the list. It was international news that did not have an apparent effect on the economy's business and stock market operations. This news represents the leaders' personal decisions and poses a more negligible effect on monetary and fiscal policy. Critical macroeconomic factors moved according to the nature of the business climate in the economy. Other exchanges were not affected the announcement of the Panama Leaks; the inference may be that they did not directly affect the investment climate of those economies. The news was international and will affect the economy in the long run, but the effects of this news will show their influence after some time, and the long-term effect on the overall stability of the economy might only be revealed in the long run.

To some extent, investors are aware of political injustice and the unequal distribution of wealth, which can serve as market efficiency towards these types of international news. Appendix B represents the news regarding the resignation of the Prime Minister of Iceland, which was an extensive development on a political figure taking responsibility for their actions and leaving his current status; the market felt a little shake after one day. At a low 10% level of significance, Iceland (OMXIP), NYSE and S&P provided significant abnormal returns after the market realized the authenticity of the news related to the prime minister's resignation. The concept prevailing in this case is the negativity bias that affects the investor perception that leads him/her to invest. The Pakistani and Spanish indexes were not affected by such news.

AAR, CAR and CAAR are insignificant, representing the efficiency of the markets. On 7 April 2016, the responsible person for the Panama papers resigned, which surprised the world media. Investment behavior changed on the event day with the significant abnormal effect on the OMXIP, NYSE and S&P indices at 10% level of significance and the IBEX index followed by the 10% considerable effect the following day of the event and the impact spilt over PSX one day after the event happened. A brief-term 10% significant effect is shown in the OMXIP with a  $(0, +1)$  event window CAR analysis. The Panama Leaks had a short-term existence as, on 15 April, two media events occurred. First, the Minister of Industry of Spain resigned due to his name being featured in the Panama papers and,

secondly, an inquiry commission was formed to investigate the people involved in the Panama documents. Both events did not cause any abnormal returns, and the market remained efficient despite this information coming out into the market.

Most of the results mentioned above, which had insignificant consequences on the stock markets, are in line with the semi-strong form of efficient market hypothesis provided by Fama (1970) and it is also in line with the findings of Chavali et al. (2020), who reported the efficiency of the market after the election news.

## 6. Concluding Remarks

The Panama papers are one of the most significant leaks ever seen and have been the main attraction of the media and different fields of economic sciences. The study aimed to analyze the effects of Panama-Leaks-related events on the stock market on the affected countries and the spillover effect on other financial markets. The study was conducted on five stock indexes, i.e., the Pakistan Stock Exchange (PSX), Iceland stock market (OMXIP), Spain stock exchange (IBEX 35), the New York stock exchange (NYSE), and S&P 500. Eight short and long event windows were used. From this abnormal return (AR), average abnormal returns (AAR), cumulative abnormal returns (CAR) and cumulative average abnormal returns (CAAR) were formed. From the analysis, it was found that some of the events had a significant short-term effect with a 10% level of significance, but, in most cases, the event did not affect market efficiency. Markets are working efficiently with the release of the news related to the Panama papers. The reason for the insignificant effect may be due to the different nature of the news. The actual specification of this event cannot be concerned with the macroeconomics of one country. It was a world phenomenon, and it might have an impact on each country's economic growth, but not a direct impact on each country's market.

The availability of the literature about the market reaction to the Panama-Leaks-related news is not sufficient, which undermines the Discussion Section of this study. To overcome this limitation, future research should focus on the short- and long-term economic and financial repercussions created from Panama-related leaks.

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**Appendix A. Panama Leak News Analysis Dated 3 April 2016****Table A1.** Abnormal returns of the forty-day event window (News of Panama leaks).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	0.93	0.00	0.17	0.01	0.39	0.00	0.35	0.00	0.35
0.02	1.80	0.00	−0.02	0.00	−0.12	−0.01	−1.02	0.00	0.33
0.00	0.04	−0.01	−0.76	0.00	−0.29	0.00	0.42	0.00	0.10
0.00	−0.24	0.00	0.24	0.00	0.21	0.00	0.02	−0.01	−1.05
−0.01	−0.76	0.00	0.59	0.00	0.10	0.01	1.40	0.01	0.49
0.00	−0.13	0.00	−0.44	0.04	2.43	0.00	−0.20	0.00	0.02
0.00	0.21	−0.01	−0.69	0.01	0.42	0.00	−0.30	0.02	1.54
0.00	−0.36	0.01	1.38	−0.02	−1.06	0.00	0.26	0.00	−0.11
0.01	0.82	−0.01	−1.61	0.00	−0.13	0.01	0.84	0.00	−0.17
0.00	0.18	−0.01	−0.68	0.00	0.17	0.01	0.56	0.01	0.54
0.00	0.35	0.00	−0.01	0.01	0.58	0.00	0.08	0.01	0.63
0.00	−0.19	0.00	−0.39	0.00	−0.16	0.00	−0.25	0.00	0.42
0.00	−0.31	0.00	−0.29	0.00	−0.15	0.00	−0.48	0.00	0.10
0.00	−0.02	0.00	−0.16	−0.01	−0.41	0.00	−0.03	0.00	−0.07
0.00	−0.41	0.00	−0.11	−0.01	−0.95	0.00	0.11	−0.01	−0.59
0.00	0.20	0.00	−0.12	0.00	0.07	0.01	0.50	0.00	−0.03
0.00	0.04	0.00	−0.12	0.00	0.07	0.00	0.45	0.00	0.06
0.00	−0.13	0.01	1.04	0.00	0.21	0.00	−0.31	0.01	0.83
0.00	0.09	0.01	0.73	0.01	0.53	0.01	0.52	0.00	0.41
0.01	0.63	0.00	−0.04	−0.02	−1.03	0.00	−0.10	0.00	−0.19
0.01	0.91	−0.01	−1.22	−0.01	−0.84	−0.01	−0.93	0.01	0.60
0.01	1.05	0.00	−0.28	0.00	0.04	0.01	0.84	0.00	−0.30
0.00	−0.15	0.00	−0.12	−0.02	−1.54	−0.01	−1.07	−0.01	−0.96
0.01	0.50	0.00	0.50	0.00	0.17	0.00	0.32	0.01	0.99
0.00	−0.18	0.01	1.44	−0.01	−0.74	0.00	−0.26	−0.01	−1.13
0.00	0.19	0.00	0.31	0.02	1.14	0.01	1.00	0.00	0.27
−0.01	−1.21	0.00	−0.62	0.01	0.63	0.01	0.83	0.00	−0.25
0.00	0.13	0.00	0.11	0.01	0.46	0.00	0.13	0.01	0.92
0.00	0.07	0.01	0.81	0.03	2.15	0.00	−0.10	0.01	0.95
0.00	0.34	0.00	0.00	0.01	0.38	0.01	0.71	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.01	0.61	0.00	−0.09
0.00	−0.03	0.01	1.00	0.00	0.29	0.00	0.15	0.01	0.62
0.00	−0.10	0.00	−0.24	0.01	0.72	−0.01	−0.56	0.00	0.29
0.00	−0.34	0.00	−0.42	0.02	1.33	0.00	0.41	0.00	0.07
0.00	−0.15	0.00	−0.13	0.01	0.41	0.00	−0.15	−0.01	−0.49
0.00	0.49	0.00	−0.11	0.00	0.31	0.00	0.24	0.00	0.01
0.00	−0.17	0.00	−0.38	−0.01	−0.60	0.00	0.42	0.00	−0.17
0.00	0.48	0.00	0.54	0.02	1.08	−0.01	−0.72	0.00	0.18
0.01	1.24	0.01	0.94	0.01	0.41	0.00	−0.44	0.00	0.16
0.01	0.67	0.00	−0.02	−0.01	−0.40	0.01	0.71	−0.01	−0.87
0.01	0.61	−0.03	−3.42	−0.03	−1.69	−0.01	−0.79	−0.01	−0.47

**Table A2.** Abnormal returns of the (0, +20) event window (News of Panama leaks).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	0.61	−0.01	−1.22	−0.01	−0.83	−0.01	−0.95	0.01	0.61
0.00	−0.31	0.00	−0.28	0.00	0.04	0.01	0.85	0.00	−0.31
−0.01	−0.98	0.00	−0.12	−0.02	−1.53	−0.01	−1.09	−0.01	−0.98
0.01	1.01	0.00	0.50	0.00	0.17	0.00	0.33	0.01	1.01
−0.01	−1.15	0.01	1.44	−0.01	−0.74	0.00	−0.27	−0.01	−1.15
0.00	0.27	0.00	0.31	0.02	1.14	0.01	1.02	0.00	0.27
0.00	−0.25	0.00	−0.62	0.01	0.62	0.01	0.85	0.00	−0.25
0.01	0.93	0.00	0.11	0.01	0.46	0.00	0.13	0.01	0.93
0.01	0.96	0.01	0.81	0.03	2.14	0.00	−0.10	0.01	0.96
0.00	0.02	0.00	0.00	0.01	0.37	0.01	0.73	0.00	0.02
0.00	−0.09	−0.01	−1.52	0.00	−0.01	0.01	0.62	0.00	−0.09
0.01	0.63	0.01	1.00	0.00	0.29	0.00	0.16	0.01	0.63
0.00	0.29	0.00	−0.24	0.01	0.72	−0.01	−0.57	0.00	0.29
0.00	0.07	0.00	−0.42	0.02	1.33	0.00	0.42	0.00	0.07
−0.01	−0.50	0.00	−0.13	0.01	0.41	0.00	−0.15	−0.01	−0.50
0.00	0.01	0.00	−0.11	0.00	0.31	0.00	0.24	0.00	0.01
0.00	−0.17	0.00	−0.38	−0.01	−0.60	0.00	0.43	0.00	−0.17
0.00	0.18	0.00	0.54	0.02	1.07	−0.01	−0.74	0.00	0.18
0.00	0.16	0.01	0.94	0.01	0.40	0.00	−0.45	0.00	0.16
−0.01	−0.88	0.00	−0.02	−0.01	−0.39	0.01	0.73	−0.01	−0.88
−0.01	−0.48	−0.03	−3.42	−0.03	−1.68	−0.01	−0.81	−0.01	−0.48

**Table A3.** Abnormal returns for the (−5, +5) event window (News of Panama leaks).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.03	0.00	−0.12	0.00	0.07	0.01	0.50	0.00	−0.03
0.00	0.06	0.00	−0.12	0.00	0.07	0.00	0.45	0.00	0.06
0.01	0.84	0.01	1.05	0.00	0.21	0.00	−0.32	0.01	0.84
0.00	0.41	0.01	0.73	0.01	0.53	0.01	0.52	0.00	0.41
0.00	−0.19	0.00	−0.04	−0.02	−1.02	0.00	−0.10	0.00	−0.19
0.01	0.60	−0.01	−1.22	−0.01	−0.83	−0.01	−0.94	0.01	0.60
0.00	−0.31	0.00	−0.28	0.00	0.04	0.01	0.85	0.00	−0.31
−0.01	−0.97	0.00	−0.12	−0.02	−1.53	−0.01	−1.09	−0.01	−0.97
0.01	1.00	0.00	0.50	0.00	0.17	0.00	0.33	0.01	1.00
−0.01	−1.14	0.01	1.45	−0.01	−0.74	0.00	−0.27	−0.01	−1.14
0.00	0.27	0.00	0.31	0.02	1.14	0.01	1.01	0.00	0.27

**Table A4.** Abnormal returns for the (0, +5) event window (News of Panama leaks).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	0.61	−0.01	−1.22	−0.01	−0.83	−0.01	−0.95	0.01	0.61
0.00	−0.31	0.00	−0.28	0.00	0.04	0.01	0.85	0.00	−0.31
−0.01	−0.98	0.00	−0.12	−0.02	−1.53	−0.01	−1.09	−0.01	−0.98
0.01	1.01	0.00	0.50	0.00	0.17	0.00	0.33	0.01	1.01
−0.01	−1.15	0.01	1.44	−0.01	−0.74	0.00	−0.27	−0.01	−1.15
0.00	0.27	0.00	0.31	0.02	1.14	0.01	1.02	0.00	0.27

**Table A5.** Abnormal returns for the (−2, +2) event window (News of Panama leaks).

PSX		OMX10I		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.42	0.01	0.73	0.01	0.53	0.01	0.53	0.00	0.42
0.00	−0.19	0.00	−0.04	−0.02	−1.02	0.00	−0.11	0.00	−0.19
0.01	0.60	−0.01	−1.22	−0.01	−0.83	−0.01	−0.95	0.01	0.60
0.00	−0.31	0.00	−0.28	0.00	0.04	0.01	0.86	0.00	−0.31
−0.01	−0.97	0.00	−0.12	−0.02	−1.53	−0.01	−1.09	−0.01	−0.97

**Table A6.** Abnormal returns of the (0, +2) event window (News of Panama leaks).

PSX		OMX10I		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	0.61	−0.01	−1.22	−0.01	−0.83	−0.01	−0.95	0.01	0.61
0.00	−0.31	0.00	−0.28	0.00	0.04	0.01	0.85	0.00	−0.31
−0.01	−0.98	0.00	−0.12	−0.02	−1.53	−0.01	−1.09	−0.01	−0.98

**Table A7.** Abnormal returns of the (−1, +1) event window (News of Panama leaks).

PSX		OMX10I		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.19	0.00	−0.04	−0.02	−1.02	0.00	−0.10	0.00	−0.19
0.01	0.60	−0.01	−1.22	−0.01	−0.83	−0.01	−0.95	0.01	0.60
0.00	−0.31	0.00	−0.28	0.00	0.04	0.01	0.85	0.00	−0.31

**Table A8.** Abnormal returns of the (0, +1) event window (News of Panama leaks).

PSX		OMX10I		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	1.08	−0.01	−1.22	−0.01	−0.83	−0.01	−0.95	0.01	0.61
0.01	1.24	0.00	−0.28	0.00	0.04	0.01	0.85	0.00	−0.31

**Table A9.** Average of abnormal returns and cumulative average abnormal returns (News of Panama leaks).

		PSX	OMX10I	IBEX 35	NYSE	S&P500	CAAR
(−20, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.17	−0.10	0.11	0.10	0.10	0.09
(0, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.25	−0.13	0.18	0.07	0.02	0.09
(−5, +5)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.30	0.19	−0.17	0.09	0.05	0.06
(0, +5)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.46	0.11	−0.29	−0.02	−0.09	−0.02
(−2,+2)	AAR	0.01	0.00	−0.01	0.00	0.00	0.00
	Sig.	0.59	−0.19	−0.56	−0.15	−0.09	−0.14
(0,+2)	AAR	0.01	0.00	−0.01	0.00	0.00	0.00
	Sig.	0.71	−0.54	−0.77	−0.40	−0.23	−0.32
(−1,+1)	AAR	0.01	0.00	−0.01	0.00	0.00	0.00
	Sig.	1.01	−0.51	−0.60	0.55	0.03	0.00
(0,+1)	AAR	0.01	−0.01	−0.01	0.00	0.00	0.00
	Sig.	1.16	−0.75	−0.40	−0.05	0.15	−0.02

**Table A10.** Cumulative abnormal returns (News of Panama leaks).

	PSX		OMX10		IBEX 35		NYSE		S&P500	
	CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.
CAR (−20, +20)	0.07	0.18	−0.03	−0.10	0.07	0.12	0.04	0.10	0.04	0.10
CAR (0, +20)	0.00	0.02	−0.02	−0.14	0.06	0.18	0.01	0.07	0.00	0.02
CAR (−5, +5)	0.00	0.00	0.00	−0.02	0.00	0.01	0.01	0.10	0.00	0.00
CAR (0, +5)	0.00	0.07	−0.01	−0.30	−0.01	−0.16	0.00	−0.02	0.00	0.06
CAR (−2, +2)	0.00	0.07	0.01	0.17	−0.01	−0.12	0.00	0.11	0.00	0.06
CAR (0, +2)	0.00	0.18	−0.01	−0.75	−0.01	−0.40	0.00	−0.05	0.00	0.15
CAR (−1, +1)	0.00	0.25	−0.01	−0.63	−0.03	−0.93	−0.01	−0.52	0.00	0.21
CAR (0, +1)	0.02	2.32	−0.01	−1.50	−0.01	−0.79	0.00	−0.09	0.00	0.30

### Appendix B. Prime Minister of Iceland Announced His Resignation, Dated 5 April 2016

**Table A11.** Abnormal returns of the (−20, +20) event window (Prime Minister of Iceland announced his resignation).

PSX		OMX10		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.04	−0.01	−0.76	0.00	−0.29	0.00	0.35	0.00	0.10
0.00	−0.24	0.00	0.24	0.00	0.21	−0.01	−1.03	−0.01	−1.05
−0.01	−0.76	0.00	0.60	0.00	0.10	0.00	0.42	0.01	0.49
0.00	−0.13	0.00	−0.44	0.04	2.43	0.00	0.02	0.00	0.02
0.00	0.21	−0.01	−0.69	0.01	0.42	0.01	1.39	0.02	1.54
0.00	−0.36	0.01	1.39	−0.02	−1.06	0.00	−0.20	0.00	−0.11
0.01	0.82	−0.01	−1.61	0.00	−0.13	0.00	−0.30	0.00	−0.17
0.00	0.18	−0.01	−0.68	0.00	0.17	0.00	0.27	0.01	0.54
0.00	0.35	0.00	−0.01	0.01	0.58	0.01	0.85	0.01	0.63
0.00	−0.19	0.00	−0.39	0.00	−0.16	0.01	0.56	0.00	0.42
0.00	−0.31	0.00	−0.29	0.00	−0.15	0.00	0.07	0.00	0.10
0.00	−0.02	0.00	−0.16	−0.01	−0.41	0.00	−0.25	0.00	−0.07
0.00	−0.41	0.00	−0.11	−0.01	−0.95	0.00	−0.47	−0.01	−0.59
0.00	0.20	0.00	−0.12	0.00	0.07	0.00	−0.03	0.00	−0.03
0.00	0.04	0.00	−0.12	0.00	0.07	0.00	0.10	0.00	0.06
0.00	−0.13	0.01	1.05	0.00	0.21	0.01	0.49	0.01	0.83
0.00	0.09	0.01	0.73	0.01	0.53	0.00	0.44	0.00	0.41
0.01	0.63	0.00	−0.04	−0.02	−1.02	0.00	−0.31	0.00	−0.19
0.01	0.91	−0.01	−1.22	−0.01	−0.84	0.01	0.52	0.01	0.60
0.01	1.05	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.30
0.00	−0.15	0.00	−0.12	−0.02	−1.54	−0.01	−0.93	−0.01	−0.96
0.01	0.50	0.00	0.50	0.00	0.17	0.01	0.84	0.01	0.99
0.00	−0.18	0.01	1.44	−0.01	−0.74	−0.01	−1.07	−0.01	−1.13
0.00	0.19	0.00	0.31	0.02	1.14	0.00	0.32	0.00	0.27
−0.01	−1.21	0.00	−0.62	0.01	0.63	0.00	−0.26	0.00	−0.25

Table A11. Cont.

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.13	0.00	0.11	0.01	0.46	0.01	1.00	0.01	0.92
0.00	0.07	0.01	0.81	0.03	2.15	0.01	0.83	0.01	0.95
0.00	0.34	0.00	0.00	0.01	0.38	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.53	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.03	0.01	1.00	0.00	0.29	0.01	0.72	0.01	0.62
0.00	−0.10	0.00	−0.24	0.01	0.72	0.01	0.60	0.00	0.29
0.00	−0.34	0.00	−0.42	0.02	1.33	0.00	0.15	0.00	0.07
0.00	−0.15	0.00	−0.13	0.01	0.41	−0.01	−0.56	−0.01	−0.49
0.00	0.49	0.00	−0.11	0.00	0.31	0.00	0.41	0.00	0.01
0.00	−0.17	0.00	−0.38	−0.01	−0.60	0.00	−0.14	0.00	−0.17
0.00	0.48	0.00	0.55	0.02	1.08	0.00	0.24	0.00	0.18
0.01	1.24	0.01	0.94	0.01	0.41	0.00	0.42	0.00	0.16
0.01	0.67	0.00	−0.02	−0.01	−0.40	−0.01	−0.73	−0.01	−0.87
0.01	0.61	−0.03	−3.43	−0.03	−1.69	0.00	−0.44	−0.01	−0.47
0.00	−0.45	−0.02	−2.62	0.00	0.04	0.01	0.71	0.01	0.74
0.01	0.94	0.01	1.21	−0.03	−1.84	−0.01	−0.79	−0.01	−0.82

Table A12. Abnormal returns of the (0, +20) event window (Prime Minister of Iceland announced his resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.14	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25
0.00	0.16	0.00	0.10	0.01	0.46	0.01	1.03	0.01	0.93
0.00	0.08	0.01	0.80	0.03	2.13	0.01	0.84	0.01	0.96
0.00	0.40	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.63
0.00	−0.12	0.00	−0.24	0.01	0.72	0.01	0.62	0.00	0.29
0.00	−0.40	0.00	−0.42	0.02	1.32	0.00	0.15	0.00	0.07
0.00	−0.17	0.00	−0.13	0.01	0.41	−0.01	−0.57	−0.01	−0.50
0.00	0.59	0.00	−0.11	0.00	0.31	0.00	0.42	0.00	0.01
0.00	−0.20	0.00	−0.38	−0.01	−0.60	0.00	−0.15	0.00	−0.17
0.00	0.57	0.00	0.54	0.02	1.07	0.00	0.24	0.00	0.18
0.01	1.47	0.01	0.94	0.01	0.40	0.00	0.43	0.00	0.16
0.01	0.80	0.00	−0.02	−0.01	−0.39	−0.01	−0.74	−0.01	−0.88
0.01	0.73	−0.03	−3.41	−0.03	−1.68	0.00	−0.45	−0.01	−0.48
0.00	−0.54	−0.02	−2.61	0.00	0.03	0.01	0.73	0.01	0.75
0.01	1.11	0.01	1.21	−0.03	−1.83	−0.01	−0.81	−0.01	−0.83

**Table A13.** Abnormal returns of the (−5, +5) event window (Prime Minister of Iceland Announced His Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.14	0.01	1.05	0.00	0.21	0.01	0.50	0.01	0.84
0.00	0.10	0.01	0.73	0.01	0.53	0.00	0.45	0.00	0.42
0.01	0.70	0.00	−0.04	−0.02	−1.02	0.00	−0.32	0.00	−0.19
0.01	1.01	−0.01	−1.22	−0.01	−0.83	0.01	0.53	0.01	0.60
0.01	1.16	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.31
0.00	−0.17	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.97
0.01	0.56	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.00
0.00	−0.20	0.01	1.45	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.21	0.00	0.31	0.02	1.14	0.00	0.33	0.00	0.27
−0.01	−1.34	0.00	−0.62	0.01	0.63	0.00	−0.26	0.00	−0.25
0.00	0.15	0.00	0.11	0.01	0.46	0.01	1.02	0.01	0.93

**Table A14.** Abnormal returns of the (0, +5) event window (Prime Minister of Iceland announced his resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.14	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25
0.00	0.16	0.00	0.10	0.01	0.46	0.01	1.03	0.01	0.93

**Table A15.** Abnormal returns of the (−2, +2) event window (Prime Minister of Iceland announced his resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	1.08	−0.01	−1.22	−0.01	−0.84	0.01	0.53	0.01	0.61
0.01	1.24	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.31
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.16

**Table A16.** Abnormal returns of the (0, +2) event window (Prime Minister of Iceland announced his resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15

**Table A17.** Abnormal returns of the (−1, +1) event window (Prime Minister of Iceland announced his resignation).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	1.24	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.31
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01

**Table A18.** Abnormal returns of the (0, +1) event window (Prime Minister of Iceland announced his resignation).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01

**Table A19.** Cumulative abnormal returns (Prime Minister of Iceland announced his resignation).

	PSX		OMXIPI		IBEX 35		NYSE		S&P500	
	CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.
CAR (−20, +20)	0.05	0.12	−0.05	−0.14	0.04	0.06	0.04	0.10	0.03	0.08
CAR (0, +20)	0.03	0.17	−0.02	−0.14	0.04	0.13	0.01	0.07	0.00	0.00
CAR (−5, +5)	0.00	0.00	0.01	0.18	0.01	0.07	0.01	0.09	0.01	0.13
CAR (0, +5)	0.00	0.08	0.00	0.08	−0.02	−0.27	0.00	−0.02	0.00	0.01
CAR (−2, +2)	0.02	0.57	−0.01	−0.37	−0.01	−0.20	0.00	0.11	0.00	0.07
CAR (0, +2)	0.00	0.21	0.00	0.19	−0.02	−0.68	0.00	−0.04	0.00	0.02
CAR (−1, +1)	0.01	0.53	0.00	−0.20	−0.02	−0.75	−0.01	−0.53	−0.01	−0.64
CAR (0, +1)	0.00	0.42	0.00	0.38	−0.02	−1.36	0.00	−0.09	0.00	0.03

**Table A20.** Average abnormal return and cumulative abnormal return (Prime Minister of Iceland announced his resignation).

		PSX	OMXIPI	IBEX 35	NYSE	S&P500	CAAR
(−20, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.12	−0.14	0.06	0.10	0.08	0.05
(0, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.16	−0.13	0.13	0.07	0.00	0.06
(−5, +5)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.19	0.17	−0.09	0.09	0.11	0.07
(0, +5)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	−0.14	0.27	0.02	−0.01	−0.03	0.02
(−2, +2)	AAR	0.00	0.00	−0.01	0.00	0.00	0.00
	Sig.	0.50	0.07	−0.58	−0.15	−0.17	−0.14
(0, +2)	AAR	0.00	0.00	−0.01	0.00	0.00	0.00
	Sig.	0.07	0.61	−0.70	−0.39	−0.37	−0.25
(−1, +1)	AAR	0.00	0.00	−0.01	0.00	0.00	0.00
	Sig.	0.55	0.03	−0.44	−0.07	−0.09	−0.07
(0, +1)	AAR	0.00	0.00	−0.01	0.00	0.00	0.00
	Sig.	0.21	0.19	−0.68	−0.04	0.02	−0.14

### Appendix C. Jurgen Mossack Resigned, Dated 7 April 2016

**Table A21.** Abnormal returns of the (−20, +20) event window for Leak of Panama papers (Jurgen Mossack Resignation).

PSX		OMXIP		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
−0.01	−0.79	0.00	0.59	0.00	0.10	0.00	0.42	0.01	0.49
0.00	−0.14	0.00	−0.44	0.04	2.44	0.00	0.02	0.00	0.02
0.00	0.22	−0.01	−0.69	0.01	0.43	0.01	1.39	0.02	1.54
0.00	−0.37	0.01	1.38	−0.02	−1.07	0.00	−0.20	0.00	−0.11
0.01	0.84	−0.01	−1.61	0.00	−0.13	0.00	−0.30	0.00	−0.17
0.00	0.19	−0.01	−0.67	0.00	0.17	0.00	0.27	0.01	0.54
0.00	0.36	0.00	−0.01	0.01	0.58	0.01	0.85	0.01	0.63
0.00	−0.20	0.00	−0.39	0.00	−0.16	0.01	0.56	0.00	0.42
0.00	−0.32	0.00	−0.29	0.00	−0.15	0.00	0.07	0.00	0.10
0.00	−0.03	0.00	−0.16	−0.01	−0.41	0.00	−0.25	0.00	−0.07
0.00	−0.43	0.00	−0.11	−0.01	−0.95	0.00	−0.48	−0.01	−0.59
0.00	0.20	0.00	−0.12	0.00	0.07	0.00	−0.03	0.00	−0.03
0.00	0.04	0.00	−0.12	0.00	0.07	0.00	0.10	0.00	0.06
0.00	−0.13	0.01	1.04	0.00	0.21	0.01	0.49	0.01	0.83
0.00	0.10	0.01	0.73	0.01	0.53	0.00	0.45	0.00	0.41
0.01	0.65	0.00	−0.04	−0.02	−1.03	0.00	−0.31	0.00	−0.19
0.01	0.94	−0.01	−1.22	−0.01	−0.84	0.01	0.52	0.01	0.60
0.01	1.08	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.31
0.00	−0.16	0.00	−0.12	−0.02	−1.54	−0.01	−0.93	−0.01	−0.96
0.01	0.52	0.00	0.50	0.00	0.17	0.01	0.84	0.01	0.99
0.00	−0.18	0.01	1.44	−0.01	−0.75	−0.01	−1.07	−0.01	−1.13
0.00	0.19	0.00	0.31	0.02	1.15	0.00	0.33	0.00	0.27
−0.01	−1.25	0.00	−0.62	0.01	0.63	0.00	−0.26	0.00	−0.25
0.00	0.14	0.00	0.11	0.01	0.46	0.01	1.01	0.01	0.92
0.00	0.07	0.01	0.81	0.03	2.15	0.01	0.83	0.01	0.95
0.00	0.35	0.00	0.00	0.01	0.38	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.03	0.01	1.00	0.00	0.29	0.01	0.72	0.01	0.62
0.00	−0.10	0.00	−0.24	0.01	0.72	0.01	0.61	0.00	0.29
0.00	−0.35	0.00	−0.42	0.02	1.34	0.00	0.15	0.00	0.07
0.00	−0.15	0.00	−0.13	0.01	0.41	−0.01	−0.56	−0.01	−0.49
0.00	0.51	0.00	−0.11	0.00	0.31	0.00	0.41	0.00	0.01
0.00	−0.17	0.00	−0.38	−0.01	−0.61	0.00	−0.14	0.00	−0.17
0.00	0.50	0.00	0.54	0.02	1.08	0.00	0.24	0.00	0.18
0.01	1.28	0.01	0.94	0.01	0.41	0.00	0.42	0.00	0.16
0.01	0.69	0.00	−0.02	−0.01	−0.40	−0.01	−0.73	−0.01	−0.87
0.01	0.63	−0.03	−3.42	−0.03	−1.69	0.00	−0.44	−0.01	−0.47
0.00	−0.47	−0.02	−2.62	0.00	0.04	0.01	0.71	0.01	0.74
0.01	0.97	0.01	1.21	−0.03	−1.84	−0.01	−0.80	−0.01	−0.82
0.01	1.23	−0.01	−1.02	−0.01	−0.77	−0.01	−0.57	−0.01	−0.55
0.02	1.81	0.00	−0.11	0.01	0.33	0.00	0.01	0.00	−0.02

**Table A22.** Abnormal returns of the (0, +20) event window for Leak of Panama papers (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.13	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25
0.00	0.16	0.00	0.10	0.01	0.46	0.01	1.02	0.01	0.93
0.00	0.08	0.01	0.80	0.03	2.13	0.01	0.84	0.01	0.96
0.00	0.40	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.63
0.00	−0.12	0.00	−0.24	0.01	0.71	0.01	0.62	0.00	0.29
0.00	−0.40	0.00	−0.42	0.02	1.32	0.00	0.15	0.00	0.07
0.00	−0.17	0.00	−0.13	0.01	0.41	−0.01	−0.57	−0.01	−0.50
0.00	0.59	0.00	−0.11	0.00	0.31	0.00	0.42	0.00	0.01
0.00	−0.20	0.00	−0.38	−0.01	−0.60	0.00	−0.14	0.00	−0.17
0.00	0.57	0.00	0.54	0.02	1.07	0.00	0.24	0.00	0.18
0.01	1.47	0.01	0.94	0.01	0.40	0.00	0.43	0.00	0.16
0.01	0.80	0.00	−0.02	−0.01	−0.39	−0.01	−0.74	−0.01	−0.88
0.01	0.73	−0.03	−3.41	−0.03	−1.67	0.00	−0.45	−0.01	−0.48
0.00	−0.54	−0.02	−2.61	0.00	0.03	0.01	0.73	0.01	0.75
0.01	1.12	0.01	1.21	−0.03	−1.82	−0.01	−0.81	−0.01	−0.83
0.01	1.41	−0.01	−1.01	−0.01	−0.76	−0.01	−0.58	−0.01	−0.56
0.02	2.07	0.00	−0.11	0.01	0.33	0.00	0.01	0.00	−0.02

**Table A23.** Abnormal returns of the (−5, +5) event window for Leak of Panama papers (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	0.74	0.00	−0.04	−0.02	−1.02	0.00	−0.32	0.00	−0.19
0.01	1.07	−0.01	−1.22	−0.01	−0.83	0.01	0.53	0.01	0.60
0.01	1.23	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.31
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.97
0.01	0.59	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.14	0.00	0.33	0.00	0.27
−0.01	−1.42	0.00	−0.62	0.01	0.63	0.00	−0.26	0.00	−0.25
0.00	0.15	0.00	0.11	0.01	0.46	0.01	1.02	0.01	0.93
0.00	0.08	0.01	0.81	0.03	2.14	0.01	0.84	0.01	0.96
0.00	0.40	0.00	0.00	0.01	0.38	0.00	0.12	0.00	0.02

**Table A24.** Abnormal returns of the (0, +5) event window (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.13	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25
0.00	0.16	0.00	0.10	0.01	0.46	0.01	1.02	0.01	0.93
0.00	0.08	0.01	0.80	0.03	2.13	0.01	0.84	0.01	0.96
0.00	0.40	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02

**Table A25.** Abnormal returns of the (−2, +2) event window (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.18	0.00	−0.12	−0.02	−1.53	−0.01	−0.95	−0.01	−0.98
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.14	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25

**Table A26.** Abnormal returns of the (0, +2) event window (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.13	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25

**Table A27.** Abnormal returns of the (−1, +1) event window (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.01	0.60	0.00	0.50	0.00	0.17	0.01	0.86	0.01	1.01
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.13	0.00	0.33	0.00	0.27

**Table A28.** Abnormal returns of the (0, +1) event window (Jurgen Mossack Resignation).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.21	0.01	1.44	−0.01	−0.74	−0.01	−1.09	−0.01	−1.15
0.00	0.22	0.00	0.31	0.02	1.13	0.00	0.33	0.00	0.27

**Table A29.** Cumulative abnormal returns (Jurgen Mossack Resignation).

		PSX		OMXIP1		IBEX 35		NYSE		S&P500	
		CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.
CAR	(−20, +20)	0.08	0.20	−0.05	−0.16	0.03	0.05	0.04	0.11	0.04	0.09
CAR	(0, +20)	0.05	0.32	−0.03	−0.21	0.06	0.18	0.01	0.04	−0.01	−0.03
CAR	(−5, +5)	0.02	0.16	−0.01	−0.13	−0.03	−0.19	0.00	0.02	0.00	0.04
CAR	(0, +5)	0.00	0.00	0.01	0.35	0.01	0.08	−0.01	−0.15	−0.01	−0.18
CAR	(−2, +2)	0.00	0.10	0.00	0.10	−0.02	−0.34	0.00	−0.02	0.00	0.01
CAR	(0, +2)	0.00	0.00	0.01	0.87	0.01	0.20	−0.01	−0.38	−0.01	−0.44
CAR	(−1, +1)	0.00	0.19	0.02	0.97	−0.01	−0.28	0.00	−0.11	0.00	−0.07
CAR	(0, +1)	0.00	0.01	0.01	1.75	0.01	0.40	−0.01	−0.76	−0.01	−0.88

**Table A30.** Average abnormal returns and cumulative average abnormal returns (Jurgen Mossack Resignation).

		PSX	OMXIP	IBEX 35	NYSE	S&P500	CAAR
(−20, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.20	−0.15	0.05	0.10	0.09	0.06
(0, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.24	−0.20	0.08	0.04	−0.03	0.03
(−5, +5)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	−0.13	0.08	0.66	0.09	0.08	0.22
(0, +5)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	−0.13	0.34	0.66	0.16	0.13	0.28
(−2, +2)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	−0.20	0.30	−0.07	−0.22	−0.22	−0.09
(0, +2)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	−0.47	0.38	0.34	−0.34	−0.38	−0.06
(−1, +1)	AAR	0.00	0.01	0.00	0.00	0.00	0.00
	Sig.	0.20	0.75	0.19	0.03	0.04	0.22
(0, +1)	AAR	0.00	0.01	0.00	0.00	0.00	0.00
	Sig.	0.00	0.87	0.20	−0.38	−0.44	0.03

#### Appendix D. José Manuel Soria, Spain's Minister of Industry, Resigned on 15 April 2016

**Table A31.** Abnormal returns of the (−20, +20) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIP		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.37	0.00	−0.01	0.01	0.57	0.01	0.86	0.01	0.63
0.00	−0.20	0.00	−0.39	0.00	−0.16	0.01	0.56	0.00	0.43
0.00	−0.32	0.00	−0.28	0.00	−0.15	0.00	0.07	0.00	0.10
0.00	−0.03	0.00	−0.16	−0.01	−0.40	0.00	−0.25	0.00	−0.07
0.00	−0.43	0.00	−0.11	−0.01	−0.94	0.00	−0.48	−0.01	−0.60
0.00	0.21	0.00	−0.12	0.00	0.07	0.00	−0.03	0.00	−0.03
0.00	0.05	0.00	−0.12	0.00	0.07	0.00	0.10	0.00	0.06
0.00	−0.14	0.01	1.04	0.00	0.21	0.01	0.50	0.01	0.84
0.00	0.10	0.01	0.73	0.01	0.52	0.00	0.45	0.00	0.41
0.01	0.66	0.00	−0.04	−0.02	−1.01	0.00	−0.32	0.00	−0.19
0.01	0.96	−0.01	−1.21	−0.01	−0.83	0.01	0.52	0.01	0.60
0.01	1.10	0.00	−0.28	0.00	0.04	0.00	−0.11	0.00	−0.31
0.00	−0.16	0.00	−0.12	−0.02	−1.52	−0.01	−0.94	−0.01	−0.97
0.01	0.53	0.00	0.50	0.00	0.17	0.01	0.85	0.01	1.00
0.00	−0.19	0.01	1.44	−0.01	−0.74	−0.01	−1.08	−0.01	−1.14
0.00	0.19	0.00	0.31	0.02	1.13	0.00	0.33	0.00	0.27
−0.01	−1.27	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25
0.00	0.14	0.00	0.10	0.01	0.46	0.01	1.01	0.01	0.92
0.00	0.07	0.01	0.80	0.03	2.13	0.01	0.84	0.01	0.95

Table A31. Cont.

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.36	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.03	0.01	1.00	0.00	0.29	0.01	0.72	0.01	0.62
0.00	−0.10	0.00	−0.24	0.01	0.71	0.01	0.61	0.00	0.29
0.00	−0.36	0.00	−0.42	0.02	1.32	0.00	0.15	0.00	0.07
0.00	−0.15	0.00	−0.13	0.01	0.41	−0.01	−0.57	−0.01	−0.49
0.00	0.52	0.00	−0.11	0.00	0.31	0.00	0.41	0.00	0.01
0.00	−0.17	0.00	−0.38	−0.01	−0.60	0.00	−0.14	0.00	−0.17
0.00	0.51	0.00	0.54	0.02	1.07	0.00	0.24	0.00	0.18
0.01	1.31	0.01	0.94	0.01	0.40	0.00	0.42	0.00	0.16
0.01	0.71	0.00	−0.02	−0.01	−0.39	−0.01	−0.73	−0.01	−0.88
0.01	0.65	−0.03	−3.41	−0.03	−1.67	0.00	−0.44	−0.01	−0.48
0.00	−0.48	−0.02	−2.61	0.00	0.03	0.01	0.72	0.01	0.74
0.01	0.99	0.01	1.21	−0.03	−1.82	−0.01	−0.80	−0.01	−0.82
0.01	1.25	−0.01	−1.01	−0.01	−0.76	−0.01	−0.57	−0.01	−0.56
0.02	1.84	0.00	−0.11	0.01	0.33	0.00	0.01	0.00	−0.02
0.00	0.06	0.01	1.19	0.00	0.16	0.00	0.30	0.00	0.31
0.01	0.72	0.01	0.69	0.00	−0.24	0.00	0.03	0.00	0.08
0.00	0.05	0.00	0.42	0.01	0.92	0.01	1.18	0.01	1.19
0.00	−0.04	−0.01	−1.03	−0.01	−0.76	−0.01	−0.97	−0.01	−0.91
−0.01	−0.67	0.00	0.09	0.00	0.06	0.00	0.18	0.00	−0.01
0.00	0.18	−0.01	−0.81	0.01	0.50	−0.01	−1.01	−0.01	−0.80

Table A32. Abnormal returns of the (0, +20) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIP1		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.62
0.00	−0.12	0.00	−0.24	0.01	0.71	0.01	0.61	0.00	0.29
0.00	−0.40	0.00	−0.42	0.02	1.31	0.00	0.15	0.00	0.07
0.00	−0.18	0.00	−0.13	0.01	0.41	−0.01	−0.57	−0.01	−0.50
0.00	0.59	0.00	−0.11	0.00	0.30	0.00	0.42	0.00	0.01
0.00	−0.20	0.00	−0.38	−0.01	−0.59	0.00	−0.14	0.00	−0.17
0.00	0.58	0.00	0.54	0.02	1.06	0.00	0.24	0.00	0.18
0.01	1.48	0.01	0.94	0.01	0.40	0.00	0.42	0.00	0.16
0.01	0.80	0.00	−0.02	−0.01	−0.39	−0.01	−0.74	−0.01	−0.88
0.01	0.73	−0.03	−3.41	−0.03	−1.65	0.00	−0.44	−0.01	−0.48
0.00	−0.54	−0.02	−2.61	0.00	0.03	0.01	0.72	0.01	0.74
0.01	1.12	0.01	1.20	−0.03	−1.80	−0.01	−0.81	−0.01	−0.82
0.01	1.42	−0.01	−1.01	−0.01	−0.75	−0.01	−0.58	−0.01	−0.56
0.02	2.09	0.00	−0.11	0.01	0.32	0.00	0.01	0.00	−0.02
0.00	0.07	0.01	1.19	0.00	0.16	0.00	0.30	0.00	0.31
0.01	0.82	0.01	0.68	0.00	−0.24	0.00	0.03	0.00	0.08
0.00	0.05	0.00	0.41	0.01	0.91	0.01	1.18	0.01	1.19
0.00	−0.05	−0.01	−1.03	−0.01	−0.75	−0.01	−0.98	−0.01	−0.91
−0.01	−0.76	0.00	0.09	0.00	0.06	0.00	0.18	0.00	−0.01
0.00	0.20	−0.01	−0.81	0.01	0.50	−0.01	−1.01	−0.01	−0.80

**Table A33.** Abnormal returns of the (−5, +5) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.22	0.00	0.30	0.02	1.13	0.00	0.33	0.00	0.27
−0.01	−1.43	0.00	−0.61	0.01	0.62	0.00	−0.26	0.00	−0.25
0.00	0.16	0.00	0.10	0.01	0.46	0.01	1.02	0.01	0.93
0.00	0.08	0.01	0.80	0.03	2.13	0.01	0.84	0.01	0.96
0.00	0.41	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.51	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	0.99	0.00	0.29	0.01	0.73	0.01	0.62
0.00	−0.12	0.00	−0.24	0.01	0.71	0.01	0.61	0.00	0.29
0.00	−0.40	0.00	−0.42	0.02	1.32	0.00	0.15	0.00	0.07
0.00	−0.17	0.00	−0.12	0.01	0.41	−0.01	−0.57	−0.01	−0.50
0.00	0.59	0.00	−0.11	0.00	0.31	0.00	0.42	0.00	0.01

**Table A34.** Abnormal returns of the (0, +5) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.62
0.00	−0.12	0.00	−0.24	0.01	0.71	0.01	0.61	0.00	0.29
0.00	−0.40	0.00	−0.42	0.02	1.31	0.00	0.15	0.00	0.07
0.00	−0.18	0.00	−0.13	0.01	0.41	−0.01	−0.57	−0.01	−0.50
0.00	0.59	0.00	−0.11	0.00	0.30	0.00	0.42	0.00	0.01

**Table A35.** Abnormal returns of the (−2, +2) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.08	0.01	0.80	0.03	2.12	0.01	0.84	0.01	0.96
0.00	0.40	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.62
0.00	−0.12	0.00	−0.24	0.01	0.71	0.01	0.62	0.00	0.29

**Table A36.** Abnormal returns of the (0, +2) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.62
0.00	−0.12	0.00	−0.24	0.01	0.71	0.01	0.61	0.00	0.29

**Table A37.** Abnormal returns of the (−1, +1) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	0.41	0.00	0.00	0.01	0.37	0.00	0.12	0.00	0.02
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.62

**Table A38.** Abnormal returns of the (0, +1) event window (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

PSX		OMXIPI		IBEX 35		NYSE		S&P500	
AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.	AR	Sig.
0.00	−0.02	−0.01	−1.52	0.00	−0.01	0.00	−0.10	0.00	−0.09
0.00	−0.04	0.01	1.00	0.00	0.29	0.01	0.73	0.01	0.62

**Table A39.** Cumulative abnormal returns (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

		PSX		OMXIPI		IBEX 35		NYSE		S&P500	
		CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.	CAR	Sig.
CAR	(−20, +20)	0.08	0.21	−0.03	−0.11	0.01	0.02	0.02	0.06	0.01	0.03
CAR	(0, +20)	0.06	0.38	−0.05	−0.29	0.00	0.01	0.00	−0.02	−0.02	−0.08
CAR	(−5, +5)	−0.01	−0.11	0.00	−0.03	0.03	0.18	0.00	0.01	0.00	0.00
CAR	(0, +5)	0.00	−0.01	0.00	−0.10	0.00	0.06	0.01	0.13	0.01	0.11
CAR	(−2, +2)	0.00	0.12	0.01	0.20	0.04	0.63	0.01	0.24	0.01	0.24
CAR	(0, +2)	0.00	−0.03	0.00	−0.26	0.00	0.14	0.01	0.31	0.01	0.27
CAR	(−1, +1)	0.00	0.19	−0.01	−0.76	0.01	0.18	0.00	0.01	0.00	−0.04
CAR	(0, +1)	0.00	−0.06	0.00	−0.52	0.00	0.28	0.01	0.63	0.01	0.54

**Table A40.** Average abnormal returns and cumulative average abnormal returns (Resignation of D. José Manuel Soria, Spain's Minister of Industry).

		PSX	OMXIPI	IBEX 35	NYSE	S&P500	CAAR
(−20, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.21	−0.10	0.02	0.06	0.03	0.04
(0, +20)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.36	−0.27	0.01	−0.02	−0.07	0.00
(−5, +5)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	−0.07	−0.07	0.70	0.30	0.21	0.28
(0, +5)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	−0.03	−0.24	0.50	0.21	0.07	0.16
(−2, +2)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	0.06	0.01	0.70	0.44	0.36	0.37
(0, +2)	AAR	0.00	0.00	0.01	0.00	0.00	0.00
	Sig.	−0.06	−0.25	0.33	0.41	0.27	0.18
(−1, +1)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	0.12	−0.17	0.22	0.25	0.18	0.14
(0, +1)	AAR	0.00	0.00	0.00	0.00	0.00	0.00
	Sig.	−0.03	−0.26	0.14	0.31	0.27	0.11

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