

FUNDAÇÃO GETULIO VARGAS  
ESCOLA DE ECONOMIA DE SÃO PAULO

FLORIAN OTTO

THE EFFECT OF ACQUISITION ANNOUNCEMENTS ON  
STOCK RETURNS OF ACQUIRING FIRMS:

A SHORT- AND LONG-TERM STUDY FOR DEVELOPED AND EMERGING  
COUNTRIES FOCUSING ON DOMESTIC AND CROSS-BORDER ACQUISITIONS  
AND THE IMPACT OF INSTITUTIONAL ENVIRONMENT

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## RESUMO

Ao usar um conjunto de compradores de vários países de 14 mercados diferentes, este trabalho tem como objetivo desenvolver uma compreensão global do impacto dos anúncios de aquisição em adquirentes de mercados desenvolvidos e emergentes. Este artigo utiliza uma abordagem empírica de estudo de eventos para investigar o efeito de anúncios de aquisição sobre o preço da ação das empresas de licitação. A amostra contém 624 anúncios de aquisição com empresas alvo localizadas em todo o mundo entre 1997 e 2015. Os resultados contradizem a sabedoria convencional de que os adquirentes do mercado desenvolvido geralmente experimentam perdas. Os concorrentes dos mercados emergentes e do mercado desenvolvido ganham significativamente no curto prazo. Além disso, para os adquirentes do mercado desenvolvido, o anúncio de aquisições transfronteiriças (CBAs) produz maiores retornos anormais do que o anúncio de aquisições domésticas. Por outro lado, os concorrentes dos mercados emergentes ganham com o anúncio de aquisições domésticas e perdem substancialmente ao publicar notícias sobre CBAs. Além disso, o ambiente institucional tem impacto nos retornos dos adquirentes.

**PALAVRAS CHAVE:** Empresas – Fusão e incorporação; Fusão e incorporação; Desenvolvimento institucional.

## **ABSTRACT**

By using a multi-country set of acquirers from 14 different markets, this work aims to develop a global understanding of the impact of acquisition announcements on developed- and emerging-market acquirers. This paper uses an empirical event-study approach to investigate the effect of acquisition announcements on the share price of bidding firms. The sample contains 624 acquisition announcements with target firms located throughout the world between 1997 and 2015. The results contradict the conventional wisdom that developed-market acquirers generally experience losses. Both emerging-market and developed-market bidders gain significantly in the short term. Moreover, for developed-market acquirers, the announcement of cross-border acquisitions (CBAs) yields higher abnormal returns than the announcement of domestic acquisitions. On the other hand, emerging-market bidders gain from announcing domestic acquisitions, and lose substantially when publishing news about CBAs. In addition, the institutional environment is found to have an impact on acquirer returns.

**KEY WORDS:** Acquisitions, Abnormal Returns, Cross-border Acquisitions, Institutional Environment

## TABLE OF CONTENTS

1.	Introduction.....	9
2.	Literature Review and Developed Hypothesis .....	10
	2.1 Acquirer Returns in Developed and Emerging Countries.....	11
	2.2 Acquirer Returns in Domestic and Cross-Border Acquisitions .....	12
	2.3 Institutional Environment and the Impact on Acquirer Returns in CBAs.....	13
3.	Data Collection and Summary Statistics.....	14
4.	Methodology.....	15
	4.1 One-Factor Market Model.....	18
	4.2 Aggregated Cumulative Abnormal Returns .....	19
	4.3 Aggregated Buy-and-hold Abnormal Returns.....	20
	4.4 Significance Tests.....	20
5.	Empirical Results.....	23
	5.1 Empirical Results of the Aggregate Sample .....	23
	5.1.1 Aggregate Sample Short-term Event Study .....	23
	5.1.2 Aggregate Sample Long-term Event Study.....	25
	5.2 Empirical Results of Individual Countries.....	26
	5.2.1 Individual Countries Short-term Event Study .....	26
	5.2.2 Individual Countries Long-term Event Study.....	28
	5.3 Domestic and Cross-border Acquisitions Results.....	31
	5.3.1 Domestic and Cross-border Acquisitions Short-term Event Study .....	31
	5.3.2 Domestic and Cross-border Acquisitions Long-term Event Study .....	34
	5.4 Impact of Institutional Environment Results.....	36
	5.4.1 Impact of Institutional Environment on Short-term Event Study.....	36
	5.4.2 Impact of Institutional Environment Long-term Event Study.....	38
6.	Limitations.....	40
7.	Conclusion.....	41
	References .....	42
	Appendix .....	45
	Separate Appendix: Complete List of Acquisition Announcements .....	48

## 1. Introduction

Different kinds of mergers and acquisitions (M&As) are present in all industries and across all countries and continents. In fact, M&A activities have always been an integral part of the inorganic growth strategies of corporates throughout the world. A record year for the number of worldwide M&A transactions was marked in 2016, when more than 48,000 deals were announced, with a corresponding total deal value of above US\$3.5 trillion.<sup>1</sup> Most of the deals are small and mid-size in value and only a fraction of the total deals are considered to be mega-deals, i.e. M&A transactions with a value higher than US\$1billion.<sup>2</sup>

Not only has the number of M&A transactions increased in recent decades, but public and institutional interests, as well as numerous services supporting and consulting parties engaged in M&As, have become an integral part of this kind of deal-making. Moreover, the impacts of these events on numerous variables have been discussed in academic research, as well as in professional information technology circles all over the world. The focus of this research has been primarily on North American and European markets. Past studies have demonstrated that, in most cases, announcements of acquisitions tend to destroy value for shareholders of acquiring firms – in both short- and long-term perspectives.<sup>3</sup> While public deals of listed companies create a considerable amount of publicity and press coverage, acquirers are likely not to meet the public's high expectations and fall short in generating shareholder value or synergies. This paper contributes to the existing literature and research by analysing the stock returns of acquiring firms at the time of acquisition announcements not only in developed markets, but also in emerging markets and a frontier market, as noted by the Morgan Stanley Capital International (MSCI) market classification.<sup>4</sup> The paper identifies the top acquisitions by value in 14 different markets, and compares the security performance of acquiring firms in the short term, i.e. around the announcement date, as well as in the long term – up to 18 months after the official announcement. The following countries were selected to form part of the study: Argentina, Australia, Brazil, Canada, China, France, Germany, Hong Kong, India, Japan, Mexico, South Africa, South Korea, and the United States. The research focuses on the aggregate sample and on each individual country, while also analysing the impact of domestic and cross-border acquisitions (CBAs), and the impact of the institutional environment in the target country on shareholder value creation.

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<sup>1</sup> <https://imaa-institute.org/mergers-and-acquisitions-statistics/>

<sup>2</sup> <https://imaa-institute.org/m-and-a-statistics-transaction-type/>

<sup>3</sup> Elaborated on in the following articles by Betton et al. (2008), Moeller et al. (2005), Mueller (1997)

<sup>4</sup> <https://www.msci.com/market-classification/>

The results indicate that both developed-market and emerging-market bidders benefit from announcing acquisitions in the short term. Moreover, when developed-market acquirers announce cross-border acquisitions, higher abnormal returns are reported than when announcing domestic acquisitions. For emerging-market bidders the effect is reversed. With regard to the impact of the institutional environment in the target country, this paper finds that when announcing CBAs in less developed countries, in terms of institutional environment, bidders benefit substantially.

The rest of this paper is organised as follows. Chapter 2 examines the relevant literature and its various findings on the topics being investigated. Thereafter, the method of data collection is explained and highlights relating to important data summary statistics are provided. Chapter 4 elaborates on the empirical methodology approach. In the following chapter, empirical results and comments on the contribution to existing literature are presented. Chapter 6 deals with possible limitations of the study. The paper concludes with a discussion of the implications of this study and possibilities for further research.

## **2. Literature Review and Developed Hypothesis**

The effect of acquisition announcements on the stock prices of acquiring firms and target firms has already been investigated by several studies and research papers in a number of countries. This chapter first briefly describes the M&A environment, and goes on to summarise relevant findings from various countries and the focus topics being investigated. Hypotheses are then developed based on previous literature and findings.

The purpose of and motivation for this study are to enhance academic research on the comparison of acquirer returns at the time of acquisition announcements between different countries and markets. Previous research into these topics has focused primarily on specific countries. By using a multi-country sample with announcement events from companies listed in 14 different markets, this paper aims to establish important evidence on the impact of acquisition announcements on acquirer returns globally. Moreover, the main research question is then modified to analyse the influence of domestic and cross-border acquisitions and how the institutional environment of the target country affects acquirer returns.

## 2.1 Acquirer Returns in Developed and Emerging Countries

Mergers and acquisitions are considered as part of what many refer to as the 'market for corporate control' (Berk & DeMarzo, 2011). The global M&A market is very active, with an average transaction value of more than US\$1 trillion per annum over the past 20 years (Berk & DeMarzo, 2011). Considering this enormous transaction value and the publicity and press coverage being created, it is very probable that M&A announcements have an impact on stock returns. This impact has been extensively researched in several ways, especially in developed countries. However, these studies often arrive at different results and contradictory outcomes. A study by Malatesta (1983) finds significant negative abnormal returns in the long term for acquiring firms, and significant negative abnormal returns as an immediate effect after M&A announcements. Agrawal, Jaffe and Mandelker (1992) support the findings by Malatesta, and conclude that stockholders of acquiring firms suffer a statistically significant wealth loss of approximately 10% over the first years following an M&A announcement. Betton, Eckbo, and Thorburn (2008), on the other hand, find that shareholders of acquiring companies realise a significant positive 0.73% gain on their stock prices shortly after an M&A announcement. Betton et al. (2008) argue for a small significant gain for acquirers, while Malatesta (1983) finds significant negative abnormal returns in the short term. On the basis of the findings mentioned above, it appears that various authors in developed countries arrive at contradictory results, at least in the short-term. Based on these contradictions and the twenty-year time span of this study, it is expected that positive and negative abnormal returns counter each other in the short and long term. The existence of this counter-effect means that there should be no significant abnormal returns for the data analysed in developed markets.

However, several studies found that in emerging markets, acquiring firms and their shareholders do experience significant positive abnormal returns in relation to corporate takeover actions. Simoes, Macedo-Soares, Klotzle and Pinto (2012) investigate the effect of acquisition announcements on the acquirer's stock prices in Latin America. They find that in Argentina, statistically significant abnormal returns are experienced by acquirers when the event is announced and in the days subsequent to the acquisition – whereas this is not the case in Brazil. The authors identify a more efficient market in Brazil, in terms of the semi-strong efficient market hypothesis (Simoes et al., 2012). Moreover, Brito, Batistella and Fama (2005) conclude that in Brazil there are no significant abnormal returns for acquirers at the time of the announcement. Therefore, Simoes et al. (2012) and Brito et al. (2005) agree that in Brazil, markets seem to be efficient, with no significant abnormal returns for the acquirer around acquisitions are announced.

In addition to the research on M&A activities in South America, several studies have also researched the impact of M&A in Asia. Rani, Yadaf and Jain (2012) analyse share price performance after M&A announcements in India. Their results indicate that shareholders of acquiring firms generate a 1.6% statistically significant abnormal return during a five-day event window. In China, Chi, Sun and Young (2011) investigate a large sample of acquiring firms in the Chinese stock market. They identify significant positive abnormal returns six months before the announcement date and in the respective event windows of the acquisitions (Chi et al., 2011). They claim information leakage as a possible reason for the abnormal returns experienced before the official announcement date. Therefore, in addition to short-term abnormal returns in a South American country, significant evidence also exists for abnormal returns in India and China around the announcement date.

On the basis of the above discussion and the reviewed literature this paper develops the following three hypotheses:

H1: Using the aggregate sample of acquisition announcement events there are no significant abnormal returns for acquirers during the respective event windows.

H1a: An analysis of the MSCI<sup>5</sup> sample of announcements made by companies listed in developed countries leads to the hypothesis that there are no significant abnormal returns for acquirers during the respective event windows.

H1b: Isolating from the sample those announcements made by firms listed in emerging countries only, leads to the hypothesis that there are significant positive abnormal returns for acquirers in emerging countries.

## **2.2 Acquirer Returns in Domestic and Cross-Border Acquisitions**

Over and above studies investigating the general impact of an acquisition announcement on acquirer returns in developed and emerging countries, there has also been considerable academic research into CBAs. Cross-border acquisitions have increased to the point where they constitute one third of the global number of deals, as discussed by Erel, Liao and Weisbach (2012). However, academic understanding of these deals – as against domestic M&As – is limited and often contradictory. In developed countries, research by experts on internationalisation predicts positive

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<sup>5</sup> <https://www.msci.com/market-classification/>

returns from cross-border acquisitions due to the positive effects of synergies and global expansion;<sup>6</sup> while other experts argue that CBAs result in wealth destruction, created by asymmetric information when evaluating foreign targets.<sup>7</sup> Similarly, with regard to emerging countries, Bhagat, Malhotra and Zhu (2011) discuss evidence of a significant positive market response to emerging-country acquirers in CBAs, while Aybar and Ficici (2009) identify that equity markets react negatively to emerging-market CBA announcements. Moreover, other important studies agree that CBAs create more value for acquiring shareholders than domestic acquisitions do. This finding holds good both for developed markets and for several emerging economies, as discussed by Moeller and Schlingemann (2005) and Feito-Ruiz and Menéndez-Requejo (2011). In order to extend the research on the impact of CBAs on acquirer returns, this work establishes the following hypotheses:

H2a: In developed countries, cross-border acquisitions generate higher abnormal returns for the acquirer than domestic acquisitions do.

H2b: In emerging countries, cross-border acquisitions generate higher abnormal returns for the acquirer than domestic acquisitions do.

### **2.3 Institutional Environment and the Impact on Acquirer Returns in CBAs**

Additionally, the level of institutional development in the country in which a target firm is incorporated was found to significantly influence returns for acquiring firms. On the one hand, a better developed institutional environment in the target country is a positive driver of cross-border acquisitions, according to Meyer, Estrin, Bhaumik and Peng (2009). On the other hand, Starks and Wei (2013) find that foreign acquiring firms incorporated in countries with a weaker institutional environment than the target-firm country, pay higher prices due to the fact that more risks are incurred with such targets, and that there are higher costs in complying with regulations. Although CBAs can be associated with higher risks and costs, this paper makes the following hypothesis:

H3: Cross-border acquisitions in which the target country is located in a better institutional environment than the acquirer country, generate higher abnormal returns than is usually the case with CBAs.

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<sup>6</sup> Discussed by Baldwin & Caves (1991) and Morck & Yeung (2003)

<sup>7</sup> According to Denis, Denis & Yost (2002) and Moeller & Schlingemann (2005)

So far, this paper has discussed and reviewed several important findings on the impact of acquisition announcements in developed markets and in four emerging markets. The subsequent chapters continue with the analysis, and introduce the data collection and summary statistics, as well as the methodology approach.

### 3. Data Collection and Summary Statistics

The sample of acquisition announcements utilized in this study was obtained from Thomson Reuters Eikon, and specifically from the Mergers and Acquisitions database. It includes completed deals announced by companies from 14 countries between 1997 and 2015. The sample covers announcements of acquisition of assets for a 100% target stake acquisition, and announcements of acquisitions of majority assets. The paper therefore excludes announcements of partial and minority-stake acquisitions. The acquiring firms are publicly listed in the respective markets, and private firms are therefore excluded from the sample. A total of 624 announcements satisfy the established criteria and are included in the sample.

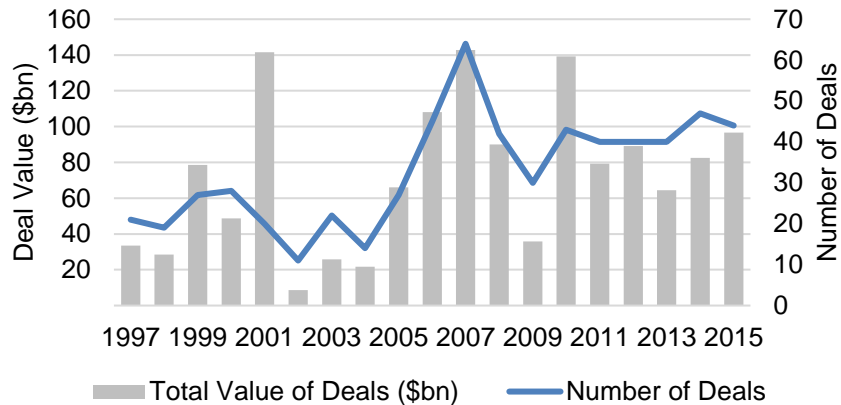
Of the total number of events, 336 are from acquirers listed in countries classified as developed markets according to MSCI<sup>8</sup>, while 255 events were announced by emerging-market incorporated companies. The remaining 33 announcements were made by companies listed in Argentina – a frontier market, according to MSCI. The sample includes 367 events for which the acquired stake is classified as ‘Acquisition of Assets’, implying the acquisition of a 100% stake in the target. A total of 257 events were classified as ‘Acquisition of Majority Assets’, where less than 100% was acquired. The mean deal value of all announcements was US\$2.214 billion, while the median deal value amounted to US\$1.0 billion. The spread is explained by the existence of some considerably large deals above US \$20 billion, and many mid-size and small-value deals. A total of 313 events represented a deal value equal to or larger than US\$1.0 billion, and were classified as mega-deals. There were 124 acquisition announcements that fell in a deal-value interval of between US\$500 million and US\$999 million, while 187 events represented a deal value of less than US\$500 million. In the sample, 320 events were cross-border acquisitions, while 304 events were domestic acquisitions. For the 320 CBAs, 154 acquisitions targeted companies in countries with a lower quality of institutional environment, while 150 focused on targets incorporated in an institutional environment of a higher quality than in the acquiring country.<sup>9</sup> Appendix 1 summarises the described summary statistics.

Figure 1 illustrates the distribution of deal announcements over the sample period. It can be observed that both deal announcements and deal value declined drastically in 2002 following the global stock market downturn, and again after the global financial

<sup>8</sup> <https://www.msci.com/market-classification/>

<sup>9</sup> <http://reports.weforum.org/global-competitiveness-report-2014-2015/rankings/>

crisis in 2008. Since 2013, deal value per acquisition announcement has increased slightly, illustrating a trend towards higher-value acquisitions in the recent past. Furthermore, the graphical illustrations also represent two important merger waves – namely the fifth and sixth merger waves – as pointed out by Alexandridis, Mavrovitis and Travlos (2012).



**Figure 1:** Distribution of announcements and deal value over the sample period. The figure illustrates the number of acquisition announcements per year and the corresponding total deal value per year for the sample presented in the Separate Appendix: Complete List of Acquisition Announcements.

For the analysis of stock price returns around announcement dates, daily closing prices of the respective acquirers and closing prices of implied market indices were downloaded from Bloomberg. As far back as the early 1980s, Dale (1984) justified the use of daily price data over monthly data on the basis of the increased statistical power achieved by reducing the sample interval to daily prices, applying more frequent sampling. In addition, Kothari and Warner (2008) support Dale's view by arguing that the use of daily returns allows for more informative studies of announcement effects due to improved statistic measurements. Non-trading days were excluded from the sample events, and prices from Bloomberg were additionally adjusted for capital changes, specifically for stock dividends, rights offerings/entitlements, stock splits/consolidations and spin-offs.

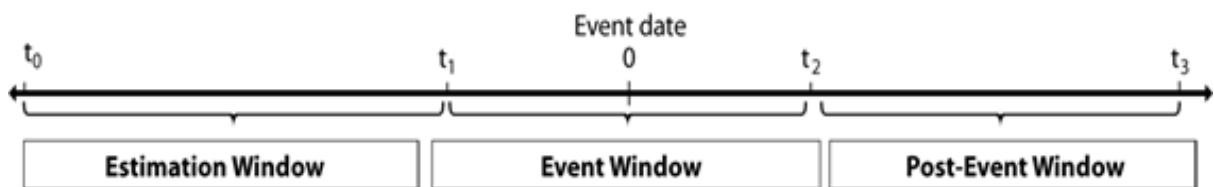
## 4. Methodology

An event-study approach is used for investigating the data set. Researchers have been using event studies for many years to examine the effects of economic events on the value of companies. James Dolley (1933) was one of the first to use a kind of event-study approach when he analysed the price effects of stock splits. Since then, the level of reliability and sophistication of this methodology has consistently improved. Fama, Fisher, Jensen, and Roll (1969) essentially developed the event study model, which is still used today. In general, only small modifications have been made to overcome

certain limitations of the approach developed by Fama et al. (1969). Widely used today, evidence suggests that event studies are a consistent and valid research tool, and are common in finance and accounting, as well as economic studies (Bodie et al., 2009). In general, an event study can be described as a technique of empirical financial research that enables an observer to assess the impact of an event on a firm's stock price (Bodie et al., 2009).

Although no exclusive format and outline are prescribed for an event study, it is recommended that the general procedure developed by well-known authors be followed. The seven-step approach for an event study developed by Campbell and MacKinlay (1997) was applied in structuring the event study for this paper. In the initial step, it is fundamental to identify the exact event being investigated, to ensure that all events can be compared with certainty. For this work, the event is defined as the acquisition announcement by firms acquiring either majority assets or full-ownership assets in other firms or other assets, e.g. drilling rights from governments.

Additionally, one should determine the period over which stock prices are examined. As the title of this paper suggests, the analysis focuses on a short-term and a long-term event study. Short-term event studies are advantageous when investigating the immediate effect an announcement has on stock prices – therefore only a few days or weeks around the event date. For this type of study, one has to identify the event date, the event window, the estimation window and the post-event window. The event date, in this particular case, is the announcement date of the acquisition (Figure 2). In cases where the announcement date falls on a non-trading day, the event date is the first respective trading day after the announcement was made, as explained by Boehmer, Broussard and Kallunki (2002).



**Figure 2:** Estimation and event windows for event studies with clear separation between pre- and post-event periods.

As far as the estimation, event and post-event windows are concerned, the challenge is to choose the optimal number of days to adequately capture the possible impact the announcement may have on the stock price. In fact, a trade off exists when choosing these optimal number of days for the respective windows (Boehmer et al., 2002). That

is to say, choosing a shorter event window may not include the full-time span within which investors learn about the event, while too large an event window, on the other hand, may also capture other information influencing the stock price (Boehmer et al., 2002). After researching the literature on the optimal window sizes for event studies, and analysing M&A announcements in research by Boehmer et al. (2002), Campbell and MacKinlay (1997), and on EventStudyMetrics<sup>10</sup>, the conclusion was reached that the appropriate time periods to use were 180 days for the estimation window and 81 days for the main event window (40 days before and after the announcement date). Additionally, seven smaller event windows are considered in this paper for the short-term analysis of stock returns.

In addition to a short-term analysis, this paper also makes use of long-term event studies. Khotari and Warner (2008) and Fama (1998) advocate the use of post-event period studies to obtain information about market inefficiency. As sudden information affects stock prices in the short term, these effects should revert to their mean level over longer horizons in order for market efficiency to be present. However, Khotari and Warner (2008) argue that as behavioral biases can be lasting, and arbitrage forces need prolonged efforts to correct the mispricing, it is advantageous to study abnormal performance over extended periods of at least one year following corporate events. In this paper, long-horizon event studies are applied in the investigation of stock prices of acquirers for up to 18 months of trading, i.e. for 360 trading days after an M&A announcement date.

The next steps relate to the determination of the selection criteria and the definition of the data collection. Chapter 3 of this paper has already elaborated in detail on the data used in this sample, and provides relevant sample statistics for the analysis.

Following the determination of the selection criteria, a measure of the abnormal return of the stock is required for an assessment of the announcement's impact. The objective is to isolate the stock price change originated by the announcement of the acquisition. In order to achieve this objective, the abnormal return – which consists of the difference between the realised return of the considered share of the acquirer and the expected normal return predicted by a normal return model – needs to be estimated. For acquirer  $i$  and event announcement date  $\tau$ , the abnormal return is given by:

$$AR_{i,\tau} = R_{i,\tau} - E[R_{i,\tau}|X_\tau] \quad [\text{Eq. 4.1}]$$

where  $AR_{i,\tau}$ ,  $R_{i,\tau}$  and  $E[R_{i,\tau}|X_\tau]$  represent the abnormal, actual, and normal returns for time period  $\tau$ , respectively. There are several models available for obtaining the

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<sup>10</sup> <http://eventstudymetrics.com/index.php/9-steps-to-follow-when-performing-a-short-time-study/>

expected (normal) return. According to MacKinlay (1997), two of the most common approaches used in event studies are the constant mean return model and the market model. Table 1 briefly illustrates these two models. Despite the fact that the constant mean return model is one of the simplest models, evidence suggests that in most cases it leads to results similar to those acquired in more sophisticated models<sup>11</sup>, and is therefore often used in short-term event studies. Although commonly applied, the constant mean return model is not utilized in this paper, as the objective of this research is to conduct a long-term analysis as well.

**Table 1:** Most common methods of estimating the expected return benchmark.

Constant Mean Return Model	$R_{i,\tau} = \mu_i + \varepsilon_{i,\tau} \rightarrow E[R_{i,\tau} X_\tau] = \mu_i$
Market Model	$R_{i,\tau} = \alpha_i + \beta_i R_{m,\tau} + \varepsilon_{i,\tau} \rightarrow E[R_{i,\tau} R_{m,\tau}] = \alpha_i + \beta_i R_{m,\tau}$

There are even more possible alternative models – for example the capital asset pricing model, or multi-factor models, such as the three-factor model developed by Fama and French (1993). However, these models have not been employed in this study due to the lack of an adequate risk-free asset in all 14 markets at all times. The market model has therefore been chosen for this paper, and is explained in more detail in the next chapter.

#### 4.1 One-Factor Market Model

As a common statistical model, the market model bases the return of a security on the return of a matching market portfolio. It therefore assumes a steady linear relation between the return of the market portfolio and the security return. In terms of the market model, the expected return of a given security is given by:

$$R_{i,\tau} = \alpha_i + \beta_i R_{m,\tau} + \varepsilon_{i,\tau} \quad [\text{Eq. 4.1.1}]$$

where  $E[\varepsilon_{i,\tau}] = 0$  [Eq. 4.1.2]

and  $\text{VAR}[\varepsilon_{i,\tau}] = \sigma_{\varepsilon_i}^2$  [Eq. 4.1.3]

$R_{i,t}$  and  $R_{m,t}$  are the returns of security  $i$  and the market portfolio in time  $\tau$ , respectively, and  $\varepsilon_{i,t}$  is the zero-mean residual term. The model parameters  $\alpha_i$ ,  $\beta_i$  and  $\sigma_{\varepsilon_i}^2$  are

<sup>11</sup> As noted in Brown and Warner (1980,1985)

estimated by ordinary least squares regressions, based on a 180-day estimation window prior to the official announcement date. MacKinlay (1997) argues for the use of a broad-based and well-known stock index for the market portfolio. This paper adopts the most common stock indices in the fourteen respective countries to be used as the market portfolio. Hence, a multi-country version of the market model is applied in this work. A detailed overview of the stock indices used for the abnormal return calculations is set out in Appendix 2.

MacKinlay (1997) discusses the advantages of the market Model over other models, e.g. the constant mean return model. The variance of the abnormal returns is reduced, due to the fact that the fraction of returns associated with the variation in the market's return, namely  $\varepsilon_{i,t}$ , is removed. One can therefore achieve a higher probability of detecting event effects. Boehmer et al. (2002) further justify the use of the market model, on the basis of the argument that it is probably the most commonly used and sophisticated model in event studies.

Blume (1975) notes that estimated beta coefficients in a sample – such as the one previously estimated above on the basis of ordinary least squares – display a tendency to regress towards the mean of all betas over time, namely 1. The author demonstrates that this regression tendency can be explained by nonstationarities in the betas of certain individual securities. Therefore, betas estimated on the basis of unadjusted historical betas are a poor indicator of the future. Betas used in the calculation of expected returns in this study are therefore adjusted according to Blume (1975):

$$\hat{\beta}_{i,Blume} = 0.33 + 0.67\hat{\beta}_i \quad [\text{Eq. 4.1.4}]$$

Now that the methodology for calculating normal and abnormal returns has been elaborated on, the paper shifts focus to the aggregation of abnormal returns, which is necessary in order to draw conclusions for the events of interest. This paper uses two measures of aggregated abnormal returns: the cumulative abnormal return (CAR) method and the buy-and-hold abnormal return (BHAR) method.

## 4.2 Aggregated Cumulative Abnormal Returns

The first measure cumulates abnormal returns across time. The CAR measure is commonly used in short-term event studies, and it is utilized in this paper for that particular purpose. It is defined as:

$$CAR_{i(\tau_1, \tau_2)} = \sum_{t=\tau_1}^{\tau_2} AR_{i,t} \quad [\text{Eq. 4.2.1}]$$

For testing CARs accordingly with a t-statistic, the cross average of the CARs is computed and is given by the cumulative average abnormal return (CAAR):

$$CAAR_{(\tau_1, \tau_2)} = \frac{1}{N} \sum_{i=1}^N CAR_{i(\tau_1, \tau_2)} \quad [\text{Eq. 4.2.2}]$$

### 4.3 Aggregated Buy-and-hold Abnormal Returns

The second measure of abnormal returns is the aggregated buy-and-hold abnormal return metric. This metric is a fundamental choice for any long-run event study. It has been widely used by many researchers, and is well represented in the literature. Mitchell and Stafford (2000, p. 296) describe BHAR as 'the average multi-year return from a strategy of investing in all firms that complete an event and selling at the end of a prespecified holding period versus a comparable strategy using otherwise similar nonevent companies.' This description also illustrates one of the advantages of the BHAR method, in the sense that buy-and-hold returns more accurately simulate investors' investment experience than periodic measures, such as the CAAR metric. Despite the advantage of bearing a similarity to the actual investor experience, Fama (1998) and Barber and Lyon (1997) identify certain problems with the use of the BHAR method, the most important one arising from skewness of the long-term returns of individual securities. The next chapter, which deals with significance tests, addresses how this study aims to overcome the identified drawbacks of the BHAR metric.

The BHAR metric is defined as the difference between the realized buy-and-hold return and the expected (normal) buy-and-hold return:

$$BHAR_{(\tau_1, \tau_2)} = \prod_{t=\tau_1}^{\tau_2} (1 + R_{i,t}) - \prod_{t=\tau_1}^{\tau_2} (1 + E[R_{i,t} | \Omega_{i,t}]) \quad [\text{Eq. 4.3.1}]$$

Similarly, as for CARs, the mean buy-and-hold abnormal return is:

$$\overline{BHAR}_{(\tau_1, \tau_2)} = \frac{1}{N} \sum_{i=1}^N BHAR_{i(\tau_1, \tau_2)} \quad [\text{Eq. 4.3.2}]$$

### 4.4 Significance Tests

For the purpose of investigating the CAARs and average buy-and-hold abnormal returns (ABHARs) for statistical significance, two test statistics are applied. This paper analyses the CAARs on the basis of a standard time-series t-test, and the ABHARs on the basis of a skewness-adjusted t-test, in order to overcome the problems associated with long-term measures, such as the BHAR measure.

Under the null hypothesis, the CAAR and the ABHAR are equal to zero. The t-statistic measures whether CAARs and ABHARs are significantly different from zero in statistical terms. It is assumed that the statistic follows the normal distribution asymptotically. Equation 4.4.1 depicts the t-statistic computation for the time series of CAARs:

$$T_{\text{time}} = \frac{CAAR_t}{(\tau_2 - \tau_1 + 1)^{\frac{1}{2}} \hat{\sigma}_{AAR_t}} \quad [\text{Eq. 4.4.1}]$$

The variance estimator of the illustrated t-statistic is based on the time series of abnormal returns included in the estimation window of 180 days prior the announcement, and given by:

$$\hat{\sigma}_{AAR_t}^2 = \frac{1}{M-d} \sum_{t=Est_{min}}^{Est_{max}} \left[ AAR_t - \frac{1}{M} \sum_{t=Est_{min}}^{Est_{max}} (AAR_t) \right]^2 \quad [\text{Eq. 4.4.2}]$$

where M represents the number of non-missing returns and d represents the degrees of freedom. In the market model, the degrees of freedom are equal to two. Additionally, to account for the circumstance that the event-window abnormal returns are out-of-sample predictions, the standard error is adjusted by the forecast error. For the applied market model, the adjustment is:

$$\sqrt{1 + \frac{1}{M} + \frac{(R_{m,\tau} - \bar{R}_{m,Est})^2}{\sum_{t=Est_{min}}^{Est_{max}} (R_{m,\tau} - \bar{R}_{m,Est})^2}} \quad [\text{Eq. 4.4.3}]$$

A skewness-adjusted t-test is applied for testing ABHARs. As referred to in chapter 4.3, Barber and Lyon (1997) identify a skewness bias in the use of the BHAR measure. The authors argue that the skewness bias occurs because of the nature of the BHAR measure. The long-term return of a portfolio is compared to the long-term return of a single security, where the return of the single security is highly skewed and the return of the portfolio is not – due its diversified nature. The BHAR, which represents the difference between the two returns, is consequently also skewed. Barber and Lyon (1997) identify that BHARs are often positively skewed, implying that the mean and the median of the data set are both greater than the mode. In fact, the ABHARs of the aggregate sample in an equally weighted portfolio applied in this study also display a positive skewness of 2.66, as illustrated in Appendix 2. As the authors note, this positive skewness tends to cause wrong sizes in standard t-tests, such as the time-series t-test, implying that the null hypothesis too often rejected, when it is actually

true.<sup>12</sup> To overcome the skewness bias, this paper uses a skewness-adjusted t-test in order to test ABHARs for statistical significance:

$$t_{sa} = \sqrt{n} \left( S + \frac{1}{3} \hat{y} S^2 + \frac{1}{6n} \hat{y} \right) \quad [\text{Eq. 4.4.4}]$$

with 
$$S = \frac{\overline{BHAR}_\tau}{\sigma(BHAR_\tau)} \quad [\text{Eq. 4.4.5}]$$

and 
$$\hat{y} = \frac{\sum_{i=1}^n (BHAR_{i\tau} - \overline{BHAR}_\tau)^3}{n\sigma(BHAR_\tau)^3} \quad [\text{Eq. 4.4.6}]$$

where  $\hat{y}$  represents the estimate of the coefficient of skewness and  $\sqrt{n}S$  illustrates the conventional t-statistic of Equation 4.

To improve the reliability of the results even further, a bootstrapped version of the skewness-adjusted t-test is also applied. The adjustment ensures the reduced probability of a type-I error, in cases where the t-statistic is inflated due to a type-I error rate. Lyon, Barber and Tsai (1999) advocate a bootstrapped version of the skewness-adjusted t-test, as with this adjustment one obtains well-specified test statistics. The process of bootstrapping involves drawing  $b$  resamples with the size  $n_b$  from the original sample. In this study, 1,000 bootstrapped resamples are drawn from the original sample of size  $n_b = n/4$ . The resulting test statistic for each bootstrapped resample is given by:

$$t_{sa}^b = \sqrt{n_b} \left( S^b + \frac{1}{3} \hat{y}^b S^{b2} + \frac{1}{6n_b} \hat{y}^b \right) \quad [\text{Eq. 4.4.7}]$$

with 
$$S^b = \frac{\overline{BHAR}_\tau^b - \overline{BHAR}_\tau}{\sigma^b(BHAR_\tau)} \quad [\text{Eq. 4.4.8}]$$

and 
$$\hat{y}^b = \frac{\sum_{i=1}^{n_b} (BHAR_{i\tau}^b - \overline{BHAR}_\tau^b)^3}{n_b \sigma^b(BHAR_\tau)^3} \quad [\text{Eq. 4.4.9}]$$

The variables,  $t_{sa}^b$ ,  $S^b$  and  $\hat{y}^b$  are the bootstrapped resample equivalents to  $t_{sa}$ ,  $S$  and  $\hat{y}$ .

Thus far, this paper has introduced relevant literature related to the study, elaborated on the data-collection approach, described important summary statistics, and

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<sup>12</sup> As also noted by Kothari and Warner (1997)

elaborated on the empirical methodology to be used in this paper. The next chapter discusses the empirical results of the various event studies conducted.

## **5. Empirical Results**

The following chapters discuss the results of the various event studies conducted. For each research topic being investigated, a short-term CAR event study and a long-term BHAR event study are conducted. The long-horizon event studies are implemented with two different portfolios: an equally weighted portfolio in which all events have the same weights, and a value weighted portfolio, which ranks the events within the portfolio according to their respective deal value. Consequently, more importance is given to high-value deals in the value weighted portfolios. In this way, the study aims to overcome the bad model problem identified by Fama (1998), which is most problematic in equally weighted portfolios.

In addition to tables with output statistics, this paper also plots average abnormal returns (AARs) and CAARs for the short-term event studies, and ABHARs for the long-term event studies.

### **5.1 Empirical Results of the Aggregate Sample**

For the first research topic, this work aggregates all data from the sample, and conducts event studies on all 624 observations from 14 countries. It therefore aims to investigate a globalised set of acquisition announcements, and to obtain significant results across regions and over time. Appendix 3 provides descriptive statistics for the CARs and BHARs obtained in the short- and long-term event studies conducted on the aggregate sample. The next two chapters discuss the results obtained from these event studies in detail.

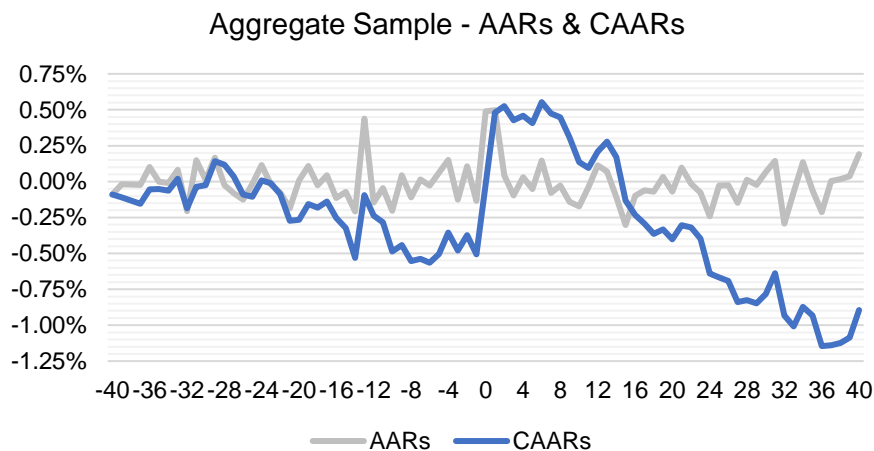
#### ***5.1.1 Aggregate Sample Short-term Event Study***

First, this study presents the statistical output of the short-term event study in the form of the CAR measure of the aggregate sample, and plots the corresponding AARs and CAARs.

**Table 2:** CAAR output – short-term event study on aggregate sample

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
[-40...40]	-0.009	0.170	<b>[-1...1]</b>	<b>0.009</b>	<b>0.000***</b>
[-20...20]	-0.001	0.783	<b>[0...0]</b>	<b>0.005</b>	<b>0.000***</b>
[-10...10]	0.004	0.208	<b>[0...10]</b>	<b>0.006</b>	<b>0.008***</b>
<b>[-2...2]</b>	<b>0.010</b>	<b>0.000***</b>	[0...20]	0.001	0.751

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figure 2:** Plotted AARs and CAARs for the aggregate sample over the main event window of [-40...40] with statistically significant CAARs around the event date.

The results above provide strong evidence against hypothesis H1. Specifically, four short-term event windows show significant positive CAARs. This suggests that, on average, shareholders of acquirers contained in this sample experience value creation in the short term, and that the market reacts positively to acquisition announcements. This finding contradicts, in part, the conventional wisdom that acquirers tend to destroy shareholder value when announcing an acquisition – at least this seems not to be the case at the time of the announcement date in this study. Over an event window of three days, acquirers in this study gain, on average, 0.9%. This finding is similar to empirical results identified by Betton et al. (2008), whose study focused on a sample of US acquirers. The authors discuss comparable results in their event study, with bidder gains of 0.73% over the same event window. They explain this on the basis of the positive returns of many acquirers with low and mid-size market capitalisations. Market sizes of acquirers in this work are lower than in a sample of purely US acquirers, as this work also aggregates acquirer returns from companies incorporated in emerging markets and smaller developed markets. Those acquirers with smaller market sizes might also explain the significant positive CAAR of 0.9%. In fact, acquirers from

emerging markets experience higher abnormal returns, on average, than developed-market acquirers, as pointed out in chapter 5.2.

Moreover, the data illustrate that the positive market reaction tends to revert to its pre-announcement level within 20 days after the announcement. Interestingly, over an 81-day event window, shareholders of acquiring companies lose almost 0.9%, which is due primarily to negative AARs, commencing 20 trading days after the announcement. However, at a 10% significance level, this wealth loss is not statistically significant.

### 5.1.2 Aggregate Sample Long-term Event Study

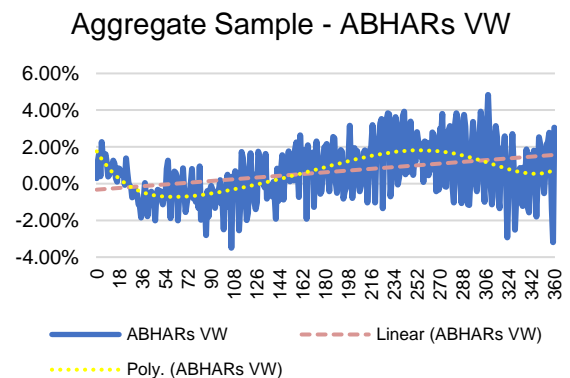
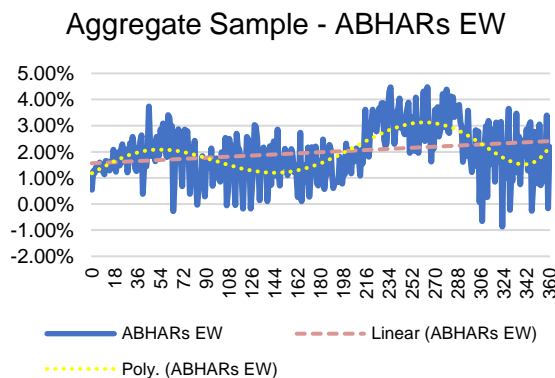
This part of the paper investigates the long-term performance of the aggregate sample of acquirers after acquisition announcements. Tables 3 and 4 illustrate the statistical results of the BHAR event studies, with an equally weighted portfolio and a value weighted portfolio, in which more importance is given to deal announcements with large deal values. The P-value corresponds to the value for the skewness-adjusted t-test. The P-value for the bootstrapped version of the skewness-adjusted t-test is also indicated.

**Table 3:** BHAR output long-term event study on aggregate sample – equally weighted and value weighted portfolio.

#### Aggregate Sample BHAR Results

<i>Equally weighted Portfolio</i>				<i>Value weighted Portfolio</i>			
Event Window	ABHAR	P-Value	BS Prob.	Event Window	ABHAR	P-Value	BS Prob.
[0...360]	0.022	0.403	0.420	[0...360]	0.031	0.243	0.261
<b>[0...240]</b>	<b>0.035</b>	<b>0.053*</b>	<b>0.056*</b>	[0...240]	0.026	0.147	0.154
[0...120]	0.014	0.306	0.323	[0...120]	0.006	0.665	0.676
<b>[0...60]</b>	<b>0.034</b>	<b>0.004***</b>	<b>0.037**</b>	[0...60]	-0.005	0.884	0.877

significance at \*\*\*1%; \*\*5%;\*10%



**Figures 3 & 4:** Plotted ABHARs for the aggregate sample over the post-event window of 18 months.

For both the equally weighted portfolio and the value weighted portfolio, ABHARs are positive, and in two cases significantly different from zero. In the equally weighted portfolio results are significant, at 5% and 10% for the three- and twelve-month post-event windows, respectively. This implies that, on average, shareholders of acquiring firms in this study experience a 3.5% statistically significant wealth gain over one year after the announcement. This gain is driven primarily by significant positive returns for acquirers in emerging countries, as pointed out in chapter 5.2. An analysis of the results of the value weighted portfolio provides further support for the previously established interpretation. Although positive and similar to those in the equally weighted portfolio, no ABHARs in the value weighted portfolio are significant. Therefore, no value effect is identified in the aggregate sample, which implies that the significant positive ABHARs in the equally weighted portfolio are driven by long-term returns from acquisitions with smaller deal values. These are the deals announced in emerging countries.

## **5.2 Empirical Results of Individual Countries**

The next chapter elaborates on the results obtained for event studies implemented separately for two groups of developed-market acquirers and emerging-market acquirers, as well as separately for the fourteen countries dealt with in this paper. The presentation follows alphabetical order, and statistical outputs are grouped by events from developed markets and emerging markets.

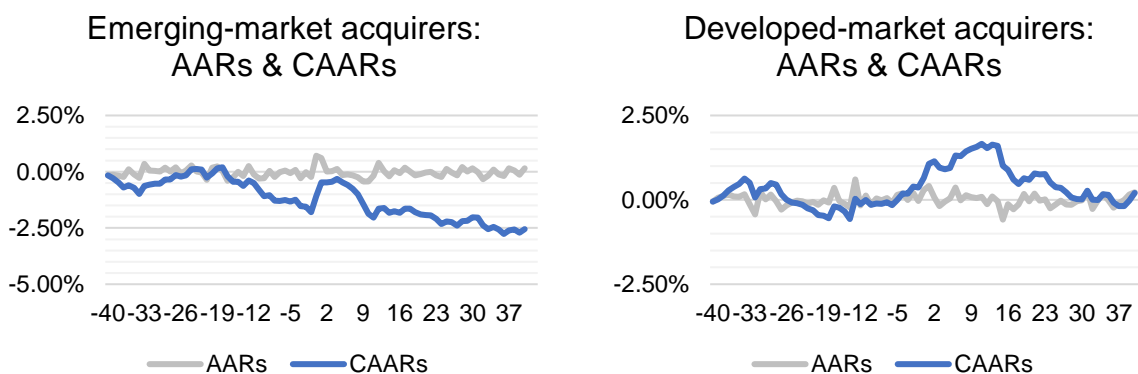
### ***5.2.1 Individual Countries Short-term Event Study***

Table 4 illustrates the results obtained for the individual country short-term event study. For the two subsamples of grouped acquirers from developed markets and emerging markets, this paper finds proof of significant positive CAARs over a five-day event window and the announcement date itself. Both developed-market and emerging-market acquirers experience a significant positive 1% CAAR over a five-day event window. On the announcement day itself, emerging-market acquirers display a 0.4% higher CAAR than developed-market acquirers, despite the fact that both display significant CARs in the short term.

**Table 4:** CAAR output short-term event study for individual countries with event windows of five days and the announcement day itself.

Acquirers from	Event Window [-2...2]		Event Window [0...0]	
	CAAR	P-Value	CAAR	P-Value
<b>Developed Markets</b>				
Australia	<b>0.015</b>	<b>0.000***</b>	0.002	0.350
Canada	<b>0.009</b>	<b>0.051*</b>	<b>0.005</b>	<b>0.012**</b>
France	<b>0.015</b>	<b>0.001***</b>	0.000	0.910
Germany	<b>0.016</b>	<b>0.001***</b>	<b>-0.006</b>	<b>0.003***</b>
Hong Kong	<b>0.026</b>	<b>0.039**</b>	0.003	0.542
Japan	-0.006	0.339	<b>0.011</b>	<b>0.000***</b>
United States	0.001	0.842	0.001	0.685
<b>Emerging Markets</b>				
Argentina	<b>0.040</b>	<b>0.000***</b>	<b>0.022</b>	<b>0.000***</b>
Brazil	<b>0.011</b>	<b>0.029**</b>	0.002	0.488
China	0.008	0.351	<b>0.013</b>	<b>0.001***</b>
India	<b>0.013</b>	<b>0.097*</b>	<b>0.019</b>	<b>0.000***</b>
Mexico	-0.007	0.251	0.001	0.651
South Africa	0.009	0.191	-0.003	0.300
South Korea	0.007	0.299	0.002	0.485

significance at \*\*\*1%; \*\*5%; \*10%



**Figures 5&6:** Plotted AARs and CAARs for developed-market acquirers and emerging-market acquirers over the main event window of [40...40] with statistically significant CAARs around the event date for both subsamples.

The previously established hypothesis of no significant abnormal returns for developed-market acquirers in the short term at the time of an announcement is therefore rejected. Moreover, this paper finds evidence for the previously established hypothesis relating to acquirer returns from emerging markets. In particular, significant

CAARs are identified for Argentina and India in respect of both event windows, and for Brazil and China in respect of one of the two windows. In Argentina, the significant positive CAARs realised by acquirers can most likely be explained on the basis of lower regulation and a less efficient security market, as noted by Simoes et al. (2012). In India it is common practice to retain the acquired entity as a separate subsidiary. Rani et al. (2013) note that these types of acquisitions result in significant positive abnormal returns for acquirers, and could therefore also explain the significant positive CAAR on the announcement date in this study. Furthermore, two factors might explain why Chinese market acquirers realise a 1.3% gain on the announcement date itself. First, the Chinese market is not as mature as other developed security markets, such as the US, and seems to be characterised by irrational trading behavior, as discussed by Chi et al. (2011). In addition, M&As in China only became frequent in the late 1990s. Therefore, many events in the sample occurred during the M&A development stage in China.

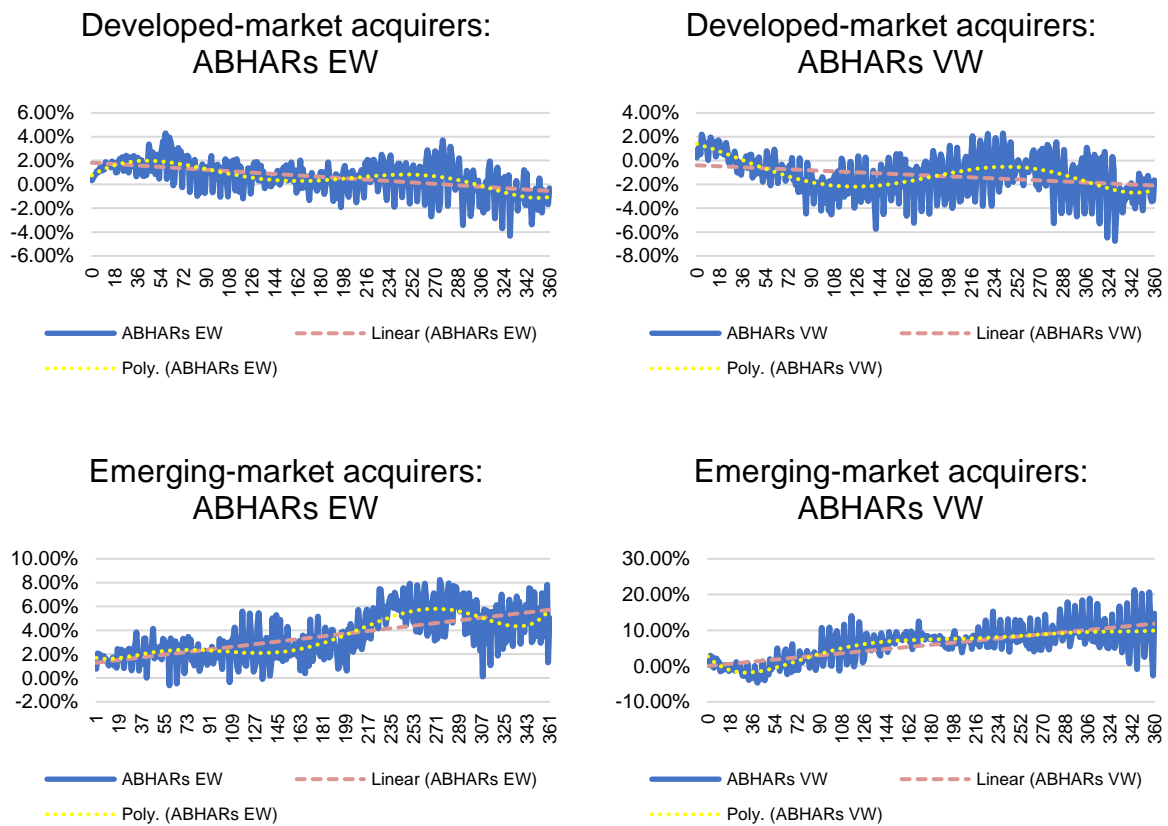
### ***5.2.2 Individual Countries Long-term Event Study***

Next, results are illustrated for acquisition announcements from firms listed in the fourteen countries identified previously. The results are presented in Table 5, and ABHARs are plotted for the groups of developed-market acquirers and emerging-market acquirers in Figures 7-10. Empirical results for developed-market acquirers are in line with the established hypothesis H1a. Specifically, there are no significant abnormal returns for the group of developed-market acquirers with regard to either the equally weighted portfolio or the value weighted portfolio, over the long-term post-announcement windows of 12 and 18 months. This suggests strong evidence of efficient markets in the seven developed countries contained in this study. Although no ABHARS are statistically significant for the group of developed-market bidders, a general pattern of negative returns can be observed over the post-announcement period of 18 months. This is well illustrated in Figures 7 and 8. Acquirers in Australia, in particular, lose a substantial 16% in both the equally weighted portfolio and value weighted portfolio, which can be explained by substantial overpayment or incorrect integration. Acquirers in Canada, on the other hand, experience significant wealth gains of 11% and 13% in the equally weighted and value weighted portfolios, respectively, over a post-event window of 12 months. In contrast to the wealth loss experienced by the group of developed-market acquirers, acquirers from emerging countries display significant positive abnormal returns in the value weighted portfolio over the post-announcement windows of 12 and 18 months. This implies a value effect in which the acquisitions with the highest deal values led the respective acquirers to perform considerably well. The empirical results obtained in this study are therefore in line with the expectations established in Hypothesis H1b. Moreover, acquirers from Brazil and South Korea experience a substantial wealth gain over the post-announcement window of 18 months. However, this gain is only statistically significant at 10%, and not under the bootstrapped version of the skewness-adjusted t-test.

**Table 5:** BHAR output long-term event study for acquirers listed in the fourteen individual countries – equally weighted and value weighted portfolio

	Acquirers from	Event Window [0...360]			Event Window [0...240]		
		ABHAR	P-Value	BS Prob.	ABHAR	P-Value	BS Prob.
Equally weighted Portfolio	<b>Devel. Markets</b>	-0.003	0.957	0.9621	0.015	0.484	0.536
	Australia	<b>-0.154</b>	<b>0.027**</b>	<b>0.051*</b>	<b>-0.129</b>	<b>0.014**</b>	<b>0.023**</b>
	Canada	0.109	0.106	0.254	<b>0.115</b>	<b>0.004***</b>	<b>0.036**</b>
	France	-0.011	0.841	0.852	0.016	0.661	0.717
	Germany	-0.057	0.213	0.208	-0.017	0.520	0.546
	Hong Kong	0.114	0.632	0.701	0.066	0.675	0.670
	Japan	-0.009	0.830	0.848	0.008	0.839	0.860
	United States	-0.020	0.689	0.703	-0.031	0.448	0.578
Value weighted Portfolio	<b>Devel. Markets</b>	-0.016	0.6833	0.7117	0.004	0.827	0.843
	Australia	<b>-0.158</b>	<b>0.024**</b>	<b>0.048**</b>	<b>-0.107</b>	<b>0.037**</b>	<b>0.045**</b>
	Canada	0.105	0.120	0.267	<b>0.130</b>	<b>0.001***</b>	<b>0.025**</b>
	France	-0.012	0.836	0.847	-0.014	0.696	0.768
	Germany	-0.027	0.542	0.541	0.021	0.529	0.605
	Hong Kong	-0.044	0.955	0.964	0.109	0.521	0.483
	Japan	-0.040	0.388	0.464	-0.024	0.507	0.581
	United States	-0.029	0.571	0.590	-0.020	0.624	0.709
Equally weighted Portfolio	<b>Emerging Markets</b>	0.051	0.229	0.245	<b>0.057</b>	<b>0.051*</b>	<b>0.055*</b>
	Argentina	0.123	0.369	0.431	<b>0.150</b>	<b>0.048**</b>	<b>0.323</b>
	Brazil	0.145	0.148	0.204	<b>0.133</b>	<b>0.004***</b>	<b>0.007***</b>
	China	0.121	0.472	0.534	0.058	0.590	0.676
	India	0.062	0.548	0.617	0.050	0.452	0.507
	Mexico	0.056	0.622	0.665	0.119	0.235	0.287
	South Africa	-0.069	0.504	0.547	-0.063	0.368	0.429
	South Korea	0.058	0.533	0.606	0.069	0.313	0.353
Value weighted Portfolio	<b>Emerging Markets</b>	<b>0.146</b>	<b>0.001***</b>	<b>0.002***</b>	<b>0.083</b>	<b>0.005***</b>	<b>0.006***</b>
	Argentina	-0.276	0.253	0.578	-0.131	0.458	0.781
	Brazil	<b>0.210</b>	<b>0.058*</b>	0.118	<b>0.082</b>	<b>0.074*</b>	<b>0.082*</b>
	China	0.211	0.321	0.382	0.004	0.937	0.958
	India	-0.007	0.975	0.978	<b>0.131</b>	<b>0.070*</b>	0.146
	Mexico	-0.052	0.632	0.725	0.000	0.978	0.981
	South Africa	0.104	0.329	0.457	<b>0.144</b>	<b>0.095*</b>	0.296
	South Korea	<b>0.180</b>	<b>0.078*</b>	0.247	0.108	0.130	0.173

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figures 7, 8, 9 & 10:** Plotted ABHARs for the developed-market and emerging-market acquirers in the equally weighted and value weighted portfolio over the post-event window of [0...360].

Moreover, acquirers from India and South Africa experience significant positive abnormal returns in the value weighted portfolio over 12 months after an acquisition announcement, indicating substantial gains for acquirers having completed high-value deals.

This chapter has presented the empirical results obtained for developed-market and emerging-market acquirers in respect of the short- and long-term event studies conducted. The results of the long-term event study are in line with the previously established hypotheses and the relevant literature. In the case of the short-term event study, this paper rejects the hypothesis that developed-market bidders lose value at the time of the announcement; and it therefore finds significant evidence that contradicts the conventional wisdom relating to wealth loss. Furthermore, this study proves that, on average, emerging-country acquirers experience gains at the time of the announcement of an acquisition.

### 5.3 Domestic and Cross-border Acquisitions Results

In this chapter, the sample of acquisition announcements as a whole is divided into four subsamples. The event study in this part of the paper therefore forms two portfolios – domestic acquisitions and cross-border acquisitions – out of all the acquisitions made by companies listed in developed markets. The same procedure is applied to acquisitions made by emerging-market firms. As in the previous chapters, first a short-term event study is conducted, followed by a long-term study relating to the same four subsamples. A total of 142 domestic acquisitions and 194 cross-border acquisitions are announced by developed-market acquirers, whereas emerging-market acquirers announced 178 domestic acquisitions and 110 CBAs.

#### 5.3.1 Domestic and Cross-border Acquisitions Short-term Event Study

Tables 6 and 7 illustrate the results for developed-market acquirers and their domestic and cross-border acquisitions. The established hypothesis H2b is confirmed for the short-term event study. Cross-border acquisitions generate slightly higher abnormal returns for developed-market acquirers than domestic acquisitions do.

**Tables 6 & 7:** CAAR-output short-term event study for domestic and cross-border acquisitions announced by developed-market acquirers with significant CAARs at the time of the announcement in both subsamples.

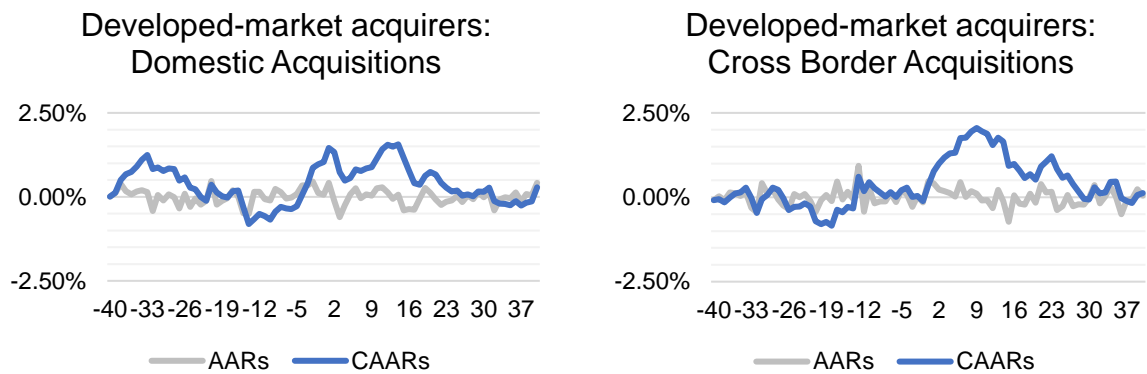
#### Developed-market acquirers: Domestic Acquisitions

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
[-40...40]	0.003	0.810	<b>[-1...1]</b>	<b>0.006</b>	<b>0.010***</b>
[-20...20]	0.004	0.648	[0...0]	0.001	0.637
<b>[-10...10]</b>	<b>0.017</b>	<b>0.005***</b>	[0...10]	0.002	0.702
<b>[-2...2]</b>	<b>0.009</b>	<b>0.002***</b>	[0...20]	-0.002	0.706

#### Developed-market acquirers: Cross-border Acquisitions

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
[-40...40]	0.001	0.911	<b>[-1...1]</b>	<b>0.007</b>	<b>0.001***</b>
[-20...20]	0.012	0.111	<b>[0...0]</b>	<b>0.005</b>	<b>0.000***</b>
<b>[-10...10]</b>	<b>0.015</b>	<b>0.006***</b>	<b>[0...10]</b>	<b>0.021</b>	<b>0.000***</b>
<b>[-2...2]</b>	<b>0.010</b>	<b>0.000***</b>	[0...20]	0.006	0.247

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figures 11 & 12:** Plotted AARs and CAARs for developed-market acquirers and their domestic and cross-border acquisitions over the main event window of  $[-40, 40]$ , with statistically significant CAARs around the event date for both subsamples.

During a post-announcement window of 10 days, developed-market bidders gain a significant 2.1%. For the subsample of bidding firms from these markets, it can be argued that investors value CBAs more highly than domestic acquisitions. This substantial gain can most likely be explained on the basis of positive effects from international expansion, as well as beliefs in value-adding synergies. Outlined by Baldwin and Caves (1991) and Morck and Yeung (2003), the internationalisation theory explains positive acquirer valuations in CBAs on the basis of gains from geographical diversification, motivated by the search for synergies in intangible assets, e.g. patents and trade secrets. For this reason, CBAs by developed-market acquirers are more positive than domestic acquisitions themselves.

While this paper supports established findings for developed-market bidders, emerging-market acquirers experience losses when announcing cross-border acquisitions. Over post-announcement windows of 10 and 20 days, in particular, bidding firms lose more than 1% on average, which is statistically significant at a 10% significance level. This trend can be clearly well-observed in Figure 14, and is even more severe over the main event window of 81 days, where bidding firms display a substantial negative CAAR of almost 4%. The negative CAARs suggest that the hypothesized gains from cross-border growth are offset by costs related to the acquisition of foreign targets. In this sample, investors do not consider CBAs by emerging-market bidders as a value-creating strategy. This supports the findings of Aybar and Ficici (2009), and is also consistent with the value-decreasing diversification effect for US acquirers identified by Denis et al. (2002), whose explanations are presumably also applicable to the results obtained in this paper. Denis et al. (2002) argue for challenges in the process of evaluating foreign targets explained by the presence of asymmetric information. Identified by the authors as relevant for US acquirers, asymmetric information in valuation is potentially even more of a challenge for emerging-market acquirers, who are conceivably less experienced in valuations

themselves. Moreover, Aybar and Ficici (2009) associate the value destruction experienced by emerging-market bidders with the acquisition of targets operating in the same or related industries. This reasoning also holds true for this study, as illustrated in Appendix 4. Results from this supportive-event study imply that emerging-market bidders experience losses, especially when acquiring targets are located across borders and operate in the same industry.

**Tables 8 & 9:** CAAR output short-term event study for domestic and cross-border acquisitions announced by emerging-market acquirers with significant CAARs around the announcement date for both subsamples, and significant CAARs for the main estimation window for the CBA subsample

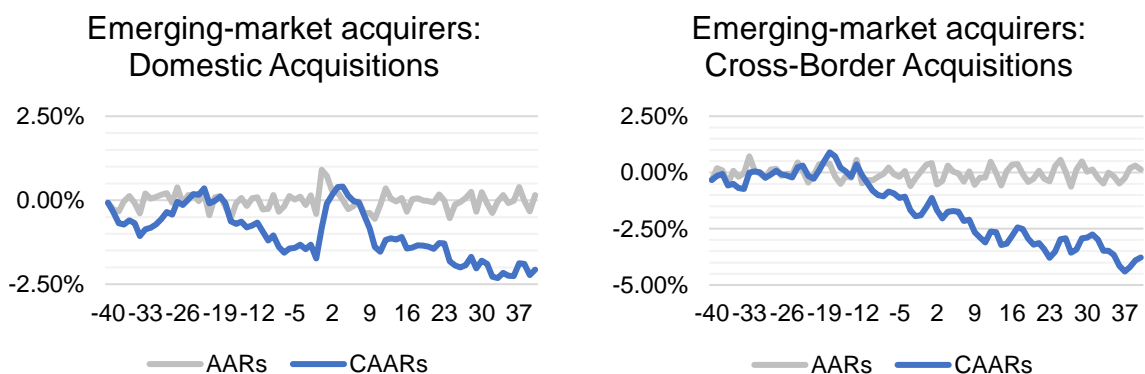
**Emerging-Market Acquirers: Domestic Acquisitions**

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
[-40...40]	-0.021	0.154	<b>[-1...1]</b>	<b>0.012</b>	<b>0.000***</b>
[-20...20]	-0.013	0.212	<b>[0...0]</b>	<b>0.009</b>	<b>0.000***</b>
[-10...10]	-0.005	0.535	[0...10]	0.003	0.527
<b>[-2...2]</b>	<b>0.016</b>	<b>0.000***</b>	[0...20]	0.004	0.637

**Emerging-Market Acquirers: Cross-border Acquisitions**

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
<b>[-40...40]</b>	<b>-0.038</b>	<b>0.011**</b>	<b>[-1...1]</b>	<b>0.008</b>	<b>0.005***</b>
<b>[-20...20]</b>	<b>-0.029</b>	<b>0.005***</b>	<b>[0...0]</b>	<b>0.004</b>	<b>0.033**</b>
<b>[-10...10]</b>	<b>-0.024</b>	<b>0.001***</b>	<b>[0...10]</b>	<b>-0.010</b>	<b>0.069*</b>
[-2...2]	0.000	0.984	<b>[0...20]</b>	<b>-0.013</b>	<b>0.081*</b>

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figures 13 & 14:** Plotted AARs and CAARs for emerging-market acquirers and their domestic and cross-border acquisitions over the main event window of [40...40] with statistically significant CAARs around the event date for domestic acquisitions and significant negative CAARs for cross-border acquisitions over the main event window.

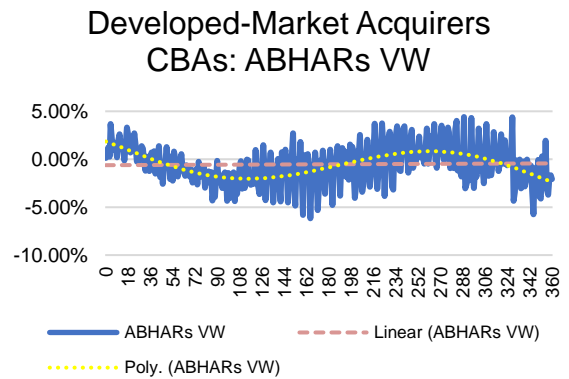
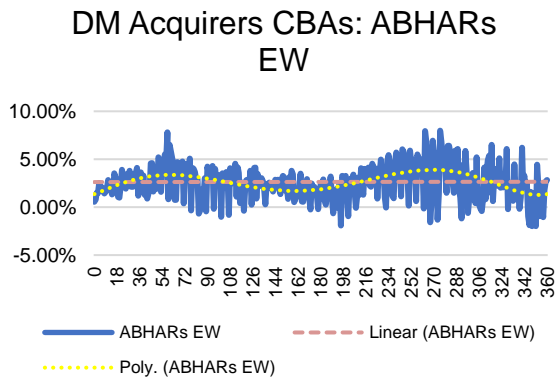
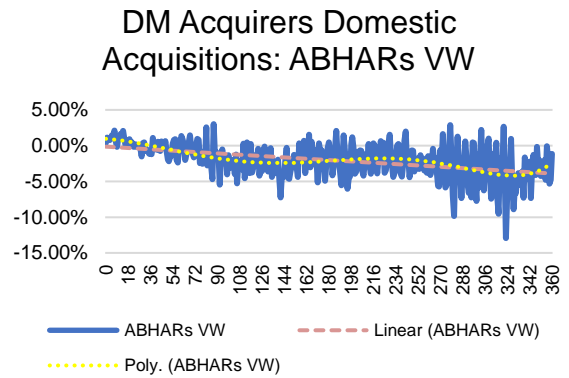
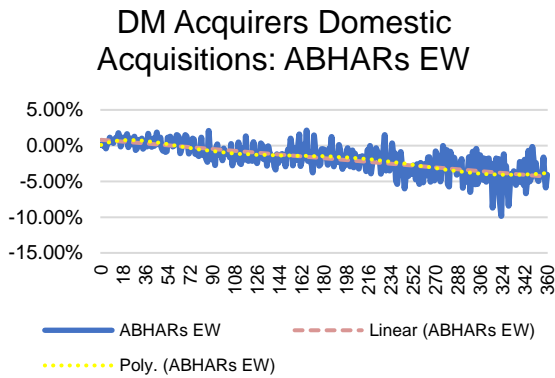
### 5.3.2 Domestic and Cross-border Acquisitions Long-term Event Study

Following the results and analysis of the short-term event study on domestic and cross-border acquisitions, this chapter now turns the focus to the long-term effect. For both developed-market acquirers and emerging-market acquirers, higher abnormal returns are expected for cross-border acquisitions than for domestic acquisitions. The established hypotheses are not confirmed, as illustrated in Table 10. In the equally weighted portfolio, developed-market acquirers gain more from cross-border acquisitions than from domestic ones; however, this gain is statistically insignificant for the post-announcement window of 18 months and statistically significant, at only 10% for the post-announcement window of 12 months. The established hypothesis H2a is therefore only partially accepted for developed-market acquirers. For emerging-market acquirers, this study finds significant positive ABHARs in domestic acquisitions and over a post-announcement window of 12 months. The results also confirm the findings of the previous short-term event study, in the sense that domestic acquisitions lead to higher abnormal returns for emerging-market bidders than cross-border acquisitions do. The established hypothesis H2b is therefore rejected in the long-term event study and for the equally weighted portfolio. Interestingly, there are highly significant ABHARs for cross-border acquisitions by emerging-market bidders in a value weighted portfolio for both post-announcement windows. For the long-term windows of 18 and 12 months, ABHARs are substantially positive at 44.2% and 18.1%, respectively. The results suggest a value effect, where high-deal-value CBAs by emerging market bidders lead to a considerable positive market reaction by investors.

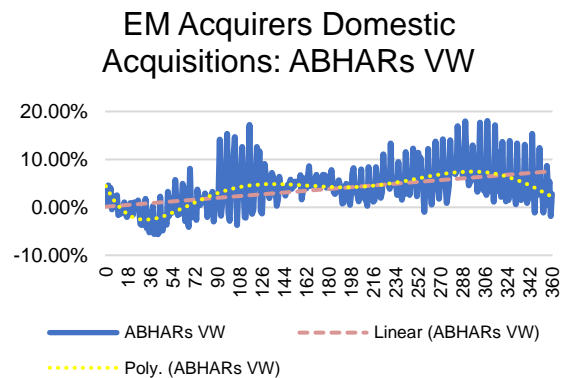
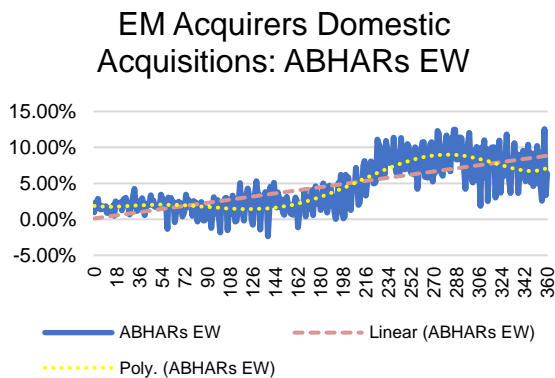
**Table 10:** ABHAR output for the long-term event study on domestic and CBAs.

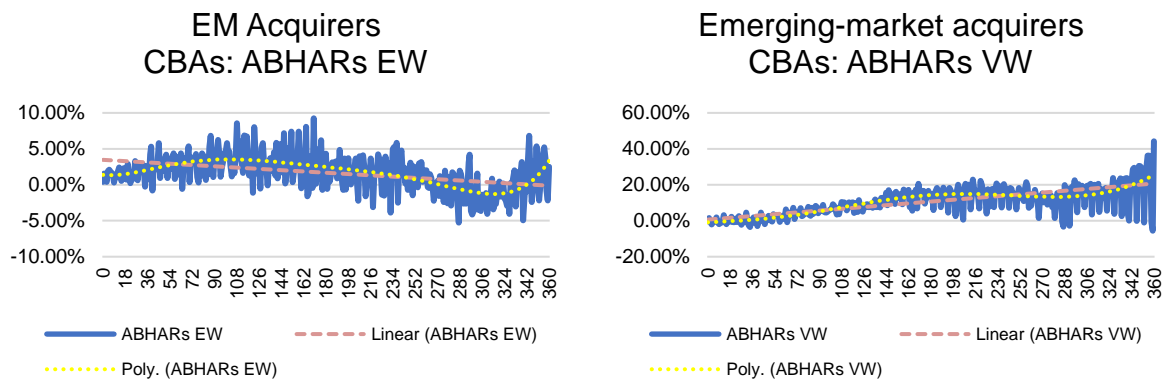
	Acquirers from	Event Window [0...360]			Event Window [0...240]		
		ABHAR	P-Value	BSProb	ABHAR	P-Value	BSProb
Equally weighted Portf.	<b>Developed Markets</b>						
	Domestic Acquisitions	-0.041	0.197	0.189	-0.034	0.16	0.181
	Cross-border Acq.	0.028	0.577	0.663	0.057	0.071*	0.134
	<b>Emerging Markets</b>						
	Domestic Acquisitions	0.064	0.217	0.241	<b>0.065</b>	<b>0.048**</b>	<b>0.049**</b>
	Cross-border Acq.	0.025	0.720	0.720	0.043	0.437	0.443
Value weighted Portf.	<b>Developed Markets</b>						
	Domestic Acquisitions	-0.011	0.712	0.710	-0.026	0.282	0.300
	Cross-border Acq.	-0.021	0.779	0.808	0.032	0.329	0.384
	<b>Emerging Markets</b>						
	Domestic Acquisitions	0.028	0.592	0.611	0.037	0.253	0.260
	Cross-border Acq.	<b>0.442</b>	<b>0.001***</b>	<b>0.023**</b>	<b>0.181</b>	<b>0.007***</b>	<b>0.007***</b>

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figures 15, 16, 17 & 18:** Plotted ABHARs for developed-market acquirers and their domestic and cross-border acquisitions over the long-term post announcement windows.





**Figures 19, 20, 21 & 22:** Plotted ABHARs for emerging-market acquirers and their domestic and cross-border acquisitions over the long-term post announcement windows

## 5.4 Impact of Institutional Environment Results

As discussed in chapter 2.3, many studies find that the development stage of the institutional environment of a country in which the target is incorporated influences return for acquirers. The effect is only applicable in cross-border acquisitions, and this work therefore splits the sample of CBAs into two groups. The first group consists of CBAs where the target firm is located in a lower-ranked country in terms of institutional environment, according to the Global Competitiveness Rankings of the World Economic Forum.<sup>13</sup> This applies to 154 events out of a total of 304 cross-border acquisitions. The second group consists of CBAs where the target companies' headquarters are located in a higher institutional environment than the acquirer. The resulting 150 events fulfil these criteria. First, the empirical results for the short-term event study are presented, followed by a long-term study.

### 5.4.1 Impact of Institutional Environment on Short-term Event Study

Table 11 illustrates the output of the short-term event study. Substantial gains are experienced by acquirers conducting cross-border acquisitions in countries with a less developed institutional environment. Specifically, in short-term post-event windows of 10 and 20 days, bidders increase shareholder wealth by 3.4% and 2.1%, respectively. Moreover, statistically significant CAARs are obtained at around the time of the announcement itself, with the highest CAAR illustrated over a five-day event window. It can therefore be argued that investors substantially value CBAs for which the target firm is incorporated in a less developed institutional environment, especially over a two-week post-event window. Rossi and Volpin (2004) provide explanations for this wealth gain. They argue that targets gain from the lower cost of capital associated with a better institutional environment of the acquirer. Acquirers therefore do not pay higher

<sup>13</sup> <http://reports.weforum.org/global-competitiveness-report-2014-2015/rankings/>

takeover premiums, and share the surplus created by exposing the target firm to a better institutional environment and implementing the institutional standards of the home country in the target firm. The gain for target shareholders is thereby also reflected as a gain for bidder shareholders, due to the fact that lower premiums are paid.

Surprisingly, for the second group – cross-border acquisitions with the target in a country with a higher-ranked institutional environment – CAARs for bidders are negative. Over the main event window of 81 days, shareholders of bidding firms lose 2.5%, which is statistically significant at 5%. This wealth loss occurs almost exclusively over the post-event window of 20 days. It implies that investors do not perceive these types of acquisitions as value-adding strategies shortly after the announcement. Furthermore, Starks and Wei (2013) argue that acquirers pay considerably high premiums in these types of acquisitions, because bidding firms need to compensate target-firm shareholders for the increased risk implied by exposing them to less developed institutional environments. In addition to these premiums, investors could negatively value the ongoing costs of complying with the higher institutional environment after the acquisition. The established hypothesis H3 is thereby rejected. This study finds higher abnormal returns for CBAs in which the target firm is located in a country that has a lower institutional development ranking.

**Table 11:** CAAR output short-term event study for CBAs with target firm in a lower institutional environment. Significant positive CAARs are obtained, especially over the post-announcement windows.

**CBAs: Target in Lower Institutional Environment**

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
[-40...40]	0.007	0.570	<b>[-1...1]</b>	<b>0.013</b>	<b>0.000***</b>
[-20...20]	0.001	0.676	<b>[0...0]</b>	<b>0.008</b>	<b>0.000***</b>
<b>[-10...10]</b>	<b>0.022</b>	<b>0.001***</b>	<b>[0...10]</b>	<b>0.034</b>	<b>0.000***</b>
<b>[-2...2]</b>	<b>0.012</b>	<b>0.000***</b>	<b>[0...20]</b>	<b>0.021</b>	<b>0.001***</b>

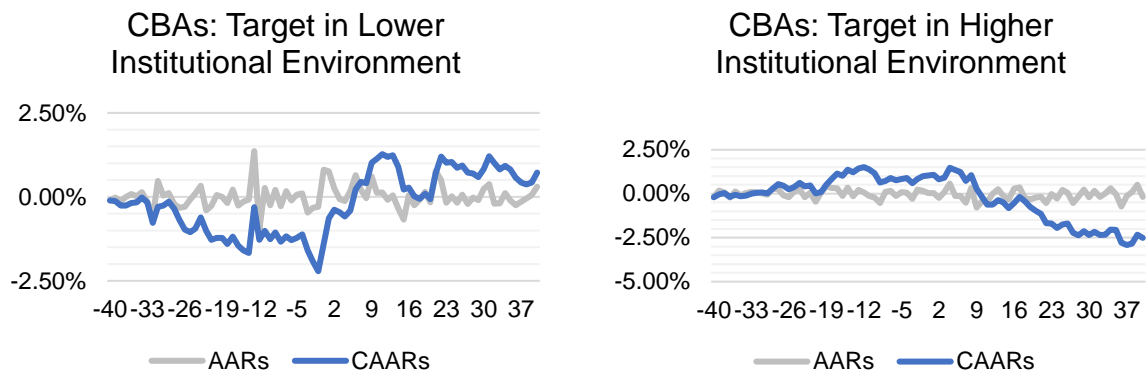
represents significance at \*\*\*1%; \*\*5%; \*10%

**Table 12:** CAAR output short-term event study for CBAs with target firm in a higher institutional environment. Significant negative CAARs are obtained over the main event window of 81 days and especially over the post-announcement windows.

**CBAs: Target in Higher Institutional Environment**

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
<b>[-40...40]</b>	<b>-0.025</b>	<b>0.034**</b>	[-1...1]	0.002	0.318
[-20...20]	0.001	0.556	[0...0]	0.000	0.764
<b>[-10...10]</b>	<b>-0.015</b>	<b>0.011**</b>	<b>[0...10]</b>	<b>-0.012</b>	<b>0.008***</b>
[-2...2]	0.002	0.450	<b>[0...20]</b>	<b>-0.020</b>	<b>0.001***</b>

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figures 23 & 24:** Plotted AARs and CAARs acquirers and cross-border acquisitions with the target firm located in lower and higher institutional environments, respectively.

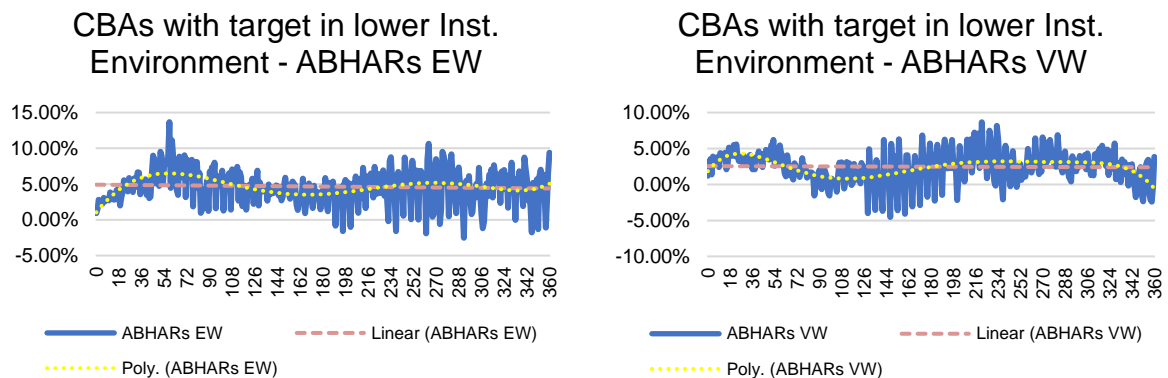
#### 5.4.2 Impact of Institutional Environment Long-term Event Study

This chapter focuses on investigating a potential long-term effect of the institutional development of the target country on acquirer returns. The results are set out in Table 13 below. This work identifies significant ABHARs only for bidders in cross-border acquisitions where the target firm is operating in a lower ranked institutional environment than the bidder, and in an equally weighted portfolio of acquisitions. The results are significantly positive at a 10% significance level, and are therefore consistent with the findings of the short-term event study. In particular, acquirers gain almost 10% over a post-announcement window of 18 months, and almost 7% over a one-year post-event window. The interpretation of these results can once again be linked to the findings of Rossi and Volpin (2004), who argue for a gain-sharing between acquirer and target shareholders due to improved standards in the target and therefore a lower premium paid by the bidder. In addition, investors might perceive this type of CBA as a value-generating strategy for the acquirer, due to a relatively nominal geographical expansion and savings as a result of not being obliged to comply with higher institutional standards. All other tests relating to this long-term event study are insignificant, implying that only a part of what was found in the preceding short-term event study is confirmed in the long term.

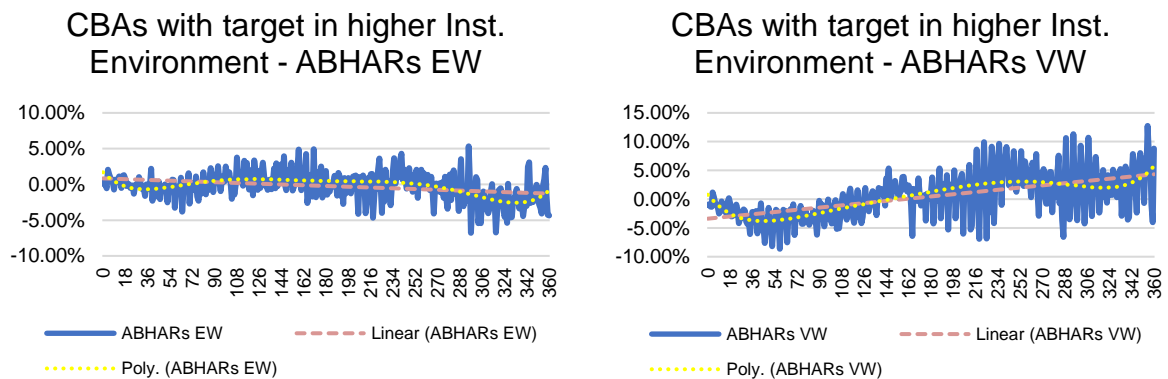
**Table 13:** ABHAR output for the long-term event study investigating the impact of the institutional development of the target country.

	CBAs with target in	Event Window [0...360]			Event Window [0...240]		
		ABHAR	P-Value	BS Prob.	ABHAR	P-Value	BS Prob.
Equally weighted Portfolio	<b>Lower Institutional Environment</b>	<b>0.094</b>	<b>0.098*</b>	0.217	<b>0.067</b>	<b>0.064*</b>	0.141
	Higher Institutional Environment	-0.044	0.479	0.505	0.037	0.414	0.439
Value weighted Portfolio	Lower Institutional Environment	0.038	0.518	0.571	0.054	0.141	0.221
	Higher Institutional Environment	0.088	0.155	0.205	0.065	0.153	0.178

represents significance at \*\*\*1%; \*\*5%; \*10%



**Figures 23 & 24:** Plotted ABHARs for bidders engaging in CBAs with the target firm operating in a lower-ranked country in terms of institutional development and in an equally- and value weighted portfolio.



**Figures 25 & 26:** Plotted ABHARs for bidders engaging in CBA's with the target firm operating in a higher-ranked country in terms of institutional development, and in an equally weighted and value weighted portfolio.

## 6. Limitations

While this research aims to overcome the drawbacks of short- and long-term event studies with measures that are statistically robust, limitations nevertheless still exist. First, with 624 events the sample size is lower than in other event studies. The reliability of the results is therefore limited, in the sense that a higher level of significance could be achieved with a larger sample size. Moreover, while this study aims to analyze a set of announcements by developed- and emerging-market acquirers, the sample concentrates on only seven developed and seven emerging countries. Therefore, the results are only representative of the countries contained in this study, and generalisation should be treated with caution. Increasing the sample size and including more countries could be a potential way to overcome this limitation. Second, event studies in this work are developed on the assumption that the market response to acquisition announcements is unbiased, based on the semi-strong form of the efficient market hypothesis. However, one drawback of event studies is that differences in market valuations around the announcement date may not reflect only the benefits of an efficiently operating market for corporate control, but also other factors, such as mispricing, associated with the fact that market participants may not fully understand the implications of underlying events. Finally, the study focuses on value creation or destruction from the perspective of the acquiring companies. Therefore, no conclusions can be drawn with regard to shareholder value development for the target companies.

## 7. Conclusion

This paper has analysed acquirer returns in developed and emerging markets, and focused on the impact of domestic and cross border acquisitions, as well as the impact of the institutional environment in the target country on bidder returns.

Interestingly, the findings of this research reject the conventional wisdom that developed-market acquirers always lose shareholder wealth when announcing acquisitions. In this work, developed-market acquirers display positive abnormal returns in the short term around the announcement date. However, no significant abnormal returns were found over an 18-month post-event window. Emerging-market acquirers also display positive gains after announcing acquisitions in the short term, and demonstrate substantial positive long-term returns in a value weighted portfolio, where more importance is attached to high-value deals. The study also investigated the impact of domestic acquisitions and cross-border acquisitions on bidder returns. For developed-market bidders, announcing cross-border acquisitions leads to higher abnormal returns than announcing domestic acquisitions. This is probably the result of investors' being positively disposed towards the geographical expansion strategy of the acquirer, motivated by the search for synergies abroad. On the other hand, emerging-market acquirers lose when announcing cross-border acquisitions, but gain when publishing news relating to domestic acquisitions. This finding contradicts the previously established hypothesis, and can probably be explained by challenges in estimating the value of foreign targets, thereby increasing the likelihood of false premiums. Moreover, a supportive event study yields the insight that wealth loss can be entirely accounted for by emerging-market bidders conducting cross-border acquisitions relating to a target firm operating in the same industry. As far as the impact of the institutional environment in the target country is concerned, this study demonstrates that bidders gain substantially when CBAs are announced in countries with a less developed institutional environment. Acquirers pay lower premiums, thereby sharing the gain of target shareholders by exposing them to a better institutional environment. Cross-border acquisitions announced in countries with a more highly developed institutional environment display negative abnormal returns for bidders. In acquisitions of this nature, acquirers pay considerably high premiums in order to compensate target firm shareholders for the increased risk of being exposed to a less developed institutional environment.

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## Appendix

### Appendix 1:

#### Summary Statistics of Sample

	AR	AT	BS	CT	CH	HK	FP
	Argentina	Australia	Brazil	Canada	China	Hong Kong	France
No. observations	33	58	45	57	25	24	53
<b>Deal Value</b>							
Mean Deal Value (US \$m)	73	1255	2298	2008	1881	1417	3136
<b>Developed / Emerging Market<sup>1</sup></b>	3	1	2	1	2	1	1
<sup>1</sup> according to MSCI classification, where 1=Developed Market, 2=Emerging Market, 3=Frontier Market							
<b>No. Domestic Acquisitions</b>	28	25	33	21	20	1	17
<b>No. Cross-border Acquisitions</b>	5	33	12	36	5	23	36
<b>Inst. Environment Ranking<sup>2</sup></b>	135	19	94	14	47	8	32
<sup>2</sup> according to World Economic Forum							
<b>CBA in</b>							
<b>Lower Inst. Environment</b>	0	16	6	33	2	23	14
<b>Higher Inst. Environment</b>	5	17	6	3	3	0	22

	GY	IN	JT	MM	SJ	KS	US
	Germany	India	Japan	Mexico	South Africa	South Korea	United States
No. observations	44	45	50	39	53	48	50
<b>Deal Value</b>							
Mean Deal Value (US \$m)	3135	662	2267	617	481	1183	8681
<b>Developed / Emerging Market<sup>1</sup></b>	1	2	1	2	2	2	1
<sup>1</sup> according to MSCI classification, where 1=Developed Market, 2=Emerging Market							
<b>No. Domestic Acquisitions</b>	15	12	30	19	26	40	33
<b>No. Cross-border Acquisitions</b>	29	33	20	20	27	8	17
<b>Inst. Environment Ranking<sup>2</sup></b>	17	70	11	102	36	82	30
<sup>2</sup> according to World Economic Forum							
<b>CBA in</b>							
<b>Lower Inst. Environment</b>	22	6	16	4	9	1	2
<b>Higher Inst. Environment</b>	7	27	4	16	18	7	15

**Appendix 2:**

List of Indices as a benchmark for the abnormal return calculation for every country contained in this study.

<b>Country</b>	<b>Bloomberg</b>	<b>Index Name</b>	<b>Exchange</b>
Argentina	Merval Index	Argentina Merval Index	Bolsa Comercio Buenos Aires
Australia	AS30 Index	Australian All Ordinaries Index	Australian Stock Exchange
Brazil	IBOV Index	Ibovespa	Sao Paulo Stock Exchange
Canada	SPTSX Index	S&P/Toronto Stock Exchange Composite Index	Toronto Stock Exchange
China	SHCOMP Index	Shanghai Stock Exchange Composite Index	Shanghai Stock Exchange
Hong Kong	HSCEI Index	Hang Seng China Enterprises Index	Hong Kong Stock Exchange
France	CAC Index	CAC 40 Index	Euronext Paris
Germany	DAX Index	Deutsche Boerse AG German Stock Index	Frankfurt Stock Exchange
India	SENSEX Index	S&P BSE Sensex Index	Bombay Stock Exchange
Japan	NKY Index	Nikkei 225	Tokyo Stock Exchange
Mexico	MEXBOL Index	S&P/BMV IPC	Bolsa Mexicana de Valores
South Africa	JALSH Index	FTSE/JSE All-Share Index	Johannesburg Stock Exchange
South Korea	KOSPI Index	Korea Stock Exchange KOSPI Index	Korea Stock Exchange
United States	INDU Index	Dow Jones Industrial Average	New York Stock Exchange

**Appendix 3:**

Descriptive Statistics for the results obtained in event studies on the aggregate sample.

<b>Descriptive Statistics</b>	<b>Mean</b>	<b>Std.</b>	<b>Skew.</b>	<b>Kurt.</b>	<b>Min.</b>	<b>Max.</b>
CAR [-40,+40]	-0.01	0.12	-0.56	10.63	-0.98	0.81
CAR [-2,+2]	0.01	0.04	0.55	5.02	-0.18	0.24
CAR [0,0]	0.00	0.02	2.15	24.76	-0.15	0.25
BHAR [0,360]	0.02	0.25	2.66	27.33	-1.25	2.68
BHAR [0,240]	0.04	0.20	2.17	19.35	-0.79	1.90
BHAR [0,120]	0.01	0.15	3.14	22.87	-0.57	1.28

**Appendix 4:**

Supportive event study for chapter 5.3.1 illustrating results for cross-border acquisitions completed by emerging-market acquirers with the target firm operating in the same industry.

**Emerging Markets - CBAs with equal Acquirer and Target Industry**

Event Window	CAAR	P-Value	Event Window	CAAR	P-Value
<i>[-40...40]</i>	<i>-0.038</i>	<i>0.029**</i>	<i>[-1...1]</i>	<i>0.008</i>	<i>0.019**</i>
<i>[-20...20]</i>	<i>-0.027</i>	<i>0.028**</i>	<i>[0...0]</i>	<i>0.004</i>	<i>0.031**</i>
<i>[-10...10]</i>	<i>-0.016</i>	<i>0.080*</i>	[0...10]	0.003	0.616
[-2...2]	0.004	0.322	[0...20]	0.002	0.836

represents significance at \*\*\*1%; \*\*5%; \*10%

## Separate Appendix: Complete List of Acquisition Announcements

Date Announced	Deal Size (M USD)	Acquirer Name	Acquirer Nation	Acquirer Industry	Target Name	Target Nation	Target Industry
12-Feb-2014	852	YPF SA	Argentina	Petrochemicals	Apache Corp-Argentina assets	Argentina	Oil & Gas
09-May-1997	594	Banco Frances del Rio de la Plata	Argentina	Banks	Banco de Credito Argentino SA	Argentina	Banks
31-May-2012	249	Petrobras Argentina SA	Argentina	Oil & Gas	Petrolera Entre Lomas SA	Argentina	Oil & Gas
22-Dec-1997	175	Solvay Indupa SAIYC	Argentina	Chemicals	Solvay do Brasil-PVC Units (Solvay SA)	Brazil	Chemicals
19-Jan-2011	90	Pampa Energia SA	Argentina	Power	Empresa Distribuidora Electrica Regional SA	Argentina	Power
01-Aug-1997	54	Inversiones y Representaciones SA	Argentina	Other Real Estate	Paseo Alcorta	Argentina	Discount and Department Store Retailing
06-Jul-2003	48	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Conagra Argentina	Argentina	Agriculture & Livestock
14-Feb-2001	45	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Lucchetti Argentina SA (Empresas Lucchetti SA)	Argentina	Food and Beverage
24-Oct-1997	37	Capex SA	Argentina	Power	Gassur SA(Central Puertos SA)	Argentina	Pipelines
02-Jul-2008	35	Telecom Argentina SA	Argentina	Telecommunications Services	Cubecorp Argentina SA	Argentina	IT Consulting & Services
31-Dec-1998	35	Transportadora de Gas del Sur SA	Argentina	Oil & Gas	Perez Companc SA-Rio Neuquen Plant	Argentina	Petrochemicals
18-Dec-1998	28	YPF SA	Argentina	Oil & Gas	Global Petroleum Corp	United States	Oil & Gas
23-Dec-2009	27	Banco Hipotecario SA	Argentina	Banks	Tarjeta Shopping SA {Tarshop SA}	Argentina	Credit Institutions
17-Dec-1999	26	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Fagnani Hermanos	Argentina	Food and Beverage
09-Dec-2013	23	Sociedad Comercial del Plata SA	Argentina	Oil & Gas	CPS Comunicaciones SA	Argentina	Telecommunications Services
12-Feb-1999	20	YPF SA	Argentina	Oil & Gas	Maleic SA	Argentina	Petrochemicals
23-Jul-2007	17	Ledesma SA Agricola Industrial	Argentina	Food and Beverage	Massuh SAIC-Plant	Argentina	Paper & Forest Products
11-Dec-2007	13	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Virgilio Manera SA	Argentina	Food and Beverage
31-Dec-1996	12	Inversiones y Representaciones SA	Argentina	Other Real Estate	Galerias Pacifico	Argentina	Non Residential
11-Oct-2011	11	Pampa Energia SA	Argentina	Power	Empresa Generacion Salta Holding SA	Argentina	Other Financials
28-Feb-2012	9	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Cia Alimenticia de los Andes SA{Cala}	Argentina	Food and Beverage
20-May-2015	6	BBVA Banco Frances SA	Argentina	Banks	Volkswagen Credit Cia Financiera SA	Argentina	Credit Institutions
06-Oct-2008	4	Sociedad Comercial del Plata SA	Argentina	Oil & Gas	Parque de la Costa SA	Argentina	Recreation & Leisure
13-Aug-2004	2	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Jugos Naturales Minerva	Argentina	Food and Beverage
19-Jun-2015	2	Sociedad Comercial del Plata SA	Argentina	Oil & Gas	Omega Grains LLC	United States	Food and Beverage
01-Apr-2015	2	SA San Miguel AGICI y F	Argentina	Agriculture & Livestock	Undisclosed Fruit Packaging Plant	South Africa	Containers & Packaging
27-Aug-2009	2	Banco Patagonia SA	Argentina	Banks	GMAC Compania Financiera SA	Argentina	Credit Institutions
22-Oct-2008	2	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Bonafide Golosinas	Argentina	Food and Beverage
20-Dec-2007	1	Molinos Rio de la Plata SA	Argentina	Food and Beverage	Grupo Estrella SA	Argentina	Household & Personal Products
19-May-2005	1	Siderar	Argentina	Metals & Mining	Impeco SA	Argentina	Metals & Mining
30-Jan-2000	1	Banco Rio de la Plata SA	Argentina	Banks	Banco Tornquist SA	Argentina	Banks

19-Mar-1998	0,5	YPF SA	Argentina	Oil & Gas	Refinaria de Petroleos de Manguinhos SA	Brazil	Petrochemicals
01-Dec-1997	0,5	Acindar Industria Argentina Aceros SA	Argentina	Metals & Mining	Impeco SA	Argentina	Metals & Mining
15-Nov-2010	7057	AMP Ltd	Australia	Asset Management	AXA Asia Pacific Holdings Ltd	Australia	Insurance
22-Feb-2011	4750	BHP Billiton Ltd	Australia	Metals & Mining	Chesapeake Energy Corp-Fayetteville Shale Assets	United States	Oil & Gas
15-Dec-2014	2814	Woodside Petroleum Ltd	Australia	Oil & Gas	Apache Julimar Pty Ltd	Australia	Oil & Gas
10-Apr-2000	2726	National Australia Bank Ltd	Australia	Banks	MLC Ltd(Lend Lease Corp Ltd)	Australia	Asset Management
15-Dec-2010	2268	Origin Energy Ltd	Australia	Oil & Gas	Integral Energy-Retail Businesses	Australia	Power
25-May-2005	2154	Woolworths Ltd	Australia	Food & Beverage Retailing	Foodland Associated Ltd-New Zealand Business	New Zealand	Food & Beverage Retailing
30-Mar-2007	2114	Babcock & Brown Power Ltd	Australia	Power	Alinta Ltd-Western Australia Retail & Cogeneration Business	Australia	Oil & Gas
18-Aug-2009	2025	Amcor Ltd	Australia	Containers & Packaging	Alcan Packaging Food Europe	France	Containers & Packaging
25-Jun-2007	1695	Valad Property Group	Australia	REITs	Scarborough Property Co PLC	United Kingdom	REITs
12-Apr-2000	1680	Telstra Corp Ltd	Australia	Telecommunications Services	Pacific Century CyberWorks Ltd-Wireless Assets	Hong Kong	Wireless
16-Dec-2013	1649	Insurance Australia Group Ltd	Australia	Insurance	Wesfarmers Ltd-Insurance Underwriting Operations	Australia	Insurance
08-May-2002	1579	Amcor Ltd	Australia	Containers & Packaging	Schmalbach-Lubeca AG-PET Container & Closure Assets	Germany	Containers & Packaging
11-Oct-2013	1467	Westpac Banking Corp	Australia	Banks	Capital Finance Australia Ltd	Australia	Credit Institutions
18-Sep-2008	1405	Commonwealth Bank of Australia	Australia	Banks	Bank of Western Australia Ltd	Australia	Banks
12-Feb-2014	1356	AGL Energy Ltd	Australia	Alternative Energy Sources	Macquarie Generation	Australia	Power
07-Jul-2014	1283	Aristocrat Leisure Ltd	Australia	Other Consumer Products	Video Gaming Technologies Inc	United States	Other Consumer Products
25-Feb-2010	1243	Lend Lease Group	Australia	Building/Construction	ING Retail Property Fund Australia	Australia	Other Financials
04-Jan-2007	1156	QBE Insurance Group Ltd	Australia	Insurance	Winterthur US Holdings Inc	United States	Professional Services
16-Nov-2005	1155	AWB Ltd	Australia	Agriculture & Livestock	Rabobank Australia Ltd-Loan Portfolio	Australia	Other Financials
04-Dec-2006	1129	Insurance Australia Group Ltd	Australia	Insurance	Equity Insurance Group Ltd	United Kingdom	Insurance
14-Apr-2005	1099	Ramsay Health Care Ltd	Australia	Hospitals	Affinity Health Ltd	Australia	Hospitals
21-Dec-2010	1090	Lend Lease Group	Australia	Building/Construction	Valemus Ltd	Australia	Building/Construction
14-Aug-2008	1059	QBE Insurance Group Ltd	Australia	Insurance	PMI Mortgage Insurance Australia Holdings Pty Ltd	Australia	Insurance
16-May-2007	1030	Transpacific Industries Group Ltd	Australia	Water and Waste Management	BIS Cleanaway Ltd	Australia	Water and Waste Management
18-Oct-2002	1022	Insurance Australia Group Ltd	Australia	Insurance	CGU Insurance Australia Ltd, New Zealand Insurance Co Ltd	Australia	Insurance
06-Feb-1998	971	Coca-Cola Amatil Ltd	Australia	Food and Beverage	Coca-Cola Co-Italian Assets	Italy	Food and Beverage
22-Jan-2015	960	Slater & Gordon Ltd	Australia	Legal Services	Quindell PLC-Professional Services Division	United Kingdom	Professional Services
06-Aug-2004	951	Prime Infrastructure Group	Australia	Alternative Financial Investments	Powerco Ltd	New Zealand	Power
24-Oct-2005	951	MAp Airports Ltd	Australia	Transportation & Infrastructure	Kobenhavns Lufthavns A/S	Denmark	Transportation & Infrastructure
27-Nov-2006	935	Origin Energy Ltd	Australia	Oil & Gas	Sun Retail	Australia	Power
14-Nov-2010	932	OneSteel Ltd	Australia	Metals & Mining	AltaSteel Ltd	Canada	Metals & Mining
08-Dec-2003	925	CSL Ltd	Australia	Pharmaceuticals	Aventis Behring LLC	United States	Biotechnology
26-Oct-2005	892	Macquarie Office Trust	Australia	REITs	Maguire Properties Inc-Office Property Portfolio	United States	Non Residential

08-Feb-2007	883	WorleyParsons Ltd	Australia	Building/Construction	Colt Engineering Corp	Canada	Oil & Gas
29-Nov-2007	798	National Australia Bank Ltd	Australia	Banks	Great Western Bancorp Inc, Omaha,Nebraska	United States	Banks
17-Jun-2003	781	PaperlinX Ltd	Australia	Paper & Forest Products	Buhrmann NV-Paper Merchating Division	Netherlands	Paper & Forest Products
02-Mar-2010	768	Tatts Group Ltd	Australia	Casinos & Gaming	New South Wales-Lotteries Business	Australia	Casinos & Gaming
05-Dec-2001	756	Westfield America Trust	Australia	REITs	Richard E Jacobs Group Inc- Shopping Malls(9)	United States	Non Residential
15-Jun-2001	737	Suncorp-Metway Ltd	Australia	Insurance	AMP General Insurance Ltd (AMP Ltd)	Australia	Insurance
09-Aug-2011	732	BHP Billiton Ltd	Australia	Metals & Mining	HWE Mining Pty Ltd- Iron Ore Entities & Assets	Australia	Metals & Mining
01-Oct-2003	711	Macquarie Bank Ltd	Australia	Other Financials	South East Water Ltd	United Kingdom	Water and Waste Management
04-Feb-2011	700	QBE Insurance Group Ltd	Australia	Insurance	Balboa Insurance Group Inc	United States	Insurance
23-Dec-2014	697	Telstra Corp Ltd	Australia	Telecommunications Services	Pacnet Ltd	Hong Kong	Telecommunications Services
22-Jun-2009	697	National Australia Bank Ltd	Australia	Banks	Aviva Australia Ltd	Australia	Insurance
19-Sep-2005	690	Orica Ltd	Australia	Chemicals	Dyno Nobel ASA-Businesses	Norway	Advertising & Marketing
18-Jul-2011	682	Santos Ltd	Australia	Oil & Gas	Eastern Star Gas Ltd	Australia	Oil & Gas
24-Sep-2007	670	Orica Ltd	Australia	Chemicals	Excel Mining Systems Inc	United States	Building/Construction
12-Apr-2007	665	Macquarie Goodman Group Ltd	Australia	REITs	Rosemound Developments Ltd	United Kingdom	Other Real Estate
05-Oct-2009	655	GrainCorp Ltd	Australia	Food and Beverage	United Malt Holdings LP	United States	Food and Beverage
09-Dec-2004	654	Stockland Corp Ltd	Australia	Other Real Estate	Lensworth Group Ltd	Australia	Other Real Estate
17-Oct-2006	651	Orica Ltd	Australia	Chemicals	Minova International Ltd	United Kingdom	Chemicals
11-Apr-2003	651	John Fairfax Holdings Ltd	Australia	Publishing	Independent Newspapers Ltd- NZ Publishing Businesses	New Zealand	Publishing
10-Aug-2006	642	Macquarie Bank Ltd	Australia	Other Financials	Itevelesa SA	Spain	Transportation & Infrastructure
17-Oct-2011	620	Super Retail Group Ltd	Australia	Automotive Retailing	Rebel Group Ltd	Australia	Other Retailing
17-Aug-2011	619	Boral Ltd	Australia	Construction Materials	Lafarge Boral Gypsum Asia Ltd	South Korea	Construction Materials
26-Nov-2013	615	Ansell Ltd	Australia	Healthcare Equipment	BarrierSafe Solutions International Inc	United States	Other Industrials
01-Jul-2013	609	Origin Energy Ltd	Australia	Oil & Gas	Eraring Energy	Australia	Power
14-Oct-2015	600	Treasury Wine Estates Ltd	Australia	Food and Beverage	Diageo PLC-US & UK Wine Operations	United States	Food and Beverage
01-Sep-2010	42877	Petroleo Brasileiro SA Petrobras	Brazil	Oil & Gas	Republic of Brazil-Oil & Gas Exploration Blocks	Brazil	Oil & Gas
11-Aug-2006	18372	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Inco Ltd	Canada	Metals & Mining
22-Jan-2010	4132	Braskem SA	Brazil	Petrochemicals	Quattor Participacoes SA	Brazil	Petrochemicals
25-Apr-2008	3430	Telemar Norte Leste SA	Brazil	Telecommunications Services	Brasil Telecom Participacoes SA	Brazil	Telecommunications Services
10-Jun-2013	2726	JBS SA	Brazil	Agriculture & Livestock	Seara Alimentos SA	Brazil	Food and Beverage
30-Apr-2010	2500	Vale SA	Brazil	Metals & Mining	BSG Resources Guinea Ltd	Guernsey	Metals & Mining
20-Nov-2008	2250	Banco do Brasil SA	Brazil	Banks	Banco Nossa Caixa SA	Brazil	Banks
30-Nov-2007	2002	Petroleo Brasileiro SA (Petrobras)	Brazil	Oil & Gas	Suzano Petroquimica SA	Brazil	Petrochemicals
02-Feb-2008	1900	Usinas Siderurgicas de Minas Gerais SA	Brazil	Metals & Mining	J Mendes Ltda	Brazil	Metals & Mining
09-Jan-2009	1823	Banco do Brasil SA	Brazil	Banks	Banco Votorantim SA	Brazil	Banks

14-May-2013	1370	Itau Unibanco Holding SA	Brazil	Banks	Banco Citicard SA	Brazil	Credit Institutions
19-Apr-2011	1366	CPFL Energia SA	Brazil	Power	ERSA Energias Renovaveis SA	Brazil	Power
04-Sep-2012	1139	Equatorial Energia SA	Brazil	Power	Centrais Eletricas do Para SA (CELPA)	Brazil	Power
15-Jan-2001	1116	Telesp Celular SA (Portugal Telecom)	Brazil	Telecommunications Services	Global Telecom SA	Brazil	Telecommunications Services
22-Jul-2002	1028	Petroleo Brasileiro SA (Petrobras)	Brazil	Oil & Gas	Perez Companc SA	Argentina	Oil & Gas
19-Oct-2007	1014	Perdigao SA	Brazil	Food and Beverage	Eleva Alimentos SA	Brazil	Food and Beverage
11-Sep-2009	900	Marfrig Frigorificos e Comercio Alimentos	Brazil	Food and Beverage	Seara Alimentos SA	Brazil	Food and Beverage
30-Jan-2009	850	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Rio Tinto PLC-Potash Assets	Argentina	Metals & Mining
13-Jan-2003	812	Banco Bradesco SA	Brazil	Banks	Banco Bilbao Vizcaya Argentaria Brasil SA	Brazil	Banks
03-Oct-2007	812	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	North-South Railroad	Brazil	Transportation & Infrastructure
14-Aug-2008	730	Ultrapar Participacoes SA	Brazil	Chemicals	Chevron Corp-Brazilian Fuel Distribution Assets	Brazil	Oil & Gas
20-Apr-2001	696	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Ferteco Mineracao SA (Thyssen Krupp AG)	Brazil	Metals & Mining
20-May-2011	632	Banco Bradesco SA	Brazil	Banks	Banco do Estado do Rio de Janeiro SA(BERJ)	Brazil	Banks
14-Jan-2002	542	Banco Bradesco SA	Brazil	Banks	Banco Mercantil de Sao Paulo SA	Brazil	Banks
30-May-2000	530	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Sociedade Anomina Mineracao da Trindade	Brazil	Metals & Mining
27-Jul-2000	500	Petroleo Brasileiro SA	Brazil	Oil & Gas	EG3(Astra Cia Argentina de Petroleo SA)	Argentina	Oil & Gas
03-Nov-2008	498	Banco Itau Holding Financeira SA	Brazil	Banks	Banco Itau Europa SA	Portugal	Brokerage
20-Mar-2006	490	Banco Bradesco SA	Brazil	Banks	American Express Co-Brazilian Credit Card Operations	Brazil	Banks
21-Apr-2010	480	Banco do Brasil SA	Brazil	Banks	Banco Patagonia SA	Argentina	Banks
18-Sep-2003	467	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Ferrovias Centro Atlantica(FCA)	Brazil	Transportation & Infrastructure
25-Jun-2004	450	Petroleo Brasileiro SA (Petrobras)	Brazil	Oil & Gas	Agip Liquigas	Brazil	Oil & Gas
23-Jul-2007	440	Cia Siderurgica Nacional(CSN)	Brazil	Metals & Mining	Cia de Fomento Mineral	Brazil	Metals & Mining
31-Mar-2003	426	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Caemi Mineracao e Metalurgia SA	Brazil	Metals & Mining
04-Jan-2002	419	Banco Bradesco SA	Brazil	Banks	Ford Leasing SA-Vehicle Financing Unit	Brazil	Credit Institutions
13-Jul-2011	394	Fleury SA	Brazil	Healthcare Equipment	Labs Cardiolab Exames Complementares SA	Brazil	Healthcare Equipment
24-Jan-2007	376	Banco Bradesco SA	Brazil	Banks	Banco BMC SA(BMC)	Brazil	Banks
23-Dec-2008	373	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Cementos Argos SA-Coal Mine Assets	Colombia	Construction Materials
02-Feb-2006	358	Petroleo Brasileiro SA (Petrobras)	Brazil	Oil & Gas	El Paso Corp-Macae Gas-Fired Station	Brazil	Power
30-Nov-2007	354	Petroleo Brasileiro SA (Petrobras)	Brazil	Oil & Gas	Suzano Petroquimica SA	Brazil	Petrochemicals
27-Jul-2011	340	Braskem SA	Brazil	Petrochemicals	The Dow Chemical Co- Polypropylene Business	United States	Chemicals
09-Mar-2000	328	Telecomunicacoes do Parana	Brazil	Telecommunications Services	Telecomunicacoes de Santa Catarina SA(Santa Catarina)	Brazil	Telecommunications Services
22-Apr-2009	306	Cia Vale do Rio Doce SA	Brazil	Metals & Mining	Undisclosed Coal Assets, Colombia	Colombia	Metals & Mining
21-Dec-2005	303	Banco Bradesco SA	Brazil	Banks	Banco Bec S.A.	Brazil	Banks
19-Dec-2008	287	Gerdau SA	Brazil	Metals & Mining	Corporacion Sidenor SA	Spain	Metals & Mining
04-Aug-1999	262	Gerdau SA	Brazil	Metals & Mining	AmeriSteel Corp(Kyoei Steel Ltd)	United States	Metals & Mining

10-Sep-2015	8900	Bank of Montreal,Ontario, Canada	Canada	Banks	General Electric Capital Corp-Transportation Finance	United States	Banks
29-Jun-2015	7211	Element Financial Corp	Canada	Diversified Financials	GE Capital Fleet Services-US & Mexico Fleet Operations	United States	Professional Services
23-Oct-2012	4100	Royal Bank of Canada	Canada	Banks	Ally Credit Canada Ltd	Canada	Credit Institutions
14-Sep-2006	4075	Canadian Natural Resources Ltd	Canada	Oil & Gas	Anadarko Canada Corp	Canada	Oil & Gas
01-Feb-2007	3900	Great-West Lifeco Inc	Canada	Other Financials	Putnam Investments	United States	Asset Management
26-Aug-2004	3813	Toronto-Dominion Bank	Canada	Banks	Banknorth Group Inc,Portland, Maine	United States	Banks
08-Sep-2015	3547	Concordia Healthcare Corp	Canada	Pharmaceuticals	Amdipharm Mercury Co Ltd	United Kingdom	Pharmaceuticals
22-Dec-2006	3400	TransCanada Corp	Canada	Oil & Gas	ANR Pipeline Co	United States	Pipelines
15-Dec-1999	3250	Nortel Networks Corp	Canada	Telecommunications Equipment	Qtera Corp	United States	Telecommunications Equipment
27-Jun-2007	3202	Yamana Gold Inc	Canada	Metals & Mining	Meridian Gold Inc	United States	Metals & Mining
15-Jun-2015	3186	Hudson's Bay Co	Canada	Discount and Department Store Retailing	GALERIA Kaufhof GmbH	Germany	Discount and Department Store Retailing
06-Feb-2001	3000	Nortel Networks Corp	Canada	Telecommunications Equipment	JDS Uniphase Corp-Laser Chip Manufacturing Plant	Switzerland	Semiconductors
19-Feb-2014	2822	Canadian Natural Resources Ltd	Canada	Oil & Gas	Devon Energy Corp-Canadian Conventional Assets	Canada	Oil & Gas
31-Mar-2008	2800	TransCanada Corp	Canada	Oil & Gas	National Grid PLC-Ravenswood Station,New York	United States	Power
31-May-2011	2787	Intact Financial Corp	Canada	Healthcare Providers	Axa Canada Inc	Canada	Insurance
05-Apr-2004	2375	The Jean Coutu Group(PJC)Inc	Canada	Other Retailing	JC Penney Co-Eckerd Drug Stores	United States	Other Retailing
31-Jul-2000	2189	Canwest Global Communications Corp	Canada	Broadcasting	Hollinger Int'l Inc-Internet & Other Publishing Asst	Canada	Publishing
29-Oct-2004	2100	Nexen Inc	Canada	Oil & Gas	EnCana(UK)Holdings Ltd	United Kingdom	Oil & Gas
07-Mar-2005	2078	Yellow Pages Income Fund	Canada	Publishing	Advertising Directory Solutions Holdings Inc	Canada	Publishing
27-Oct-2000	2060	Thomson Corp	Canada	E-commerce / B2B	Harcourt General Inc-Higher Education Business and Certain Corp	United States	Publishing
06-Oct-2014	2000	Lundin Mining Corp	Canada	Metals & Mining	Freeport-McMoRan Inc-Candelaria & Ojos del Salado Copper Mines	Chile	Metals & Mining
19-Feb-2001	1765	George Weston Ltd	Canada	Food and Beverage	Bestfoods Baking Co(Bestfoods Inc/Unilever PLC)	United States	Food and Beverage
24-Feb-2004	1703	TransCanada Corp	Canada	Oil & Gas	Gas Transmission Northwest Corp	United States	Oil & Gas
30-Apr-2001	1650	Domtar Inc	Canada	Paper & Forest Products	Georgia-Pacific Corp-Paper Mills (4)	United States	Paper & Forest Products
03-Dec-2012	1450	Saputo Inc	Canada	Food and Beverage	Morningstar Foods LLC	United States	Food and Beverage
23-Aug-2006	1438	Harvest Energy Trust	Canada	Oil & Gas	North Atlantic Refining Ltd	Canada	Petrochemicals
22-Sep-2014	1425	Veresen Inc	Canada	Oil & Gas	Ruby Pipeline LLC	United States	Pipelines
23-Mar-2015	1422	TransAlta Renewables Inc	Canada	Alternative Energy Sources	TransAlta Corp-Australian Power Generation & Gas Pipeline Portfolio	Australia	Power
02-Jun-2014	1400	Element Financial Corp	Canada	Diversified Financials	PHH Vehicle Management Services LLC	United States	Professional Services
26-Aug-2014	1368	Cominar Real Estate Investment Trust	Canada	REITs	Ivanhoe Cambridge Inc-Landmark Properties Portfolio	Canada	Non Residential
25-Feb-2015	1361	RioCan Real Estate Investment Trust	Canada	REITs	Hudson's Bay Co-Properties(10)	Canada	Non Residential
21-Feb-2008	1351	Royal Bank of Canada	Canada	Banks	Phillips Hager & North Investment Management Ltd	Canada	Asset Management
31-Oct-2005	1350	Goldcorp Inc	Canada	Metals & Mining	Barrick Gold Corp-Certain Placer Dome Mining Assets	Canada	Metals & Mining
16-Jul-2014	1325	Onex Corp	Canada	Alternative Financial Investments	York Risk Services Group Inc	United States	Insurance
30-Mar-2015	1250	DH Corp	Canada	IT Consulting & Services	Fundtech Ltd	United States	Software

06-Nov-2014	1250	Cott Corp	Canada	Food and Beverage	DS Services of America Inc	United States	Food and Beverage
01-Feb-2012	1135	AltaGas Ltd	Canada	Oil & Gas	Semco Holding Corp	United States	Oil & Gas
23-Feb-2007	1122	Astral Media Inc	Canada	Broadcasting	Standard Radio Inc	Canada	Broadcasting
24-Apr-2006	1066	Focus Energy Trust	Canada	Oil & Gas	Profico Energy Management Ltd	Canada	Oil & Gas
18-Jul-2003	1050	Cinram International Inc	Canada	Motion Pictures / Audio Visual	Warner Music Group-DVD & CD Manufacturing,Printing, Packaging	United States	Motion Pictures / Audio Visual
20-Oct-2011	1004	Bank of Nova Scotia	Canada	Brokerage	Banco Colpatria Red Multibanca SA	Colombia	Banks
13-Mar-2006	999	Canadian Imperial Bank of Commerce	Canada	Banks	FirstCaribbean International Bank Ltd	Barbados	Banks
18-Feb-2005	975	Brascan Corp	Canada	Asset Management	Weyerhaeuser Co-Coastal Group Assets,British Columbia	Canada	Construction Materials
19-Apr-2005	971	Calloway Real Estate Investment Trust	Canada	REITs	FirstPro Shopping Centres- Shopping Centres(36)	Canada	Non Residential
25-Mar-2014	968	Brookfield Renewable Energy Partners LP	Canada	Power	Bord Gais Energy-Wind Project Portfolio(17)	Ireland	Alternative Energy Sources
14-Jun-2010	967	Canadian Imperial Bank of Commerce	Canada	Banks	Citi Cards Canada Inc- MasterCard Credit Card Business	Canada	Credit Institutions
16-Apr-2015	952	Calloway Real Estate Investment Trust	Canada	REITs	SmartCentres Inc	Canada	Other Real Estate
24-Jul-2013	951	Crombie Real Estate Investment Trust	Canada	REITs	Sobeys Inc-Retail Property Portfolio(70)	Canada	Non Residential
06-May-2013	950	Onex Corp	Canada	Alternative Financial Investments	Nielsen Expositions	United States	Professional Services
07-Dec-2011	912	Veresen Inc	Canada	Oil & Gas	EnCana Corp-Natural Gas Processing Plants,Cutbank Ridge	Canada	Oil & Gas
29-Nov-2006	911	Pengrowth Energy Trust	Canada	Oil & Gas	Burlington Resources Inc-Oil & Natural Gas Producing Properties	Canada	Oil & Gas
04-Dec-2013	900	Chemtrade Logistics Income Fund	Canada	Other Financials	General Chemical Corp	United States	Chemicals
20-Mar-2012	879	Agrium Inc	Canada	Chemicals	Viterra Inc-Agri Products Business	Canada	Agriculture & Livestock
18-May-2004	874	Brascan Corp	Canada	Asset Management	Reliant Energy Inc- Hydroelectric Power Plant(71)	United States	Power
01-Nov-2012	861	Crescent Point Energy Corp	Canada	Oil & Gas	Ute Energy Upstream Holdings LLC	United States	Oil & Gas
08-Oct-2015	860	Brookfield Renewable Energy Partners LP	Canada	Power	Talen Energy Corp-Holtwood & Wallenpaupack Facilities	United States	Power
02-Dec-1997	849	TrizecHahn Corp	Canada	Other Real Estate	Sears Tower,Chicago,Illinois (AEW Partners LP)	United States	Non Residential
06-Apr-2011	4507	SAIC Motor Corp Ltd	China	Automobiles & Components	Shanghai Automotive Industry Corp(Group)(SAIC)-Assets	China (Mainland)	Automobiles & Components
01-Sep-2010	4313	Ping An Insurance Co of China Ltd	China	Insurance	Shenzhen Development Bank Co Ltd	China (Mainland)	Banks
27-Sep-2013	3612	Beijing Zhongchuang Telecom Test Co Ltd	China	Telecommunications Equipment	Beijing Xinwei Telecom Technology Co Ltd	China (Mainland)	Telecommunications Services
20-Jun-2006	3501	China Petroleum & Chemical Corp	China	Oil & Gas	OAO Udmurtneft	Russia	Oil & Gas
18-Mar-2014	2967	Shanghai Pudong Development Bank Co Ltd	China	Banks	Shanghai International Trust Co Ltd	China (Mainland)	Asset Management
05-Feb-2007	2836	Dongfang Electrical Machinery Co Ltd	China	Other Energy & Power	Dongfang Boiler(Group)Co Ltd	China (Mainland)	Other Industrials
02-Jun-2008	2474	China Merchants Bank Co Ltd	China	Banks	Wing Lung Bank Ltd	Hong Kong	Banks
16-Oct-2013	2244	Sinohydro Group Ltd	China	Power	Power Construction Corp of China-Assets	China (Mainland)	Power
22-Oct-2007	2231	Shanghai Shimao Co Ltd	China	Other Real Estate	Peak Gain International Ltd- Commercial Property Assets(10)	China (Mainland)	Other Real Estate
30-May-2012	2112	Chongqing Iron & Steel Co Ltd	China	Metals & Mining	Chongqing Iron&Steel(Group)Co Ltd-Assets	China (Mainland)	Metals & Mining
30-Jun-2010	1701	Yantai Wanhua Polyurethanes Co Ltd	China	Chemicals	BorsodChem Zrt	Hungary	Chemicals
20-Jun-2008	1374	Shanghai Bashi Industrial Group Co Ltd	China	Transportation & Infrastructure	SAIC-Auto Parts Business Related Assets	China (Mainland)	Automobiles & Components
11-May-2012	1268	Beijing Jingneng Thermal Power Co Ltd	China	Power	Beijing Jingneng International Energy Co Ltd-Coal Electricity Assets	China (Mainland)	Power

13-Aug-2013	1250	Huayu Automotive Systems Co Ltd	China	Automobiles & Components	Visteon Corp-Automobile JV Assets	China (Mainland)	Automobiles & Components
14-Oct-2014	1198	Huaneng Power International Inc	China	Power	China Huaneng Group - Assets	China (Mainland)	Power
31-Aug-2011	1197	China Yangtze Power Co Ltd	China	Power	China Three Gorges Corp-First Batch Assets Three Gorges	China (Mainland)	Power
12-Sep-2014	1125	China Petroleum & Chemical Corp	China	Oil & Gas	Sinopec Yizheng Chemical Fibre Co Ltd-Assets	China (Mainland)	Chemicals
24-Aug-2009	1015	Petro China Co Ltd	China	Oil & Gas	INEOS Group Ltd-European Refining Business	France	Chemicals
24-Aug-2013	980	Baoshan Iron & Steel Co Ltd	China	Metals & Mining	Baosteel Zhanjiang Iron&Steel Co Ltd	China (Mainland)	Metals & Mining
29-Mar-2011	953	Yingkou Port Liability Co Ltd	China	Transportation & Infrastructure	Yingkou Port Group Corp-Asset& Business	China (Mainland)	Transportation & Infrastructure
14-Apr-2015	894	Hainan Airlines Co Ltd	China	Transportation & Infrastructure	Tianjin Airlines Co Ltd	China (Mainland)	Transportation & Infrastructure
31-Oct-2006	890	Inner Mongolia Baotou Steel Union Co Ltd	China	Metals & Mining	Baotou Aluminum(Group)Co Ltd- Steel Core Assets	China (Mainland)	Metals & Mining
05-Nov-2010	823	Shandong Gold Mining Co Ltd	China	Metals & Mining	Shandong Jinshi Mining Co Ltd	China (Mainland)	Metals & Mining
20-Apr-2007	781	Zhongjin Gold Co Ltd	China	Metals & Mining	China National Gold Group Corp -Assets	China (Mainland)	Metals & Mining
29-Jan-2014	770	Industrial & Commercial Bank of China Ltd	China	Banks	Standard Bank PLC	United Kingdom	Banks
22-Aug-2012	18047	China Telecom Corp Ltd	Hong Kong	Telecommunications Services	China Telecommunications Corp- 3G Assets	China (Mainland)	Wireless
02-Jun-2008	9562	China Telecom Corp Ltd	Hong Kong	Telecommunications Services	Unicom New Horizon Corp Ltd- CDMA Network Assets	China (Mainland)	Telecommunications Services
14-Mar-2010	3100	CNOOC Ltd	Hong Kong	Oil & Gas	Bridas Corp	Argentina	Oil & Gas
09-Jan-2014	1412	Fosun International Ltd	Hong Kong	Pharmaceuticals	Caixa Seguros e Saude SGPS SA- Insurance Businesses	Portugal	Insurance
05-Dec-2010	439	Catic Shenzhen Holdings Ltd	Hong Kong	Other Industrials	AVIC International Holding Corp-Assets	China (Mainland)	Transportation & Infrastructure
31-Oct-2015	360	Shanghai Jin Jiang International HotelCo Ltd	Hong Kong	Hotels and Lodging	Shanghai Jin Jiang International Hotels Development Co Ltd	China (Mainland)	Hotels and Lodging
21-May-2015	315	Shunfeng International Clean Energy Ltd	Hong Kong	Power	Lattice Power Corp	China (Mainland)	Semiconductors
02-Jan-2007	113	ChinaSoft International Ltd	Hong Kong	IT Consulting & Services	Hinge Global Resource Inc	Hong Kong	Other Financials
30-Aug-2014	85	Shunfeng Photovoltaic International Co Ltd	Hong Kong	Semiconductors	SAG Solarstrom AG-Operating Business	Germany	Other Industrials
23-Mar-2010	85	AviChina Industry&Technology Co Ltd	Hong Kong	Aerospace & Defense	Chengdu CAIC Electronics Co Ltd	China (Mainland)	Aerospace & Defense
31-Dec-2003	69	Shenyang Public Utility Holdings Co Ltd	Hong Kong	Other Real Estate	Shenzhen Jingmei Industrial Development Co Ltd	China (Mainland)	Other Real Estate
28-Sep-2009	64	Alibaba.com Ltd	Hong Kong	E-commerce / B2B	China Civilink(Cayman)	China (Mainland)	Internet Software
13-May-2008	62	Hunan Nonferrous Metals Corp Ltd	Hong Kong	Metals & Mining	Abra Mining Ltd	Australia	Metals & Mining
03-May-2014	58	Kingworld Medicines Group Ltd	Hong Kong	Other Consumer Products	Shenzhen Dong Di Xin Technology Co Ltd	China (Mainland)	Healthcare Equipment
15-Dec-2009	49	China National Materials Co Ltd{Sinoma}	Hong Kong	Machinery	Gansu Qilianshan Construction Material Holding Co Ltd	China (Mainland)	Construction Materials
06-May-2010	38	Asia Cement(China)Holdings Corp	Hong Kong	Construction Materials	Wuhan Xinlingyun Cement Co Ltd	China (Mainland)	Construction Materials
01-Feb-2006	31	Wumart Stores Inc	Hong Kong	Food & Beverage Retailing	Beijing MerryMart Chainstores Development Co Ltd	China (Mainland)	Food & Beverage Retailing
26-Aug-2010	22	New Focus Auto Tech Holdings Ltd	Hong Kong	Automobiles & Components	Zhejiang Autoboom Industrial Co Ltd	China (Mainland)	Automotive Retailing
28-Nov-2002	20	Shenyang Public Utility Holdings Co Ltd	Hong Kong	Other Real Estate	Zhuhai Beida Education & Science Park Co Ltd	China (Mainland)	Public Administration
12-Sep-2014	20	Yuanda China Holdings Ltd	Hong Kong	Textiles & Apparel	AutoAgronom Ltd	Israel	Chemicals

31-Dec-2013	17	Dongfeng Motor Group Co Ltd	Hong Kong	Automobiles & Components	Shenzhen Dongfeng Automobile Co Ltd	China (Mainland)	Automobiles & Components
28-Apr-2003	15	Beijing Beida Jade Bird Universal Sci-Tech	Hong Kong	Software	Beida Jade Bird Software Park	China (Mainland)	Software
23-Sep-2011	13	New Focus Auto Tech Holdings Ltd	Hong Kong	Automobiles & Components	Hubei Autoboom Auto Accessories Supermarket Co Ltd	China (Mainland)	Automotive Retailing
17-Feb-2015	11	Flying Financial Service Holdings Ltd	Hong Kong	Credit Institutions	Profit Success Technology Ltd	China (Mainland)	E-commerce / B2B
14-Dec-2005	16290	Vinci SA	France	Building/Construction	Autoroutes du Sud de la France	France	Transportation & Infrastructure
30-Aug-1999	15837	Carrefour SA	France	Food & Beverage Retailing	Promodes	France	Food & Beverage Retailing
06-Oct-2008	12765	BNP Paribas SA	France	Brokerage	Fortis Bank SA/NV	Belgium	Banks
09-Mar-1999	12531	Banque Nationale de Paris(BNP)	France	Banks	Paribas SA	France	Banks
14-Dec-2001	10749	Vivendi Universal SA	France	Motion Pictures / Audio Visual	USA Networks Inc-Entertainment Assets	United States	Broadcasting
01-Dec-1998	9730	Total SA	France	Oil & Gas	Petrofina SA	Belgium	Petrochemicals
15-Jan-2001	5502	Schneider Electric SA	France	Other Energy & Power	Legrand SA	France	Other Industrials
29-May-2008	3992	Suez SA	France	Power	ENI SpA-Energy Assets	Italy	Power
19-Feb-2001	3767	Usinor SA	France	Metals & Mining	Arbed SA	Luxembourg	Metals & Mining
20-Jan-2004	3374	Air Liquide SA	France	Chemicals	Messer Griesheim GmbH- Industrial Gas Operations	Germany	Chemicals
07-Aug-2007	3271	Cie de Saint-Gobain SA	France	Construction Materials	Maxit Holding GmbH	Germany	Construction Materials
07-Mar-2011	3001	LVMH Moet Hennessy Louis Vuitton SA	France	Other Financials	Bulgari SpA	Italy	Other Consumer Products
15-Nov-2010	2631	AXA SA	France	Insurance	AMP Ltd-AXA Asian Business	Hong Kong	Insurance
08-Jul-2013	2574	LVMH Moet Hennessy Louis Vuitton SA	France	Other Financials	Loro Piana SpA	Italy	Textiles & Apparel
10-Dec-2001	2400	BNP Paribas SA(WAS 066747)	France	Brokerage	United California Bank,Los Angeles,CA(UFJ Holdings Inc)	United States	Banks
05-Apr-2006	2330	Thales SA	France	Aerospace & Defense	Alcatel SA-Satellite and Security Operations	France	Telecommunications Services
19-Sep-2014	2232	Arkema SA	France	Chemicals	Bostik SA	France	Chemicals
10-Nov-1997	2101	Assurances Generales de France (AGF)	France	Insurance	Athena Assurances(Worms et Cie)	France	Insurance
27-Apr-2007	1971	Veolia Environnement SA	France	Water and Waste Management	SULO GmbH	Germany	Water and Waste Management
29-Nov-1999	1954	AXA SA	France	Insurance	Nippon Dantai Life Insurance Co Ltd	Japan	Insurance
18-Jun-2008	1952	Sanofi-Aventis SA	France	Pharmaceuticals	Zentiva NV	Czechia	Pharmaceuticals
11-May-2009	1848	Electricite de France SA	France	Power	SPE SA	Belgium	Power
02-Dec-2007	1731	Vivendi SA	France	Motion Pictures / Audio Visual	Activision Inc	United States	Software
23-Dec-2009	1703	Icade SA	France	Other Real Estate	Cie la Lucette SA	France	REITs
28-Sep-2006	1700	Societe Generale SA	France	Banks	OAO Rosbank	Russia	Banks
25-Jun-1998	1700	Valeo SA	France	Automobiles & Components	ITT Industries Inc-Automotive Electrical Systems Business	United States	Automobiles & Components

13-Jul-2000	1695	Vinci SA	France	Building/Construction	Groupe GTM	France	Building/Construction
23-Jan-2008	1683	L'Oreal SA	France	Other Retailing	YSL Beaute SAS	France	Other Consumer Products
30-Jun-2015	1670	Wendel SE	France	Alternative Financial Investments	Allied Security Holdings LLC	United States	Professional Services
11-Oct-2006	1665	Credit Agricole SA	France	Banks	Banca Intesa SpA-Branches(193)	Italy	Banks
01-Feb-1999	1597	AXA SA	France	Insurance	Guardian Royal Exchange Overseas(Guardian Royal Exchange PLC)		Insurance
24-Sep-2012	1552	Cie Generale de Geophysique-Veritas SA	France	Oil & Gas	Fugro NV-Geoscience Division	Netherlands	Building/Construction
01-Aug-2007	1540	Schneider Electric SA	France	Other Energy & Power	Pelco	United States	Electronics
23-Mar-2007	1528	AXA SA	France	Insurance	Montepaschi Vita SpA	Italy	Insurance
01-Oct-2008	1507	GDF Suez SA	France	Power	Nederlandse Aardolie Maatschappij BV-North Sea Oil & Gas Asset	Netherlands	Oil & Gas
16-Sep-2003	1500	Atos Origin SA	France	IT Consulting & Services	Sema PLC-Certain European Businesses	France	IT Consulting & Services
18-Nov-2004	1456	Vivendi Universal SA	France	Motion Pictures / Audio Visual	Itissalat Al-Maghrib(IAM)	Morocco	Telecommunications Services
20-May-2014	1394	Eurosic SA	France	REITs	SIIC de Paris SA	France	REITs
02-Jun-2015	1383	Gecina SA	France	REITs	Ivanhoe Cambridge Ltd-Office Buildings(2)	France	Non Residential
25-Dec-2013	1330	BNP Paribas SA	France	Brokerage	Bank Gospodarki Zywnosciowej SA	Poland	Banks
24-Jul-2006	1264	Credit Agricole SA	France	Banks	Finanziaria di Sviluppo SpA	Italy	Credit Institutions
20-Apr-2006	1232	Societe Generale SA	France	Banks	HVB Splitska Banka dd	Croatia	Banks
19-Feb-2007	1225	Fonciere des Regions SA	France	REITs	Beni Stabili SpA	Italy	REITs
23-Oct-2002	1217	Lagardere SCA	France	Publishing	Vivendi Universal Publishing SA	France	Advertising & Marketing
29-Sep-1998	1209	Usinor SA	France	Metals & Mining	Cockerill Sambre SA	Belgium	Metals & Mining
26-Sep-2003	1179	Areva SA	France	Power	Areva T&D SA	France	Power
08-Dec-2007	1166	Regie Nationale des Usines Renault SA	France	Automobiles & Components	OAO Avtovaz	Russia	Automobiles & Components
23-Apr-2007	1123	Carrefour SA	France	Food & Beverage Retailing	Atacadao Distribuicao Comercio e Industria Ltda(Atacadao)	Brazil	Food and Beverage
19-Nov-2006	1110	Lagardere SCA	France	Publishing	Sportfive SA	France	Advertising & Marketing
18-Dec-2014	1100	Atos SE	France	IT Consulting & Services	Xerox Corp-Information Technology Outsourcing Business	United States	IT Consulting & Services
11-Jan-2000	1100	Groupe Danone SA	France	Food and Beverage	McKesson Water Products Co (McKesson HBOC Inc)	United States	Food and Beverage
06-Nov-1997	1094	Thomson-CSF	France	Semiconductors	Alcatel Alstom CGE-Professional Electronics & Military Tele	France	Electronics
11-Jan-1999	1065	Schneider SA	France	Other Energy & Power	Lexel(A Ahlstrom,NKT Holdings)	Denmark	Machinery
01-Apr-2001	19656	Allianz AG	Germany	Insurance	Dresdner Bank AG	Germany	Banks
02-Apr-2007	14342	E ON AG	Germany	Power	Endesa Italia	Italy	Power
06-May-2014	14200	Bayer AG	Germany	Chemicals	Merck & Co Inc-Consumer Care Business	United States	Pharmaceuticals

21-Sep-2006	8561	Merck KGaA	Germany	Pharmaceuticals	Serono International SA	Switzerland	Biotechnology
30-Jul-2007	5507	Henkel AG & Co KGaA	Germany	Household & Personal Products	National Starch & Chemical Co- Adhesives & Electronic Material Bus	United States	Household & Personal Products
27-Mar-2000	5373	Deutsche Telekom AG	Germany	Telecommunications Services	Debis Systemhaus GmbH	Germany	IT Consulting & Services
15-Nov-2005	5344	Commerzbank AG	Germany	Banks	Eurohypo AG	Germany	Banks
29-Jun-2006	5318	Siemens AG	Germany	Telecommunications Equipment	Bayer Healthcare AG-Diagnostic Division	United States	Pharmaceuticals
17-Nov-1997	5118	Allianz AG	Germany	Insurance	Assurances Generales de France (AGF)	France	Insurance
09-May-2011	4904	Volkswagen AG	Germany	Automobiles & Components	MAN SE	Germany	Automobiles & Components
31-Aug-2008	4612	Commerzbank AG	Germany	Banks	Dresdner Bank AG	Germany	Banks
13-Aug-2009	4546	Volkswagen AG	Germany	Automobiles & Components	Porsche Holding GmbH	Austria	Automobiles & Components
21-Mar-2000	3900	BASF AG	Germany	Chemicals	American Cyanamid Agricultural Products(American Home Products)	United States	Chemicals
01-Mar-2006	3338	BASF AG	Germany	Chemicals	Degussa AG-Construction Chemicals Business	Germany	Chemicals
19-Jul-2004	2961	Bayer AG	Germany	Chemicals	Roche Holding AG-Over-The- Counter Drug Business	Switzerland	Pharmaceuticals
16-Sep-1998	2834	Metro AG	Germany	Food & Beverage Retailing	Metro Holding-Worldwide Wholesale Trading Activities	Denmark	Food and Beverage
24-Sep-2001	2500	Deutsche Bank AG	Germany	Banks	Zurich Scudder Investments Inc (Zurich Financial Svcs Grp)	United States	Asset Management
16-Nov-1999	2450	Bayer AG	Germany	Chemicals	Lyondell Chemical Co-Global Polyols Business	United States	Petrochemicals
03-Dec-2012	2357	E ON SE	Germany	Power	Enerjisa Enerji Uretim AS	Turkey	Power
20-Aug-2013	2224	Deutsche Wohnen AG	Germany	Other Real Estate	GSW Immobilien AG	Germany	Residential
18-Oct-2000	2220	Allianz AG	Germany	Insurance	Nicholas-Applegate Capital Management	United States	Asset Management
14-Jun-2015	2132	Deutsche Annington Immobilien SE	Germany	REITs	Sueddeutsche Wohnen Management Holding GmbH & Co KG	Germany	Real Estate Management
31-Jul-2007	1982	Deutsche Bank AG	Germany	Banks	Abbey Life Assurance Co Ltd	United Kingdom	Insurance
27-Jul-1998	1930	Continental AG	Germany	Automobiles & Components	ITT Industries Inc-Automotive Brake And Chassis Division	Germany	Automobiles & Components
10-Feb-2014	1910	Continental AG	Germany	Automobiles & Components	Veyance Technologies Inc	United States	Machinery
24-May-2007	1898	Deutsche Telekom AG	Germany	Telecommunications Services	Orange Nederland	Netherlands	Wireless
14-Oct-2005	1804	Fresenius AG	Germany	Pharmaceuticals	Helios Kliniken GmbH	Germany	Hospitals
14-Apr-2014	1797	Symrise AG	Germany	Other Consumer Products	DIANA SAS	France	Food and Beverage
13-Aug-2007	1770	IVG Immobilien AG	Germany	REITs	Allianz SE-Office Property Portfolio	Germany	Non Residential
02-Apr-2009	1675	K+S AG	Germany	Chemicals	Morton International Inc	United States	Food and Beverage
29-Apr-2014	1672	Siemens AG	Germany	Telecommunications Equipment	Rolls-Royce Holdings PLC-Energy Gas Turbine & Compressor	United Kingdom	Machinery
12-Jun-1997	1629	Preussag AG	Germany	Travel Services	Hapag-Lloyd AG	Germany	Transportation & Infrastructure
15-Dec-2008	1612	MAN SE	Germany	Automobiles & Components	Volkswagen Caminhoes e Onibus Industria e Comercio de Veiculos	Brazil	Automobiles & Components

30-Mar-2005	1553	Siemens AG	Germany	Telecommunications Equipment	Flender Holding GmbH	Germany	Machinery
12-Sep-2010	1531	Deutsche Bank AG	Germany	Banks	Deutsche Postbank AG	Germany	Banks
13-Nov-1997	1525	Siemens AG	Germany	Telecommunications Equipment	Westinghouse Electric Corp- Conventional Power Generation Business	United States	Machinery
05-Jun-2013	1366	SAP AG	Germany	Software	Hybris AG	Switzerland	Software
17-Dec-2008	1319	EnBW AG	Germany	Power	E ON AG-Lippendorf Lignite- Fired Power Station	Germany	Power
29-Oct-1999	1128	Allianz AG	Germany	Insurance	PIMCO Advisors LP	United States	Asset Management
16-Sep-1998	1100	Bayer AG	Germany	Chemicals	Chiron Diagnostics Corp (Chiron Corp)	United States	Pharmaceuticals
20-Sep-2012	1020	BASF SE	Germany	Chemicals	Becker Underwood Inc	United States	Chemicals
03-Apr-2006	1000	Continental AG	Germany	Automobiles & Components	Motorola Inc-Automotive Electronics Business	United States	Telecommunications Equipment
27-Mar-2013	988	Allianz SE	Germany	Insurance	Yapi Kredi Sigorta AS	Turkey	Insurance
26-Mar-2014	970	SAP AG	Germany	Software	Fieldglass Inc	United States	IT Consulting & Services
15-Feb-2010	10700	Bharti Airtel Ltd	India	Wireless	Zain Africa BV	Nigeria	Wireless
03-May-2011	1951	Mundra Port & Special Economic Zone Ltd	India	Transportation & Infrastructure	Abbot Point Coal Terminal	Australia	Transportation & Infrastructure
16-Sep-2011	1260	GVK Power & Infrastructure Ltd	India	Power	Hancock Coal Pty Ltd- Queensland Coal Assets	Australia	Metals & Mining
16-May-2007	1176	United Spirits Ltd	India	Food and Beverage	Whyte & Mackay Ltd	United Kingdom	Food and Beverage
25-Jun-2008	1107	GMR Infrastructure Ltd	India	Transportation & Infrastructure	InterGen NV	Netherlands	Power
22-Aug-2007	940	JSW Steel Ltd	India	Metals & Mining	Jindal United Steel Corp	United States	Metals & Mining
23-Jul-2015	880	Lupin Ltd	India	Pharmaceuticals	GAVIS Pharmaceuticals LLC,Novel Laboratories Inc	United States	Pharmaceuticals
10-May-2010	698	Hindustan Zinc Ltd	India	Metals & Mining	Anglo American PLC-Skorpion Mine	Namibia	Metals & Mining
16-May-2012	635	Piramal Healthcare Ltd	India	Pharmaceuticals	Decision Resources Group	United States	Professional Services
11-Sep-2013	601	UltraTech Cement Ltd	India	Construction Materials	Jaypee Cement Corp Ltd-Cement Unit(2)	India	Construction Materials
16-Feb-2006	571	Dr Reddy's Laboratories Ltd	India	Pharmaceuticals	Betapharm Arzneimittel GmbH	Germany	Pharmaceuticals
05-Jun-2008	546	Suzlon Energy Ltd	India	Machinery	REpower Systems AG	Germany	Machinery
23-Nov-2010	464	Mahindra & Mahindra Ltd	India	Automobiles & Components	Ssangyong Motor Co Ltd	South Korea	Automobiles & Components
02-Jul-2015	400	Rajesh Exports Ltd	India	Other Consumer Products	European Gold Refineries Holding SA	Switzerland	Metals & Mining
03-Jan-2012	396	TV18 Broadcast Ltd	India	Broadcasting	Ushodaya Enterprises Ltd-ETV News Channels	India	Broadcasting
05-Aug-2010	392	Reliance Industries Ltd	India	Oil & Gas	Marcellus Shale Natural Gas Acreage	United States	Oil & Gas
03-Aug-2010	380	UltraTech Cement Ltd	India	Construction Materials	STAR Cement Co LLC	United Arab Emirates	Construction Materials
02-Feb-2012	362	Binani Industries Ltd	India	Other Financials	3B The Fibreglass Company Sprl	Belgium	Textiles & Apparel
10-Sep-2012	349	Infosys Ltd	India	IT Consulting & Services	Lodestone Management Consultants AG	Switzerland	Advertising & Marketing

12-Apr-2007	339	Jet Airways(India)Ltd	India	Transportation & Infrastructure	Air Sahara	India	Transportation & Infrastructure
16-Oct-1999	334	Indian Oil Corp Ltd	India	Petrochemicals	Lubrizol India	India	Petrochemicals
29-Mar-2006	324	Ranbaxy Laboratories Ltd	India	Pharmaceuticals	Terapia SA	Romania	Pharmaceuticals
13-Dec-2013	322	Torrent Pharmaceuticals Ltd	India	Pharmaceuticals	Elder Pharmaceuticals Ltd-Formulations Business	India	Pharmaceuticals
13-Mar-2007	300	Havells India Ltd	India	Other Industrials	SLI Sylvania	Netherlands	Other Industrials
17-Jun-2003	275	Grasim Industries Ltd	India	Paper & Forest Products	Larsen & Toubro Ltd-Cement Division	India	Construction Materials
03-May-2007	265	Wockhardt Ltd	India	Biotechnology	Negma Lerads SAS	France	Pharmaceuticals
19-Jun-2014	264	Indiabulls Real Estate Ltd	India	Other Real Estate	Scottish Widows Investment Partnership Ltd-Prime Property	United Kingdom	Non Residential
29-Oct-2009	255	Zee Entertainment Enterprises Ltd	India	Broadcasting	Zee News Ltd-Regional Entertainment Business	India	Broadcasting
21-Feb-2010	252	Shree Renuka Sugars Ltd	India	Food and Beverage	Equipav SA Acucar e Alcool	Brazil	Agriculture & Livestock
20-Nov-2014	240	Tech Mahindra Ltd	India	IT Consulting & Services	Lightbridge Communications Corp	United States	Telecommunications Services
03-May-2013	235	Jindal Poly Films Ltd	India	Chemicals	ExxonMobil Chemical Co-Global BOPP Films Business	United States	Chemicals
25-Jun-2006	220	Tata Coffee Ltd	India	Food and Beverage	Eight O Clock Coffee co	United States	Food and Beverage
19-Jun-2005	203	Matrix Laboratories Ltd	India	Pharmaceuticals	Docpharma NV	Belgium	Pharmaceuticals
13-Jul-2011	201	Motherson Sumi Systems Ltd	India	Electronics	Peguform GmbH	Germany	Automobiles & Components
16-Feb-2015	200	Infosys Ltd	India	IT Consulting & Services	Panaya Inc	United States	Software
16-Nov-2006	200	Chemplast Sanmar Ltd	India	Chemicals	Trust Chemical Industries- Chemical Business Unit	Egypt	Chemicals
24-Feb-2010	200	Religare Enterprises Ltd	India	Asset Management	Northgate Capital Group LLC	United States	Alternative Financial Investments
22-Aug-2009	188	Fortis Healthcare (India) Ltd	India	Hospitals	Wockhardt Hospitals Ltd- Hospitals(10)	India	Hospitals
29-Jun-2011	179	Welspun Corp Ltd	India	Metals & Mining	Welspun Maxsteel Ltd	India	Metals & Mining
02-Dec-2012	175	MphasiS Ltd	India	IT Consulting & Services	Digital Risk LLC	United States	Software
09-Mar-2000	169	Hindalco Industries Ltd	India	Metals & Mining	Indian Aluminum Co Ltd	India	Metals & Mining
18-Jan-2007	165	Subex Azure Ltd	India	Software	Syndesis Ltd	Canada	IT Consulting & Services
19-May-2010	155	Axis Bank Ltd	India	Banks	Bombay Dyeing & Manufacturing Co Ltd-Mumbai Property	India	Non Residential
15-Feb-2012	150	Marico Ltd	India	Household & Personal Products	Halite Personal Care India Pvt Ltd	India	Household & Personal Products
26-Jul-2011	150	United Phosphorus Ltd	India	Chemicals	DVA Agro do Brasil Ltda	Brazil	Chemicals
15-Oct-2012	21640	SoftBank Corp	Japan	Wireless	Sprint Nextel Corp	United States	Telecommunications Services
13-May-2011	11001	Nomura Holdings Inc	Japan	Other Financials	Nomura Land & Building Co Ltd	Japan	Real Estate Management
08-Mar-1999	7832	Japan Tobacco Inc(JT)	Japan	Tobacco	RJ Reynolds International (RJR Nabisco Inc/RJR Nabisco Holdings)	Netherlands	Tobacco
29-Sep-2015	5005	Japan Tobacco Inc	Japan	Tobacco	Reynolds American Inc-Natural American Spirit Business	United States	Tobacco

29-Jan-2012	4966	TonenGeneral Sekiyu KK	Japan	Petrochemicals	Exxon Mobil	Japan	Oil & Gas
07-Nov-2008	4521	Panasonic Corp	Japan	Electronics	Sanyo Electric Co Ltd	Japan	Electronics
24-Jan-2010	4000	KDDI Corp	Japan	Telecommunications Services	Liberty Global Inc- Subsidiaries(3)	United States	Cable
28-Apr-2006	3625	Hankyu Holdings Inc	Japan	Transportation & Infrastructure	Hanshin Electric Railway Co Ltd	Japan	Transportation & Infrastructure
16-Dec-2005	3540	Kao Corp	Japan	Household & Personal Products	Kanebo Cosmetics Inc	Japan	Other Consumer Products
06-Jun-1997	2660	ORIX Corp	Japan	Diversified Financials	Crown Leasing Corp-Domestic Financial Portfolio	Japan	Asset Management
19-Feb-2013	2593	ORIX Corp	Japan	Diversified Financials	Robeco Groep NV	Netherlands	Asset Management
10-Feb-2015	2373	Canon Inc	Japan	Electronics	Axis AB	Sweden	Software
26-Jul-2012	2288	Toyota Tsusho Corp	Japan	Metals & Mining	CFAO SA	France	Automobiles & Components
24-Jul-2001	2127	Furukawa Electric Co Ltd	Japan	Other Industrials	Lucent Technologies Inc- Optical Fibre Solutions Unit	United States	Metals & Mining
13-Sep-2012	1685	Itochu Corp	Japan	Textiles & Apparel	Dole Food Co Inc-Packaged Foods & Fresh Produce Business	United States	Food and Beverage
11-Jun-2008	1592	Daiichi Sankyo Co Ltd	Japan	Pharmaceuticals	Ranbaxy Laboratories Ltd	India	Pharmaceuticals
30-Sep-2011	1558	Sumitomo Mitsui Financial Group Inc	Japan	Banks	Promise Co Ltd	Japan	Credit Institutions
01-Oct-2000	1458	Aiful Corp	Japan	Credit Institutions	Life Co Ltd	Japan	Credit Institutions
19-Dec-2003	1359	Matsushita Electric Industrial Co Ltd	Japan	Electronics	Matsushita Electric Works Ltd	Japan	Other Industrials
22-Nov-2007	1317	Japan Tobacco Inc(JT)	Japan	Tobacco	Katokichi Co Ltd	Japan	Food and Beverage
25-May-2015	1234	Suntory Beverage & Food Ltd	Japan	Food and Beverage	Japan Tobacco Inc-Soft Drink Business	Japan	Food and Beverage
02-Nov-2006	1200	Nomura Holdings Inc	Japan	Other Financials	Instinet Group Inc	United States	Brokerage
08-Apr-2010	1178	Mori Trust Sogo Reit Inc	Japan	REITs	Tokyo Shiodome Building, Minato, Tokyo	Japan	Non Residential
18-May-2006	1152	Daikin Industries Ltd	Japan	Machinery	OYL Industries Bhd	Malaysia	Machinery
13-Feb-2008	1090	Fujifilm Holdings Corp	Japan	Chemicals	Toyama Chemical Co Ltd	Japan	Pharmaceuticals
20-Sep-2007	1047	Mitsubishi UFJ Financial Group Inc	Japan	Banks	Mitsubishi UFJ NICOS Co Ltd	Japan	Credit Institutions
18-Sep-2002	1032	Nissan Motor Co Ltd	Japan	Automobiles & Components	Dongfeng Motor Corp	China (Mainland)	Automobiles & Components
21-Nov-2013	1002	Takashimaya Co Ltd	Japan	Discount and Department Store Retailing	Godo Kaisha Times Square-Times Square Building	Japan	Non Residential
22-Dec-1999	1000	KYOCERA Corp	Japan	Electronics	QUALCOMM Inc-Land-Based Wireless Teleco Operations	United States	Wireless
05-Apr-2006	983	KDDI Corp	Japan	Telecommunications Services	Tokyo Electric Power Co Inc- optical network company	Japan	Other Telecom
16-Nov-2009	952	Canon Inc	Japan	Electronics	Oce NV	Netherlands	Software
28-May-2008	860	ROHM Co Ltd	Japan	Semiconductors	Oki Electric Industry Co Ltd- Semiconductor Department	Japan	Semiconductors
17-Apr-2012	850	TOSHIBA TEC Corp	Japan	Computers & Peripherals	International Business Machine Corp(IBM)-Retail Store Solutions Bus	United States	Computers & Peripherals
25-Feb-1999	835	Mitsubishi Estate Co Ltd	Japan	Real Estate Management	Bank of Tokyo Mitsubishi- Office & Annex Buildings, Tokyo,Japan	Japan	Non Residential

18-Oct-2007	835	Toshiba Corp	Japan	Electronics	Sony Semiconductor Kyushu-Naga saki Tech Center wafe mnfr line	Japan	Semiconductors
27-Mar-2009	818	Mitsubishi Estate Co Ltd	Japan	Real Estate Management	Asahi Mutual Life Insurance Co -Headquarters	Japan	Non Residential
24-Dec-2008	809	Asahi Breweries Ltd	Japan	Food and Beverage	Cadbury Schweppes Australia Ltd	Australia	Food and Beverage
23-Jul-2004	802	Tokyo Electric Power Co Inc(TEPCO)	Japan	Power	PoweredCom Inc	Japan	Internet Software
14-Nov-2011	789	Japan Real Estate Investment Corp	Japan	REITs	Mitsubishi Estate Co Ltd- Akasaka Park Building	Japan	Non Residential
03-Feb-2014	762	Nippon Paint Co Ltd	Japan	Chemicals	Nippon Paint(HK)Co Ltd	Hong Kong	Chemicals
22-Jul-2008	744	Nomura Real Estate Holdings Inc	Japan	Other Real Estate	Toshiba Building Co Ltd	Japan	Other Real Estate
15-Dec-2015	729	Yahoo Japan Corp	Japan	E-commerce / B2B	Ikyu Corp	Japan	Travel Services
16-Mar-2005	726	Toyo Communication Equipment Co Ltd	Japan	Telecommunications Equipment	Seiko Epson Corp-Crystal Business	Japan	Electronics
25-Jan-2007	725	Ricoh Co Ltd	Japan	Other Consumer Products	International Business Machines Corp-Printing Systems Division	United States	Computers & Peripherals
28-Mar-2014	720	Sekisui House Ltd	Japan	Building/Construction	Kokusai Akasaka Building	Japan	Non Residential
13-Nov-2014	691	ORIX Corp	Japan	Diversified Financials	Yayoi Co Ltd	Japan	Software
13-Aug-2012	680	Nippon Steel Corp	Japan	Metals & Mining	BlueScope Steel Ltd-ASEAN Building Products Business	Indonesia	Metals & Mining
04-Nov-2009	658	Toray Industries Inc	Japan	Textiles & Apparel	Tonen Kinomaku	Japan	Chemicals
06-Mar-2009	656	Shinsei Bank Ltd	Japan	Banks	APLUS Co Ltd	Japan	Credit Institutions
26-Oct-2011	650	Heiwa Corp	Japan	Casinos & Gaming	PGM Holdings KK	Japan	Recreation & Leisure
04-Dec-2008	2500	Grupo Bimbo SAB de CV	Mexico	Food and Beverage	Dunedin Holdings SARL-US Bread Making Operations	United States	Food and Beverage
07-Apr-2011	2002	Grupo Televisa SAB	Mexico	Broadcasting	Grupo Iusacell SA de CV	Mexico	Wireless
09-May-2013	1829	Fibra Uno Administracion SA de CV	Mexico	REITs	MRP Group LP-Apollo Portfolio(49)	Mexico	Non Residential
06-Dec-2007	1685	Organizacion Soriana SAB de CV	Mexico	Food and Beverage	Grupo Gigante SA de CV- Supermarkets(206)	Mexico	Food & Beverage Retailing
28-Jan-2015	1668	Organizacion Soriana SAB de CV	Mexico	Other Retailing	Controladora Comercial Mexicana SAB de CV	Mexico	Food & Beverage Retailing
03-Mar-2006	1636	America Movil SA de CV	Mexico	Wireless	Puerto Rico Telephone	Puerto Rico	Telecommunications Services
11-Feb-1999	963	Empresas la Moderna SA de CV	Mexico	Tobacco	Seguros Comercial America (Grupo Pulsar)	Mexico	Insurance
10-Sep-2015	760	Arca Continental SAB de CV	Mexico	Food and Beverage	Corporacion Lindley SA	Peru	Food and Beverage
20-Feb-2012	688	Coca-Cola FEMSA SAB de CV	Mexico	Food and Beverage	Coca-Cola Bottlers Philippines Inc	Philippines	Food and Beverage
01-Aug-2013	666	Grupo Televisa SAB	Mexico	Broadcasting	Tenedora Ares SAPI de CV	Mexico	Other Financials
18-Aug-2014	630	Mexichem SAB de CV	Mexico	Chemicals	Dura-Line Holdings Inc	United States	Building/Construction
10-Sep-2013	627	Alsea SAB de CV	Mexico	Food & Beverage Retailing	Wal-Mart de Mexico SAB de CV- Vips Restaurant Business	Mexico	Food & Beverage Retailing
11-Apr-2005	614	Telefonos de Mexico SAB de CV (Telmex)	Mexico	Other Telecom	Embratel Participacoes SA	Brazil	Telecommunications Services
22-Jan-2002	610	Grupo Bimbo SAB de CV	Mexico	Food and Beverage	George Weston Ltd-US Bakery Plants(5)	United States	Food and Beverage

24-Feb-2009	461	Grupo Carso SAB de CV	Mexico	Discount and Department Store Retailing	Inmobiliaria para el Desarrollo de Proyectos SA de CV	Mexico	Other Real Estate
17-Mar-2000	452	Telefonos de Mexico SAB de CV (Telmex)	Mexico	Other Telecom	Telecomunicaciones de Guatemala SA(Telgua)(Luca SA)	Guatemala	Telecommunications Services
19-Sep-2000	433	Grupo Financiero BBVA Bancomer	Mexico	Banks	Afore Bancomer SA(Grupo Financiero Bancomer SA de CV)	Mexico	Asset Management
30-Oct-2006	427	Fomento Economico Mexicano SA De CV	Mexico	Food and Beverage	Coca-Cola FEMSA SA de CV	Mexico	Food and Beverage
09-Sep-2003	417	America Movil SA de CV	Mexico	Wireless	Estel LLC	El Salvador	Telecommunications Services
12-Jan-1999	400	CEMEX SA DE CV	Mexico	Construction Materials	Apo Cement Corp(JG Summit Holdings Inc)	Philippines	Chemicals
30-Jul-2007	380	Coca-Cola FEMSA SA de CV	Mexico	Food and Beverage	Refrigerantes Minas Gerais Ltda	Brazil	Food and Beverage
08-Aug-2007	325	Grupo Televisa SA de CV	Mexico	Broadcasting	Bestel SA de CV	Mexico	Wireless
01-Aug-1999	319	CEMEX SA DE CV	Mexico	Construction Materials	Assiut Cements Co	Egypt	Construction Materials
14-Dec-2015	303	Fibra Uno Administracion SA de CV	Mexico	REITs	Alaska Office Building Portfolio,Mexico City	Mexico	Non Residential
17-Dec-2010	300	Mexichem SAB de CV	Mexico	Chemicals	Rockwood Holdings Inc- AlphaGary Plastic Compounding Business	United States	Chemicals
24-Mar-2008	281	Empresas ICA SAB de CV	Mexico	Transportation & Infrastructure	Consortio del Mayab SA de CV	Mexico	Transportation & Infrastructure
26-Jan-2006	259	Grupo Financiero Banorte SA de CV	Mexico	Banks	Inter National Bank,McAllen, Texas	United States	Banks
25-Mar-2013	250	Mexichem SAB de CV	Mexico	Chemicals	PolyOne Corp-Vinyl Dispersion, Blending & Suspension Resin Assets	United States	Chemicals
28-Oct-2013	243	Fibra Uno Administracion SA de CV	Mexico	REITs	Industrial Properties(33)	Mexico	Other Real Estate
19-Sep-2000	242	Grupo Financiero BBVA Bancomer	Mexico	Banks	Seguros Bancomer SA (Grupo Financiero Bancomer SA de CV)	Mexico	Insurance
05-Feb-2010	240	Grupo Mexico SAB de CV	Mexico	Metals & Mining	Compania Perforadora Mexico SA de CV(Pemsa)	Mexico	Oil & Gas
18-Dec-2014	235	Grupo Financiero Inbursa SAB de CV	Mexico	Banks	Banco Walmart de Mexico Adelante SA Institucion de Banca Multiple	Mexico	Banks
01-Feb-1999	230	Grupo Televisa SA de CV	Mexico	Broadcasting	Grupo Alameda,S.A de C.V. (Televisi3n)	Mexico	Broadcasting
26-Jun-1997	225	Industrias Penoles SAB de CV	Mexico	Metals & Mining	Centromin Peru-Mineria Metaloroya	Peru	Metals & Mining
23-Oct-2003	207	Telefonos de Mexico SAB de CV (Telmex)	Mexico	Other Telecom	AT&T Latin America Corp-Brasil Argentina,Chile,Colombia,Peru Subsidiaries	Brazil	Telecommunications Services
10-Oct-2011	157	Grupo Bimbo SAB de CV	Mexico	Food and Beverage	Sara Lee Corp-Bakery Division	Spain	Food and Beverage
04-Aug-2014	144	Alsea SAB de CV	Mexico	Food & Beverage Retailing	Grupo Zena SA	Spain	Food & Beverage Retailing
30-May-2012	141	Empresas ICA SAB de CV	Mexico	Transportation & Infrastructure	San Martin Contratistas Generales SA	Peru	Building/Construction
05-Mar-1999	132	Grupo Elektra SA de CV	Mexico	Other Financials	Grupo Salinas y Rocha SA	Mexico	Home Furnishings
25-Nov-2014	3112	Steinhoff International Holdings Ltd	South Africa	Home Furnishings	Pepkor Holdings (Pty) Ltd	South Africa	Apparel Retailing
31-Jan-2011	1653	Steinhoff International Holdings Ltd	South Africa	Home Furnishings	Conforama SA	France	Internet and Catalog Retailing
15-Sep-1997	1313	Sappi Ltd	South Africa	Paper & Forest Products	KNP Leykam Holding SA (Koninklijke KNP BT)	Austria	Paper & Forest Products
23-Oct-2015	1200	Naspers Ltd	South Africa	Cable	Kekh eKommerts OOO	Russia	Advertising & Marketing
12-Dec-2000	1142	Sasol Ltd	South Africa	Petrochemicals	Condea Chemie GmbH (RWE-DEA AG/RWE AG)	Germany	Chemicals

04-Aug-1998	1133	Genbel South Africa Ltd	South Africa	Asset Management	SANLAM Asset Management (Pty) Ltd(SA National Life Assurance)	South Africa	Other Financials
29-Sep-2008	1082	Sappi Ltd	South Africa	Paper & Forest Products	M-real Corp-Coated Graphic Paper Business	Finland	Paper & Forest Products
08-Mar-2011	1063	Sasol Ltd	South Africa	Petrochemicals	Talisman Energy Inc-Cypress A Assets,British Columbia	Canada	Oil & Gas
27-Jun-2013	1000	Aspen Pharmacare Holdings Ltd	South Africa	Pharmaceuticals	NV Organon-Active Pharmaceutical Ingredients Manufacturing	Netherlands	Pharmaceuticals
21-May-1998	931	New Africa Investment Ltd	South Africa	Advertising & Marketing	Theta Group Ltd	South Africa	Other Financials
11-Jul-2012	804	Mondi Ltd	South Africa	Paper & Forest Products	Nordenia International AG	Germany	Containers & Packaging
21-May-2010	803	Aspen Pharmacare Holdings Ltd	South Africa	Pharmaceuticals	Sigma Pharmaceuticals Ltd- Pharmaceutical Division	Australia	Pharmaceuticals
22-Nov-2000	745	Investec Group Ltd (Investec Holdings Ltd)	South Africa	Brokerage	Fedsure Holdings Ltd-Financial Services & Life Businesses	South Africa	Asset Management
26-Aug-2008	660	Simeka Business Solutions Group Ltd	South Africa	IT Consulting & Services	Mint Net(Pty)Ltd	South Africa	IT Consulting & Services
12-Dec-1997	492	New Africa Investment Ltd	South Africa	Advertising & Marketing	Metropolitan Holdings Ltd	South Africa	Insurance
18-Mar-2002	480	Sappi Ltd	South Africa	Paper & Forest Products	Pottlatch Corp-Coated Paper Business	United States	Paper & Forest Products
13-Nov-2003	430	Harmony Gold Mining Co Ltd	South Africa	Metals & Mining	Avgold Ltd	South Africa	Metals & Mining
28-Sep-2009	342	Naspers Ltd	South Africa	Cable	BuscaPe.com Inc	Brazil	E-commerce / B2B
02-Mar-2012	335	AngloGold Ashanti Ltd	South Africa	Metals & Mining	First Uranium(Pty)Ltd	South Africa	Metals & Mining
28-Jan-2015	319	Redefine Properties Ltd	South Africa	REITs	Leaf Property Fund Pty Ltd	South Africa	Asset Management
22-Aug-2013	301	Gold Fields Ltd	South Africa	Metals & Mining	Barrick Gold Corp-Yilgarn South Assets	Australia	Metals & Mining
19-Mar-1999	289	Aspen Healthcare Holdings Ltd	South Africa	Healthcare Equipment	South African Druggists Ltd-Pharmaceutical Business	South Africa	Pharmaceuticals
22-Mar-2007	280	Telkom SA Ltd	South Africa	Telecommunications Services	Multi-Links Telecommunications Ltd	Nigeria	Wireless
06-Mar-2007	273	Exxaro Resources Ltd	South Africa	Metals & Mining	Namakwa Sands(Pty)Ltd	South Africa	Metals & Mining
23-Mar-2000	270	Anglogold Ltd	South Africa	Metals & Mining	Geita Mine(Ashanti Goldfields Co Ltd)	Tanzania	Metals & Mining
11-Feb-1998	259	Metro Cash & Carry Ltd	South Africa	Food and Beverage	Davids Ltd	Australia	Food and Beverage
21-Sep-2001	256	Gold Fields Ltd	South Africa	Metals & Mining	WMC Resources Ltd-St Ives, Agnew Gold Mine Operations	Australia	Metals & Mining
28-Mar-2013	254	Hyprop Investments Ltd	South Africa	REITs	Somerset Mall	South Africa	Non Residential
11-Nov-1997	253	Genbel South Africa Ltd	South Africa	Asset Management	NSA Investments	South Africa	Asset Management
16-Jul-2009	244	AngloGold Ashanti Ltd	South Africa	Metals & Mining	Moto Goldmines Ltd	Australia	Metals & Mining
16-Sep-2010	232	Net 1 UEPS Technologies Inc	South Africa	Computers & Peripherals	KSNET Inc	South Korea	Telecommunications Services
02-Feb-2012	223	Anglo American Platinum Ltd	South Africa	Metals & Mining	Atlatsa Resources Corp- Boikgantsho Project,Ga-Phasha Project	South Africa	Metals & Mining
15-Jan-2015	212	The Foschini Group Ltd	South Africa	Apparel Retailing	Poppy Holdco Ltd	United Kingdom	Apparel Retailing
03-Jun-1998	206	Fedsure Holdings Ltd	South Africa	Asset Management	Norwich Holdings Ltd	South Africa	Insurance
19-Aug-1998	203	Spicer-Mitchell Holdings Ltd	South Africa	Containers & Packaging	TCM Business Systems,TCM Computers,TCM Consulting Services	South Africa	Professional Services

06-Dec-2010	201	Village Main Reef Gold Mining Co Ltd	South Africa	Metals & Mining	Simmer & Jack Mines Ltd-Assets	South Africa	Metals & Mining
13-Dec-2004	198	Growthpoint Properties Ltd	South Africa	REITs	Tresso Trading 199 Pty Ltd- Property Portfolio	South Africa	Other Real Estate
04-Apr-2006	191	Tiger Brands Ltd	South Africa	Food and Beverage	Bromor Foods(Pty)Ltd	South Africa	Food and Beverage
04-Jul-2012	185	Tiger Brands Ltd	South Africa	Food and Beverage	Dangote Flour Mills Plc	Nigeria	Food and Beverage
18-Jun-1998	171	Datatec Ltd	South Africa	IT Consulting & Services	Westcon Group Inc	United States	Computers & Peripherals
15-Jul-2005	169	The Bidvest Group Ltd	South Africa	Other Financials	Deli XL BV	Netherlands	Food & Beverage Retailing
10-Jul-2014	163	The Bidvest Group Ltd	South Africa	Other Financials	DAC Distribuzione Alimentari Convenienze SpA	Italy	Food & Beverage Retailing
27-Mar-2006	157	Sun International Ltd	South Africa	Hotels and Lodging	Real Africa Holdings Ltd	South Africa	Other Financials
20-Nov-2007	152	Aspen Pharmacare Holdings Ltd	South Africa	Pharmaceuticals	Strides Latina	Brazil	Pharmaceuticals
02-Feb-1998	151	Power Technologies(Pty)Ltd	South Africa	Metals & Mining	Voltex-Manufacturing Division	South Africa	Metals & Mining
30-Aug-2011	147	Resilient Property Income Fund Ltd	South Africa	REITs	Boardwalk Shopping Centre	South Africa	Non Residential
05-Apr-2000	132	Anglogold Ltd	South Africa	Metals & Mining	Randgold Resources(Morila)Ltd	Mali	Metals & Mining
19-Dec-2000	129	Harmony Gold Mining Co Ltd	South Africa	Metals & Mining	AngloGold Ltd-Elandsrand, Deelkraal Mines & Other Mining Assets	South Africa	Metals & Mining
03-May-2001	120	Standard Bank Investment Corp Ltd	South Africa	Banks	Jardine Fleming Bank,Hong Kong (Jardine Fleming Bank Ltd)	Hong Kong	Banks
14-Nov-2012	118	Rainbow Chicken Ltd	South Africa	Agriculture & Livestock	Capitau Investment Management Ltd	South Africa	Other Financials
30-Jun-2003	107	Impala Platinum Holdings Ltd	South Africa	Metals & Mining	Zimbabwe Platinum Mines Ltd	Australia	Metals & Mining
29-May-2009	106	Nedbank Group Ltd	South Africa	Banks	Imperial Bank Ltd	South Africa	Credit Institutions
09-Jun-2010	102	Hospitality Property Fund Ltd	South Africa	REITs	Arabella South Africa Holdings (Pty)Ltd-Hotels(2)	South Africa	Hotels and Lodging
21-Aug-2006	7346	Shinhan Financial Group Ltd	South Korea	Other Financials	LG Card Co Ltd	South Korea	Credit Institutions
20-May-1999	5370	Hyundai Electronics Industries Co Ltd	South Korea	Semiconductors	LG Semicon Co Ltd(LG Electronics/LG Group)	South Korea	Semiconductors
29-Jul-2007	4900	Doosan Infracore Co Ltd	South Korea	Machinery	Ingersoll-Rand Co Ltd-Bobcat, Utility Equipment & Attachment Buss	United States	Other Industrials
16-Nov-2010	3477	Hana Financial Group Inc	South Korea	Banks	Korea Exchange Bank	South Korea	Banks
23-Sep-2009	2833	POSCO Co Ltd	South Korea	Metals & Mining	Daewoo International Corp	South Korea	Metals & Mining
19-Jun-2003	2824	Shinhan Financial Group Ltd	South Korea	Other Financials	Chohung Bank	South Korea	Banks
17-Oct-2013	2616	Hyundai Steel Co	South Korea	Metals & Mining	Hyundai Hysco Co Ltd-Cold Rolled Steel Business	South Korea	Metals & Mining
30-Oct-2015	2040	Lotte Chemical Corp	South Korea	Chemicals	Samsung SDI Co Ltd-Chemical Business	South Korea	Chemicals
11-Jan-2005	1828	Doosan Heavy Industries & Construction	South Korea	Other Industrials	Daewoo Heavy Industries & Machinery Ltd	South Korea	Machinery
23-Mar-2011	1516	Samsung Electronics Co Ltd	South Korea	Telecommunications Equipment	Samsung Mobile Display Co Ltd	South Korea	Electronics
22-May-2009	1232	SK Telecom Co Ltd	South Korea	Wireless	SK Networks Co Ltd-Leased Line Business	South Korea	Telecommunications Services
30-Jun-2014	1213	BS Financial Group Inc	South Korea	Other Financials	Kyongnam Bank (DNU>01/AUG/2014 NOW 5C5770)	South Korea	Banks

09-Feb-2010	1159	Lotte Shopping Co Ltd	South Korea	Discount and Department Store Retailing	GS Retail Co Ltd-Mart & Department Store Units	South Korea	Other Retailing
16-Jul-2010	1108	Honam Petrochemical Corp	South Korea	Chemicals	Titan Chemicals Corp Bhd	Malaysia	Chemicals
06-Jul-2012	1095	Lotte Shopping Co Ltd	South Korea	Discount and Department Store Retailing	Hi-mart Co Ltd	South Korea	Computers & Electronics Retailing
22-Dec-1999	962	SK Telecom Co Ltd	South Korea	Wireless	Shinsegi Telecom	South Korea	Telecommunications Services
26-May-2006	911	E1 Corp	South Korea	Oil & Gas	Kukje Corp	South Korea	Textiles & Apparel
22-May-2006	879	Shinsegae Co Ltd	South Korea	Discount and Department Store Retailing	Wal-Mart Stores Inc-South Korean Operations	South Korea	Food & Beverage Retailing
13-Feb-1997	823	Pohang Iron & Steel Co Ltd	South Korea	Metals & Mining	Sammi Steel Co Ltd-Specialty Steel Plants(2)	South Korea	Metals & Mining
23-Jun-2008	734	STX Corp	South Korea	Oil & Gas	Aker Yards ASA	Norway	Automobiles & Components
13-Nov-2002	707	Korea Telecom Freetel Co Ltd {KTF Co}	South Korea	Wireless	Korea Telecom ICOM Co Ltd {KT ICOM}	South Korea	Computers & Peripherals
04-Sep-2007	699	Hanwha Corp	South Korea	Oil & Gas	Korea Life Insurance Co Ltd	South Korea	Insurance
01-Dec-1998	676	Hyundai Motor Co Ltd	South Korea	Automobiles & Components	Kia Motors Corp(Kia Group)	South Korea	Automobiles & Components
31-Jul-2015	652	GS Retail Co Ltd	South Korea	Food & Beverage Retailing	Parnas Hotel Co Ltd	South Korea	Hotels and Lodging
13-Mar-2014	610	Hanjin Shipping Co Ltd	South Korea	Transportation & Infrastructure	Hanjin Shipping Holdings-Shipping Holding& Trademark Business	South Korea	Transportation & Infrastructure
30-May-2008	529	Hyundai Mipo Dockyard Co Ltd	South Korea	Automobiles & Components	CJ Investment & Securities Co Ltd	South Korea	Brokerage
04-Feb-2013	525	Doosan Heavy Industries & Construction	South Korea	Other Industrials	Doosan Engineering & Construction Co Ltd	South Korea	Transportation & Infrastructure
18-Jul-2013	510	Samsung Life Insurance Co Ltd	South Korea	Insurance	Government Of Singapore Investment-London Varsity Gresham	United Kingdom	Non Residential
28-Feb-2014	487	S-Oil Corp	South Korea	Oil & Gas	Korea National Oil Corp-Onsaneup Asset	South Korea	Residential
02-May-2005	476	Hana Bank	South Korea	Banks	Daehan Investment & Securities Co Ltd	South Korea	Asset Management
04-Nov-2013	452	S-1 Corp	South Korea	Professional Services	Samsung Everland Inc-Building management Business	South Korea	Real Estate Management
20-Aug-2007	439	LG Household & Health Care Ltd	South Korea	Other Consumer Products	Coca-Cola Korea Bottling Co Ltd	South Korea	Food and Beverage
04-May-2000	381	Inchon Iron & Steel	South Korea	Metals & Mining	Sammi Steel Co Ltd(Sammi Group)	South Korea	Metals & Mining
09-Feb-2007	380	Hanwha Chemical Corp	South Korea	Chemicals	Kocref CR-REIT 1-Assets	South Korea	Other Real Estate
03-Apr-2006	376	CJ Home Shopping Co Ltd	South Korea	Broadcasting	Dreamcity Broadcasting Co Ltd	South Korea	Broadcasting
19-Sep-2012	368	Halla Climate Control Corp	South Korea	Machinery	Visteon Corp-Climate Control Operations	United States	Automobiles & Components
24-Nov-2009	364	LG Household & Health Care Ltd	South Korea	Other Consumer Products	Face Shop Korea Co Ltd	South Korea	Household & Personal Products
09-May-2014	347	Samsung Life Insurance Co Ltd	South Korea	Insurance	Samsung Asset Management Co Ltd	South Korea	Asset Management
28-Oct-2000	316	Samsung Electronics Co Ltd	South Korea	Telecommunications Equipment	Samsung SDI Co Ltd-Colour Filter Division	South Korea	Telecommunications Equipment
26-Aug-2012	314	Hanwha Corp	South Korea	Oil & Gas	Q-Cells SE-Business Operations	Germany	Semiconductors
17-Jul-2012	310	Samsung Electronics Co Ltd	South Korea	Telecommunications Equipment	CSR PLC-Handset Connectivity & Location Development Operation	United Kingdom	Telecommunications Equipment
03-May-2005	300	Pantech & Curitel Communications Inc	South Korea	Telecommunications Equipment	SK Teletch Co Ltd	South Korea	Telecommunications Equipment

16-Nov-2011	293	GS Engineering & Construction Corp	South Korea	Building/Construction	OHL Medio Ambiente Inima SAU	Spain	Water and Waste Management
23-May-2005	290	POSCO Co Ltd	South Korea	Metals & Mining	Korea Independent Energy Corp	South Korea	Power
20-Jan-2015	290	LG International Corp	South Korea	Other Consumer Products	Pantos Logistics Co Ltd	South Korea	Transportation & Infrastructure
31-Aug-2007	289	Woori Finance Holdings Co Ltd	South Korea	Asset Management	Hanmi Capital Co Ltd	South Korea	Asset Management
22-Jul-2015	287	LS Networks Corp Ltd	South Korea	Textiles & Apparel	G&A Private Equity Fund	South Korea	Other Financials
01-Dec-1998	271	Hyundai Motor Co Ltd	South Korea	Automobiles & Components	Asia Motors Co Inc(Kia Group)	South Korea	Automobiles & Components
08-Jul-2001	72041	Comcast Corp	United States	Cable	AT&T Broadband & Internet Services(AT&T Corp)	United States	Cable
23-Apr-2007	21000	Bank of America Corp	United States	Banks	ABN AMRO North America Holding Co	United States	Banks
26-Jun-2006	16600	Johnson & Johnson	United States	Pharmaceuticals	Pfizer Consumer Healthcare	United States	Pharmaceuticals
08-Mar-2010	15544	MetLife Inc	United States	Insurance	American Life Insurance Co Inc	United States	Insurance
11-Mar-2007	14433	Schering Plough Corp	United States	Pharmaceuticals	Organon Biosciences(OBS)	Netherlands	Pharmaceuticals
25-Feb-2010	12541	Coca-Cola Co	United States	Food and Beverage	Coca-Cola Enterprises Inc- North American Business	United States	Food and Beverage
31-Jan-2005	11695	MetLife Inc	United States	Insurance	Travelers Life & Annuity Co	United States	Insurance
27-May-2013	11648	Valeant Pharmaceuticals International Inc	United States	Pharmaceuticals	Bausch & Lomb Inc	United States	Healthcare Equipment
05-Feb-2015	10500	Frontier Communications Corp	United States	Telecommunications Services	Verizon Communications Inc-Wireline Operations	United States	Telecommunications Services
10-May-2011	9124	Microsoft Corp	United States	Software	Skype Global Sarl	Luxembourg	Software
16-Jun-2011	8876	Capital One Financial Corp	United States	Banks	ING Direct USA	United States	Other Financials
02-Oct-2005	8608	NRG Energy Inc	United States	Power	Texas Genco Holdings Inc	United States	Power
13-May-2009	8583	Frontier Communications Corp	United States	Telecommunications Services	Verizon Communications Inc- Local Wireline Operations	United States	Telecommunications Services
18-May-2015	8036	Endo International PLC	United States	Pharmaceuticals	Par Pharmaceutical Holdings Inc	United States	Pharmaceuticals
08-Sep-2008	7938	ConocoPhillips Co	United States	Oil & Gas	Origin Energy Ltd-Coal Seam Gas Assets	Australia	Oil & Gas
07-Jun-2001	7800	Bristol-Myers Squibb Co	United States	Pharmaceuticals	DuPont Pharmaceuticals Co(EI du Pont de Nemours and Co)	United States	Pharmaceuticals
03-Jul-2007	7214	Kraft Foods Inc	United States	Food and Beverage	Groupe Danone SA-Biscuit & Cereal Products Division	France	Food and Beverage
15-Jul-2003	7100	Citigroup Inc	United States	Banks	Sears Roebuck & Co-Credit Card & Financial Products Business	United States	Credit Institutions
15-Mar-2000	7000	Phillips Petroleum Co Inc	United States	Oil & Gas	Atlantic Richfield Co(ARCO)- Alaskan Crude Oil Assets	United States	Oil & Gas
15-Dec-2000	6900	Abbott Laboratories	United States	Pharmaceuticals	Knoll AG(BASF AG)	Germany	Pharmaceuticals
04-May-1999	6784	Comcast Corp	United States	Cable	AT&T Corp-Cable Systems	United States	Cable
12-May-2007	6628	Mylan Laboratories Inc	United States	Pharmaceuticals	Merck KGaA- Generic Drugs Business	Germany	Pharmaceuticals
26-Jan-1999	6566	General Electric Capital Corp	United States	Credit Institutions	Japan Leasing Corp	Japan	Credit Institutions
28-Jul-2015	6556	Honeywell International Inc	United States	Automobiles & Components	Elster Group GmbH	Germany	Other Industrials

01-Mar-2011	6505	PPL Corp	United States	Power	Central Networks PLC	United Kingdom	Power
28-Jan-1999	6450	Ford Motor Co	United States	Automobiles & Components	Volvo AB-Worldwide Passenger Vehicle Business	Sweden	Automobiles & Components
13-Dec-2010	6080	HCP Inc	United States	REITs	HCR ManorCare Inc-Real Estate Assets	United States	Healthcare Providers
17-Mar-2008	6000	International Paper Co	United States	Paper & Forest Products	Weyerhaeuser Co-Containerboard Packaging & Recycling Business	United States	Paper & Forest Products
20-Nov-2013	6000	Devon Energy Corp	United States	Oil & Gas	GeoSouthern Energy Corp-Eagle Ford Oil & Gas Assets	United States	Oil & Gas
14-Jul-2014	5725	Mylan Inc	United States	Other Consumer Products	Abbott Laboratories-Non US Markets Specialty & Branded Generics	Netherlands	Pharmaceuticals
03-Feb-2015	5708	The JM Smucker Co	United States	Food and Beverage	Big Heart Pet Brands Corp	United States	Other Consumer Products
22-Apr-2014	5400	Eli Lilly & Co	United States	Pharmaceuticals	Novartis AG-Animal Health Division	Switzerland	Pharmaceuticals
17-Oct-1997	5275	USA Networks Inc	United States	Broadcasting	Universal Studios Inc- Television Assets(Seagram Ltd)	United States	Motion Pictures / Audio Visual
26-Oct-2015	5267	Intercontinental Exchange Inc	United States	Brokerage	Interactive Data Corp	United States	Internet Software
05-Feb-2015	5053	American Tower Corp	United States	Wireless	Verizon Communications Inc-Wireless Communication Towers	United States	Telecommunications Services
15-Mar-2012	5000	Cisco Systems Inc	United States	Computers & Peripherals	NDS Group Ltd	United Kingdom	Internet Software
08-Dec-1998	5000	AT&T Corp	United States	Telecommunications Services	IBM Corp-Global Network Operations	United States	Internet Software
03-Sep-2013	4992	Microsoft Corp	United States	Software	Nokia Oyj-Devices & Services Business	Finland	Telecommunications Equipment
21-May-2001	4950	Procter & Gamble Co	United States	Household & Personal Products	Bristol-Myers Squibb Co- Clairol Division	United States	Other Consumer Products
30-Aug-2012	4900	The Carlyle Group LP	United States	Alternative Financial Investments	Dupont Performance Coatings Inc	United States	Chemicals
15-Jan-2007	4812	General Electric Co	United States	Industrial Conglomerates	Smiths Aerospace Ltd	United Kingdom	Aerospace & Defense
16-May-1997	4750	US WEST Communications Inc	United States	Other Telecom	US WEST Media Group-US WEST Dex Business	United States	Publishing
13-Nov-2014	4700	Berkshire Hathaway Inc	United States	Industrial Conglomerates	Duracell International Inc	United States	Other Energy & Power
31-May-2000	4649	Lucent Technologies Inc	United States	Telecommunications Services	Chromatis Networks	United States	Software
01-Oct-2014	4623	Enterprise Products Partners LP	United States	Oil & Gas	Oiltanking Partners LP	United States	Oil & Gas
08-Jan-2006	4600	Abbott Laboratories	United States	Pharmaceuticals	Boston Scientific Co-Guidant Intervention & Endovascular Business	United States	Healthcare Equipment
18-Dec-1997	4571	Citicorp	United States	Banks	AT&T Universal Card Services (AT&T Corp)	United States	Credit Institutions
18-Mar-2003	4530	Procter & Gamble Co	United States	Household & Personal Products	Wella AG	Germany	Other Consumer Products
25-Dec-2007	4500	Berkshire Hathaway Inc	United States	Industrial Conglomerates	Marmon Holdings Inc	United States	Other Industrials
21-Dec-2012	4300	General Electric Co	United States	Industrial Conglomerates	Avio SpA-Aviation Business	Italy	Aerospace & Defense