

Flying the nest: an analysis of Kiwi firms delisting from the NZX

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Abstract

Recent commentary has suggested an increasing trend in delistings from the NZX, driven by offshore takeovers. However, some of that commentary has been driven by anecdotal evidence. In order to shed light on this discussion, we examine the extent and nature of delisting activity over the past 15 years. Our results indicate no increase in offshore takeovers, with well under half of the delistings in the sample period the result of foreign takeovers.

JEL Classification: G32; G30

Keywords: NZX; New Zealand stock market; delistings; listings

Executive Summary

Recent commentary has suggested an increasing trend in delistings from the NZX, particularly following a change in ownership to a single offshore owner. However, some of that commentary has been driven by anecdotal evidence with little data available on the extent of that delisting activity and on whether or not those patterns have changed recently.

This study seeks to fill that gap by analysing the delistings from the NZSX between 1993 and 2007. The dataset constructed for this paper, using information from the NZX Fact Books, the DeListed website, the Companies office website and the NZX Deep Archive database, records the companies that have delisted from the NZSX, the reasons cited for their delisting, and the size of companies that delist.

Examination of this dataset shows that less than half of the delistings are as a result of a takeover by an offshore company. Nor has there been an increase in takeovers over our sample period. When the capitalisation of delisting companies is taken into account, the majority of companies delisting are small (i.e. they comprise less than one percent of the total capitalisation of the board). When we decompose the reason for delisting by the size of firm delisting, we see that smaller firms dominate most categories, but less so for foreign takeovers. This suggests that foreign companies tend to take over larger companies on average than do local New Zealand companies.

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Flying the nest: an analysis of Kiwi firms delisting from the NZX

1. Introduction

Capital markets perform a variety of functions and play an important role in a country's economy. Together with other agencies, the Ministry of Economic Development is undertaking work to better understand New Zealand's capital markets and their development potential. Earlier work includes a high-level assessment of New Zealand's capital markets and their importance for the economy, as well as wide-ranging discussions on these issues with stakeholders.¹ This paper continues that work by investigating the reasons why firms have delisted from the New Zealand Stock Exchange (NZSX)², over the past 15 years. The private sector - public sector Capital Market Development Taskforce is also working to analyse the current state of our capital markets and recommend changes to improve them.³

Stock exchanges are an important and highly visible part of capital markets. They allow firms to raise equity and investors to trade their interests in companies in an open market. However, not all firms will choose to list on an exchange. Equally, when firms do want to publicly list, they often have the choice as to whether they list on local or offshore exchanges.

¹ MED (2007), Cameron et al (2007).

² The NZX operates in three securities markets – the New Zealand Stock Exchange (NZSX), New Zealand Alternative Exchange (NZAX) and the New Zealand Debt Exchange (NZDX). In this analysis we focus on the NZSX, but also examine delisting frequencies from the NZAX.

³ Information on the taskforce is available at:

http://www.med.govt.nz/templates/ContentTopicSummary___37568.aspx

There have been some concerns from commentators in recent years regarding the number of firms that have chosen to delist from the NZSE, particularly following a change in ownership to a single offshore owner. However, there has been little data available on the extent of that delisting activity and on whether or not the patterns have changed recently. This study seeks to fill that gap. The study does not investigate in detail listing activity, capital raising activity on the exchange, or the overall viability of a national stock exchange in New Zealand.

Our results indicate no increase in offshore takeovers, with well under half of the delistings in the sample period the result of foreign takeovers. The paper summarises some of the concerns expressed by commentators in the context section and section 3 contains a brief review of the literature on delisting activity. Section 4 describes our dataset and methodology and section 5 contains the analysis. Brief conclusions are provided in section 6.

2. Context

A number of commentators have expressed concern at what they see as a trend in companies removing their listing from the NZX (Bennett, 2006 and O'Sullivan, 2007). Often this has been linked to changes in ownership, with offshore owners seen as taking companies offshore – particularly to Australia (New Zealand Herald, 2006). These concerns have been exacerbated by the small size of our listed market relative to that in other countries (Cameron, et al., 2007), and by a concern that there have been few new listings onto the exchange (Louisson, 2007). Given the large current account deficit in New Zealand and the associated need for foreign direct investment, the offshore delisting activity would not be surprising.⁴ However, implicit or explicit in such commentaries is often a view that this delisting activity is detrimental to our economic growth prospects, or is symptomatic of underlying problems.

Concerns about the ability of the NZX to attract and retain listings are not new (James, 1999). Similarly, concerns along these lines are also expressed in other

⁴ The September 2008 current account deficit for New Zealand was at 8.6% of GDP. The last year in which New Zealand had a current account surplus was 1973.

countries (e.g. Lew and Ramsey, 2007, in Australia and, Martin and Nixon, 2007, in Canada). Section 3 discusses some of these in more detail.

In many cases, the concerns appear to be driven by a series of anecdotes. The contribution of this study is to document what has actually happened to listed New Zealand companies over the past 15 years. We provide information on the number and relative size of companies delisting from the NZSX, as well as on the reasons for delisting. In doing so we are not seeking to make a judgement as to whether the extent of delistings is of concern – but to understand and document what has happened.

It is also important to note that the study only deals with listed markets. Companies not listed on the stock exchange are also subject to merger and acquisition activity – including from offshore investors. However, there is no comprehensive publicly available database that we can draw on to monitor the private market. The advantage of studying the listed market is that we can be certain we are capturing it completely. The disadvantage is that it only captures a portion of New Zealand's companies.

3. The literature on delistings

The literature that is directly comparable to our study is very limited. Lew and Ramsay (2007) is the only study to our knowledge that is similar. They conduct an analysis of the Australian economy using 30 years of delisting data from 1975-2004. In their study they consider the extent of delistings relative to the total number of Australian Securities Exchange (ASX) board listings, the length of time delisting companies have been listed for, and the industry of the delisted companies. Their findings show that the extent of delistings is equivalent to the ASX being turned over at least once every 10 years, when name changes and capitalisation changes are included as delistings. This rate of turnover significantly reduces when name changes and capitalisation changes are excluded from the sample. They also find that companies tend to delist by their tenth year of listing irrespective of the reason for delisting and that the three industries that accounted for the majority of delistings are: banks, investment and financial; miscellaneous industrial; and resources.

The motivation behind the Lew and Ramsay study reflects a growing interest in delisting activity by academics in response to increased investor protection regulation such as the Sarbanes-Oxley Act enacted in the United States in 2002.⁵ Some of the research in this area examines the impact of these regulations on the frequency of delistings (Engel *et al.*, 2004; Austin and Dickins, 2007; and Hansen, Pownell and Wang, 2008); the frequency of delisting by reason for delisting (Thomsen and Vinten, 2007); while others examine changes in the competitiveness of exchanges in the United States relative to those in other countries (Doidge, Karolyi and Stulz, 2007).

Other studies focus more on specific influences on individual firms that result in different reasons for delisting. For example, Sorensen (2000), Palepu (1986) and Barnes (2000) are among the studies that examine the characteristics of merging firms and the prediction of takeover targets. Altman (1968) is the seminal paper in the area of bankruptcy determination models while Renneboog and Simons (2005) outline some of the firm specific characteristics that are likely to influence publicly listed firms to decide to go private.

The decision to delist is thought to be influenced by factors such as investor protection and corporate governance requirements, as well as firm specific factors (Thomsen and Vinten, 2007). La Porta *et al.*, (1997) show that countries with poor investor protection have smaller and narrower capital markets than countries with higher levels of investor protection. While this affects the absolute number of listings or delistings between countries, it would not explain delisting frequencies over time (Thomsen and Vinten, 2007). Firm specific characteristics cover agency issues (Jensen 1986), tax benefits (Kaplan 1989), managerial inefficiency (Palepu, 1986), firm size (Dietrich and Sorensen, 1984), undervaluation (Cudd and Duggal, 2000; Palepu, 1986), and liquidity and profitability ratios (Altman, 1993), among other factors.

Another strand of the literature analyses the impact of delisting activity on the firms themselves in terms of the value of the stock and the liquidity of shares. In particular, a distinction is made in the analysis between firms that voluntarily delist and privatise,

⁵ Pagano and Volpin (2006) document a general increase in the level of minority investor protection internationally.

deregister⁶, or merge or liquidate themselves, versus those that are involuntarily delisted by the exchange for failure to comply with listing rules.⁷ Most of the papers in this area focus on those firms which delist from the main exchanges in the United States but go on to trade on the Over-The-Counter (OTC) Bulletin Board and Pink Sheets which have reduced disclosure requirements. Studies such as Angel *et al.* (2004), Sanger and Paterson (1990), and Macey *et al.*, (2004) find that stocks *involuntarily* delisted generally reduce in liquidity and in value, with the reason for delisting affecting the extent of the market response. Not surprisingly, the reduction in value for involuntarily delisted firms is greater in magnitude than the reduction for firms that voluntarily deregistered (Angel *et al.*, 2004).

Studies such as Leuz, Triantis and Wang (2004) examine the economic impacts on firms that voluntarily delist. They distinguish between those firms which actively choose to privatise and those which deregister. They find that there is a negative market adjusted return associated with firms that deregister while there is a positive market adjusted return for those firms that go private.

In relation to our analysis, the impact delistings have on liquidity at the market or exchange level is of greater interest since studies such as Levine and Zervos (1996) find that liquidity measured as turnover (value traded relative to the size of the market) and value traded (value traded relative to the size of the economy) are significant for economic growth. While it is likely that liquidity measured as volume of transactions in an exchange will reduce with firms delisting, any impact on turnover and value traded is dependent on the size and output of the companies that delist. In addition, the overall level of exchange activity will be determined by new listing activity and by the growth in the value of stocks that remain listed, as well as by any delistings.

⁶ To privatise a firm, the shares of existing shareholders are purchased for cash (or other agreed upon forms of payment) to ensure that the shareholder base has decreased sufficiently to enable a company to elect to terminate its public company status. In contrast, in the United States when a company deregisters (popularly referred to as the company 'going dark'), the firm files with the Securities and Exchange Commission, that based on the small number of shareholders and other eligibility criteria, the company can suspend its obligation to make public filings. In both instances the company chooses its course of action and the delisting is thus voluntary.

⁷ Macey *et al.*, (2004) outline the fundamental objectives of delisting rules.

4. Data

4.1. Dataset

In this study, we exploit a dataset constructed of all companies that have delisted from the NZSX over a 15 year period (1993 to 2007). The data are obtained, and verified where possible, from the Fact Books published by the NZX from 1991 to 2003, the DeListed website⁸, the Companies Office website⁹, the NZX Deep Archive database, and supplemented directly by the NZX where necessary. The dataset records the companies that have delisted from the NZSX, the reasons cited for their delisting, and the size of the companies that delist.

4.2. Capitalisation

For this study we measure firm size in terms of full market capitalisation. The full market capitalisation methodology takes into account all the shares outstanding, including locked-in shares such as those held by any majority shareholder. To make comparisons over the 15 year period, we standardise the market capitalisation of each company delisting relative to the total market capitalisation of the board in the year prior to its delisting. We refer to this standardised measure as the 'weight' of the company delisting.

Since the value of a company is sensitive to information relating to a potential delisting, the capitalisation of the company at the end of December in the year prior to its delisting is used. While this method does not always fully insulate the measure of capitalisation from being affected by the coming delisting, it mitigates the impact. We evaluate the results in light of this possibility.

In an extension to the study, we also examine delistings from the New Zealand Alternative Exchange (NZAX). Since limited data relating to the size of the firms delisting relative to the size of the exchange were available for this alternative market, we exclude capitalisation data from this part of the analysis.

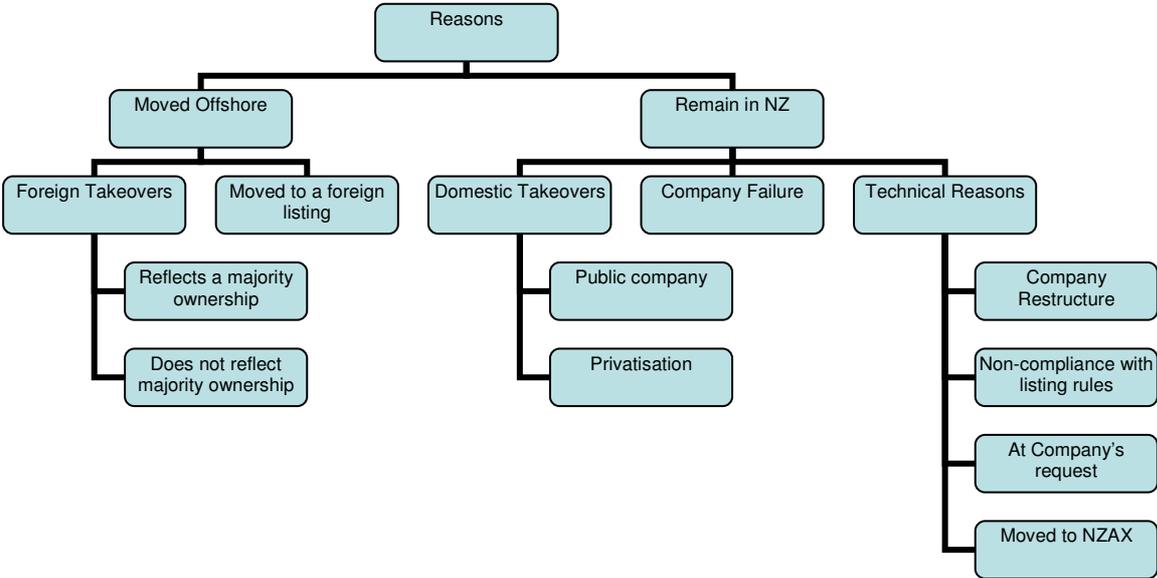
⁸ Available at: www.delisted.com.au

⁹ Available at: <http://www.companies.govt.nz/cms>

4.3. Reasons for delisting

For our analysis we separate the reasons companies delisted into two broad categories: those that delist and move offshore and those that delist but remain in New Zealand. These two groups are defined further to assist our understanding of the reasons for delisting. Figure 1 below depicts the relationship diagrammatically.

Figure 1: Reasons for delisting



The companies that move offshore are either taken over by foreign companies or move their listing offshore without a substantive change in ownership. Some of the reasons companies may move their listing offshore include tax consequences for an offshore shareholder base from the new listing, cost of capital arbitrage, growth opportunities, and the preferences of individual company’s CEOs.

The companies that are taken over by foreign firms either remain listed (on a foreign exchange) if they are taken over by foreign public companies, or they become private. Since our interest in this study is in the movement from the NZX, whether the firm taken over remains listed on an offshore exchange or is privatised, is not investigated. For this reason most of our focus on foreign takeovers is on the aggregate division. However, in some instances the offshore takeovers involve the existing foreign

majority owner buying out minority shareholders. We note this categorisation since a takeover of this form to some extent formalises an existing situation in terms of effective control. While resource limitations prevented us from categorically determining if the takeover reflects formalisation of a majority interest, we record those instances of consolidation of interests where it was publicly acknowledged.

For the domestic delistings from the NZX, we analyse takeovers which result in the firms being privatised as well as takeovers by public New Zealand companies which result in continued listings. The essential difference between these two sub-groups of domestic takeovers is the liquidity consequences for the NZX. The other categories of reasons why companies delist but remain in New Zealand are company failure or technical reasons, as depicted in Figure 1.

While the groupings of the reasons why companies delist from the NZSX facilitate the analysis in our study, the groupings are largely arbitrary, with different logical groupings possible. In some cases, the reasons companies delist do not fit clearly into our defined categories and judgment is required to categorise the delisting. Ultimately, this reflects the unique nature of each delisting.

4.4. Definition of the term 'delisting'

In keeping with Lew and Ramsay (2007), we distinguish between delistings of substance and technical delistings. They suggest that companies that undergo changes in capitalisation or name changes constitute technical delistings. While these events may reflect significant change within the company, they could equally reflect benign corporate actions. They thus examine a dataset that includes name changes and capitalisation changes, as well as one that does not consider these changes as delistings. To analyse trends in the delistings from the NZX we exclude technical delistings due to name and capitalisation changes from our study and instead treat companies which have changed name as a single company.¹⁰

¹⁰ In our dataset when name changes are included as delistings, the number of companies delisting over the 15 year period increases by 79%, with 100 name changes being considered as additional delistings.

In practical terms, the delistings in our sample are those companies, trusts or funds whose ordinary shares or units are removed from having a primary or dual listing on the NZSX.¹¹ The exception is NZX index funds which track the securities listed on the exchange and are thus excluded from the analysis. Companies that are listed on the NZSX as an Overseas Listing (where the full listing is on an overseas exchange) are also excluded from this dataset.¹² Similarly, companies that shift securities to an overseas listing are recorded as having delisted.¹³ These definitions also apply to those companies delisting from the NZAX.

5. Analysis

5.1. International Comparison

We begin our analysis by comparing New Zealand with a number of other countries to determine whether New Zealand is unique in terms of delisting activity. Table 1 sets out basic population and recent economic trends of a number of other small, developed economies we use as comparators.

Table 1: Background information on comparison countries

Country	Population - millions (2007)	2007 GDP (USD millions)	GDP per capita 2007 (USD)	GDP per capita 2007 (International dollar, PPP)	Average annual growth real GDP (1992-2007)
Australia	20.98*	908,826	43,312*	36,258*	3.65%
Denmark	5.45*	311,905	57,260*	37,391*	2.30%
Finland	5.26*	245,013	46,601*	35,279*	3.04%

¹¹ A primary listing refers to a security solely listed on the NZSX Market. The companies in this category abide with the listing rules of the NZX. A dual listing refers to companies that have full listings on the NZSX Market as well as an overseas exchange. Like the primary listing category, companies with a dual listing abide by the listing rules of the NZX. In addition, these companies also abide by the rules of the other stock exchange they are listed on.

¹² It is estimated that 151 companies that were listed on the NZSX as overseas securities between 1993 and 2007.

¹³ Guinness Peat Group plc which listed as an NZSX quoted overseas security in 1993 is one such example.

Ireland	4.32*	258,574*	59,924*	43,143*	6.71%*
New Zealand	4.24*	128,141*	30,255*	26,378*	3.35%*
Norway	4.67*	391,498	83,922*	53,036*	3.20%
Singapore	4.59*	161,349	35,162*	49,713*	6.70%
Sweden	9.17*	455,319	49,654*	36,494*	2.61%
Switzerland	7.30*	423,938	58,083*	41,128*	1.52%

Source: International Monetary Fund, World Economic Outlook Database, April 2008.

* Indicates IMF estimates.

In terms of New Zealand's financial markets, data from the World Federation of Exchanges (WFE) indicate that of the sample of countries considered, New Zealand has one of the smallest equity markets when measured as domestic market capitalisation relative to nominal GDP. The comparisons in this section draw on WFE data. In Table 2 we present the number of listed companies on each exchange at five year intervals.

Table 2: Number of listed companies

Countries	1992	1997	2002	2007
Australia	1073	1219	1421	1998
Denmark	219	249	201	*
Finland	62	126	149	*
Ireland	**	102	76	73
New Zealand	167	180	196	178
Norway	123	217	203	248
Singapore	195	334	501	762
Sweden	205	261	297	*
Switzerland	470	428	398	341

Source: World Federation of Exchanges

* Since Denmark, Finland and Sweden consolidated with the OMX Exchanges from 2003 onwards, data after this year are not available for those countries

** The WFE data on Ireland begin from 1995 onwards.

The data show that New Zealand is not unusually small in terms of the number of listed companies on the stock exchange. However, there is wide variation across countries in how the number of listed companies has changed through time – there has been substantial growth in Australia, Singapore and to a lesser extent in Norway; falling numbers in Ireland and Switzerland; and little change in New Zealand.

The WFE data on delistings is limited and available for fewer of the comparable countries. Denmark, Finland and Sweden are removed from this analysis because of the lack of data following the merger of their exchanges into the OMX. Given the short time series of data, it is important not to over-interpret the results.

Table 3 below presents the number of firms delisting across the different countries for 2002 and 2007, as well as the market capitalisation of delistings relative to the total market capitalisation of the exchanges for these years.

Table 3: Delistings in terms of numbers and value

Country	Number of domestic companies delisted from the stock exchange		Market capitalisation of domestic companies delisting relative to the total market capitalisation of the exchange	
	2002	2007	2002	2007
Australia	66	93	*	6%
Ireland	6	4	8%	0%
New Zealand	12	7	5%	7%
Norway	12	18	6%	3%
Singapore	18	10	4%	1%
Switzerland	7	*	0%	*

Source: World Federation of Exchanges, Annual Statistics

* Data not available

The data indicate that New Zealand is at the upper end in terms of the percentage (by capitalisation) that delist – but not markedly so. Increases in private equity activity globally and the availability of abundant and cheap liquidity in credit markets will have influenced the value and frequency of delistings over the period from 2002 to 2007. As such, these figures are representative only of the period covered.

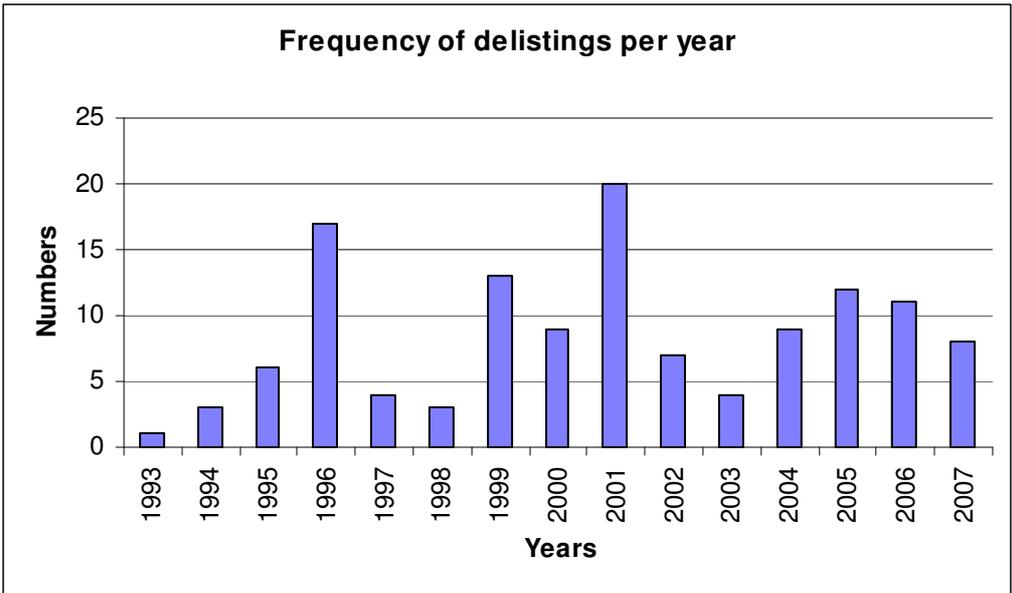
5.2. Delistings in New Zealand

In this study we primarily examine the data in terms of the number of companies (or the extent of) delisting, and the reasons for (or nature of) delisting. We incorporate the size of the companies that delist into both strands of analysis. Our data on delistings differ somewhat from the WFE data examined above.

5.2.1. The Extent of Delistings

Figure 2 below shows the number of companies that have delisted from the exchange each year from 1993 to 2007. Over the 15 year period this amounts to 127 companies. There is no obvious trend in the number of delistings, although the number of firms delisting has varied through time.¹⁴ Since 2004 the variation has decreased and the number of companies delisting has been relatively consistent at between 7 and 12 delistings per year.

Figure 2: Number of delistings in New Zealand



¹⁴ Given the number of listed companies has remained relatively constant over the sample period, trends in the proportion of companies delisting are similar to the trends in the number of delistings.

Lew and Ramsay (2007) in their study of Australian delistings find that 46 percent of the ASX board turned over between 1995 and 2004, with turnover being defined as the total number of firms delisting in a period as a percentage of the average number of listed companies on the board over that period. Examining the same time period in New Zealand with comparable definitions of delisting, we find that the turnover in New Zealand is higher at 69 percent.¹⁵ Given the rapid growth in the number of listed companies in Australia, it is likely that the lower Australian turnover is at least in part due to increased new listings boosting the average number of companies listed.

In Figure 3 we present the total inflation adjusted market capitalisation of delisted firms over the 15 year period. The table shows that there has been considerable volatility in the total value of firms delisting per year, with clusters of higher activity around 1998-2002 and 2004-2007. The high figure for 1996 is dominated by the delisting of Fletcher Challenge Limited, which accounted for 10.62 percent of the size of the NZSX in that year.¹⁶ More importantly, the data suggest that in real terms the value of delistings has decreased in 2004-2007 relative to the earlier cluster.

In Figure 4 we examine the sum of the weight of companies delisting per year. Here the weight of a company delisting refers to the ratio of full market capitalisation of the company in the year prior to its delisting, to total market capitalisation of the exchange in that year¹⁷. This ratio is inflation adjusted as well as standardised by the size of the board through time, therefore allowing time-series comparisons. The graph suggests that the recent hump in delisting is less than previous ones, both in terms of numbers and of the weight of the board being delisted.

¹⁵ An additional result of Lew and Ramsay (2007) is that there is 175% turnover of the ASX Board between 1995 and 2004 when name changes and capitalisation changes are included as delistings. While our data prevents us from accounting for delistings in terms of capitalisation changes and so limits the comparison, when name changes are included as delistings over the ten year period for New Zealand the turnover on the NZX Board was 120%.

¹⁶ The market capitalisation of Fletcher Challenge is the largest in the delisting dataset followed by Fletcher Challenge Ltd Energy which accounted for 7.13% of the board when it delisted. Figure 5 provides a more comprehensive picture of the size of individual firms that delisted over the period.

¹⁷ Refer to Section 4 for further information on this measure.

Figure 3: Total value of delistings

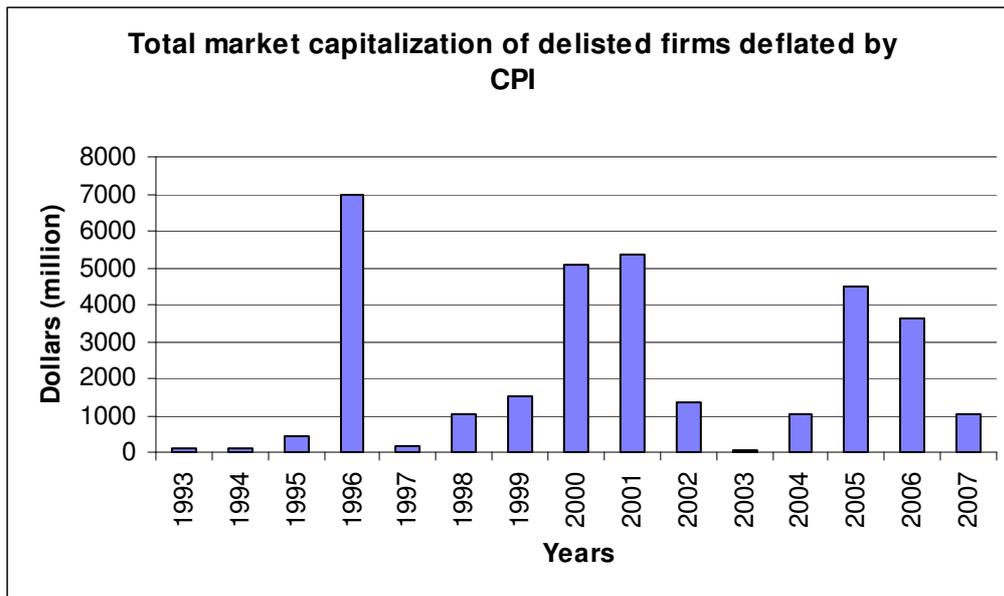
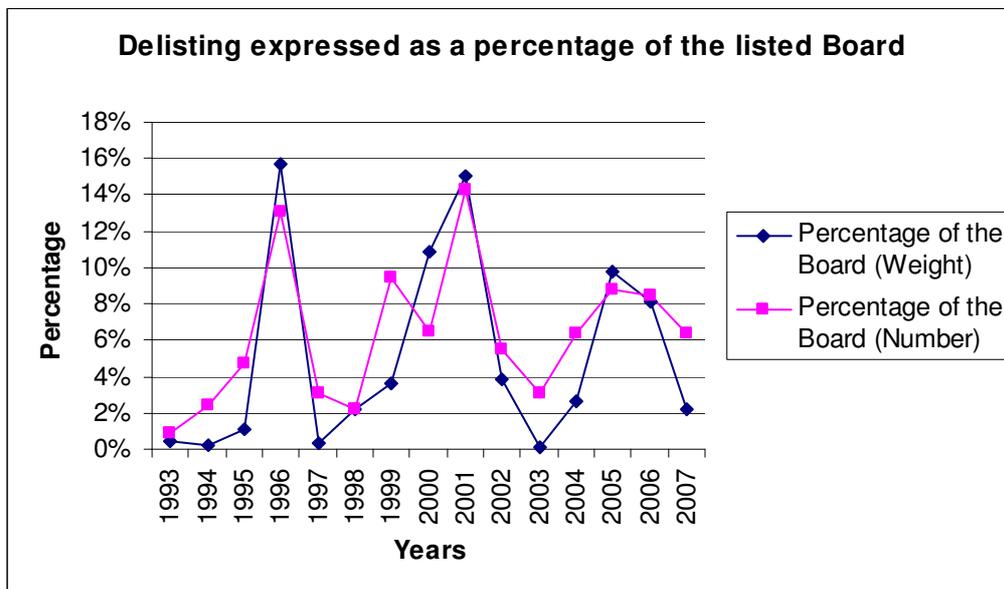


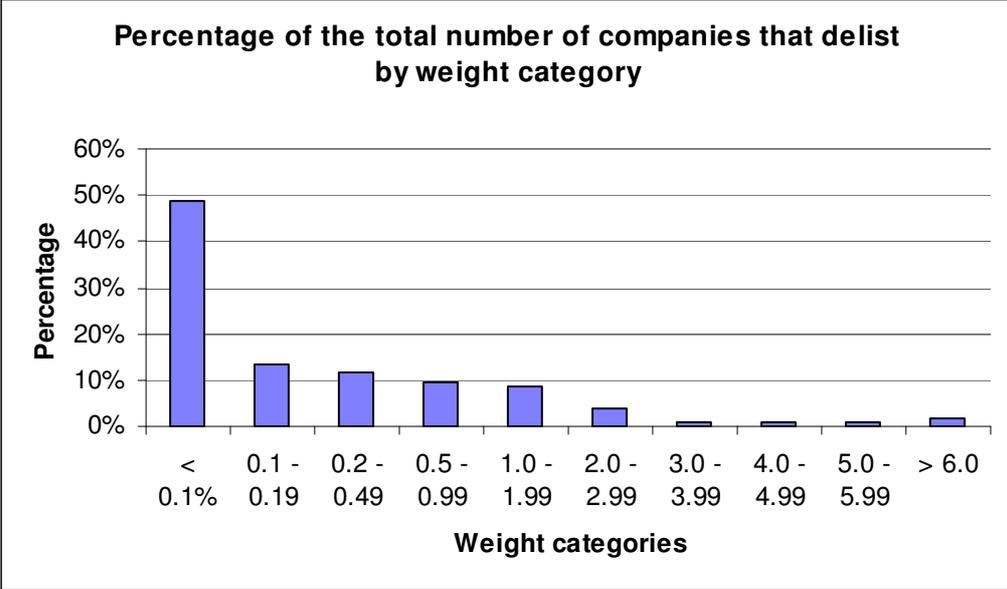
Figure 4: Delistings as a percentage of the board



To get a better understanding of the size of the firms that delist, we define weight categories that companies fall into, and count the frequency of delistings over the 15 years that fall into each category. In the graph below the frequencies are expressed as percentages of the total number of firms delisted in the 15 year period. Here the weight categories represent the percentage of the board that the delisting firm accounted for, and we determine the number of delisting firms that belong to each

category. Figure 5 shows that the largest percentage of firms delisting over the 15 year period are less than 0.1 percent of the size of the board and that nearly 80 percent of delisting companies have a capitalisation of less than one percent of the total board. In the following section we consider whether the size of companies delisting is associated at all with the reason for delisting.

Figure 5: Sizes of the individual companies delisting



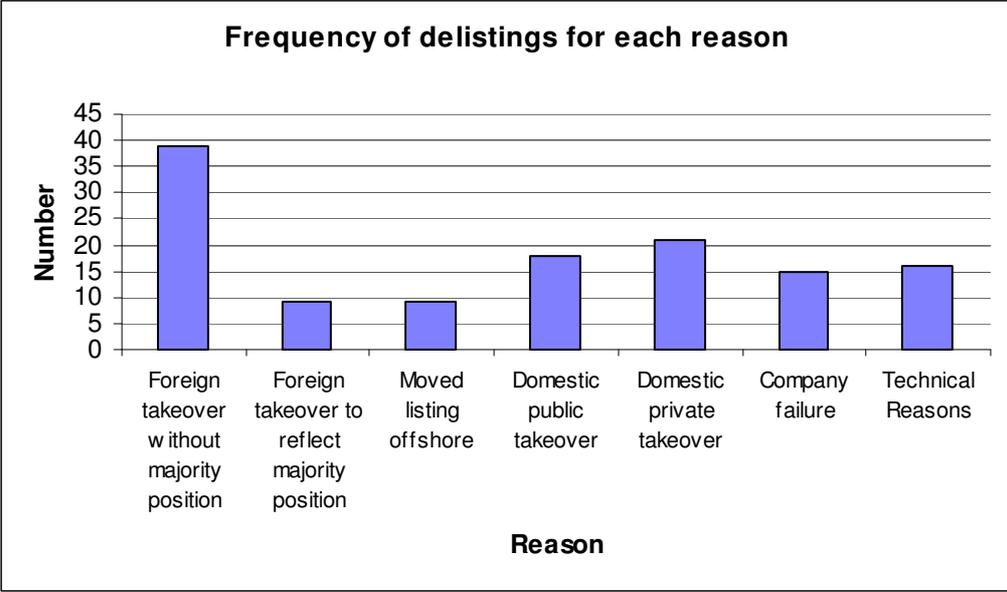
5.2.2. The Nature of Delistings

Since commentary in New Zealand has suggested that there has been increasing foreign takeover activity in New Zealand over recent years and that some of the largest companies are delisting due to this takeover activity, we analyse the data in relation to these questions.

Figure 6 shows the total number of delistings over the 15 year period that can be attributed to each reason. Over the last 15 years, the most significant reason for delisting was foreign takeovers, accounting for 38 percent of the total number of delistings. Within this category, takeovers are predominantly by acquirers who do not have a majority interest in the company being acquired. Over this period, takeover activity in total (foreign as well as domestic) accounted for 69 percent of the total number of delistings. Given the private equity boom globally between 2002 and 2006 and the availability of abundant debt in liquidity markets (Acharya *et al*, 2007), the

high level of cumulative takeover activity in New Zealand is unsurprising. In particular, the high level of domestic private takeovers could reflect a premium to privatisation; privatisation enabling greater leverage and higher valuations of firms due to cheap liquidity.

Figure 6: Frequency of delistings by reason

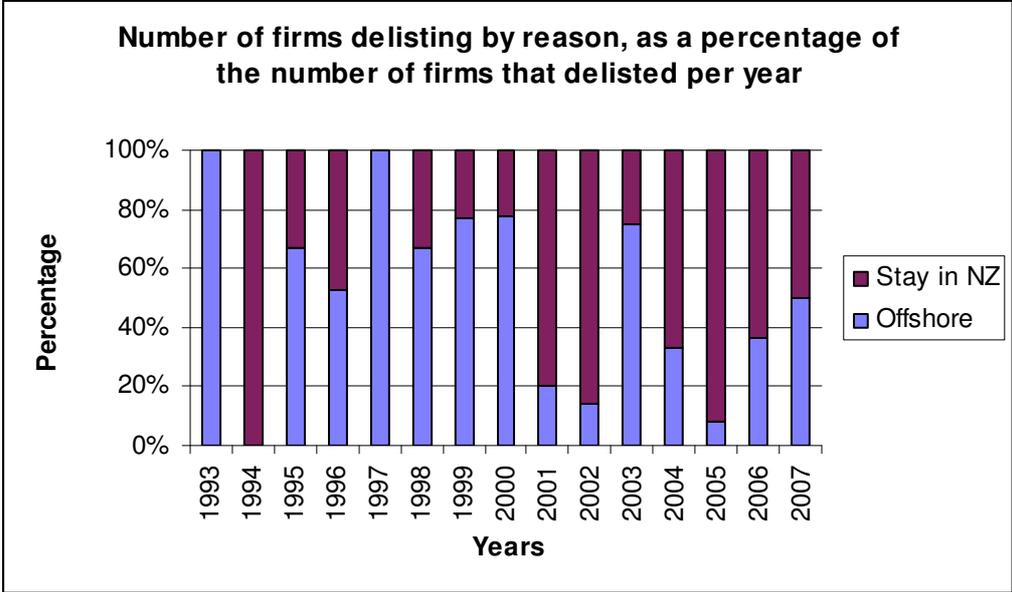


To understand the trend in the reasons for delisting through time, we first separate the two broad categories of reasons for delisting: those which go offshore and those which delist but stay in New Zealand. We examine the number of companies that delist per year that provide reasons that fall into each of these two categories for delisting as a percentage of the total number that delist per year. Figure 7 below presents the results. Overall, there has been a shift through time from firms delisting to go offshore, to those that delist and continue in New Zealand.

Breaking these categories down further¹⁸ indicates that since 2001 there has been a marked decrease in the percentage of the board delisting due to foreign takeovers. This is in contrast to the peaks in 1997 and 1999. Similarly, there is an upward trend through time in the percentage of the board that delists and stays in New Zealand. Besides the increase in domestic takeovers, there also seems to be a slight increase in the percentage of the board delisting due to company failures from 2002.

¹⁸ The results of the disaggregated analysis are available on request.

Figure 7: Frequency of firms delisting by reason, as a percentage of the number of firms that delisted per year.



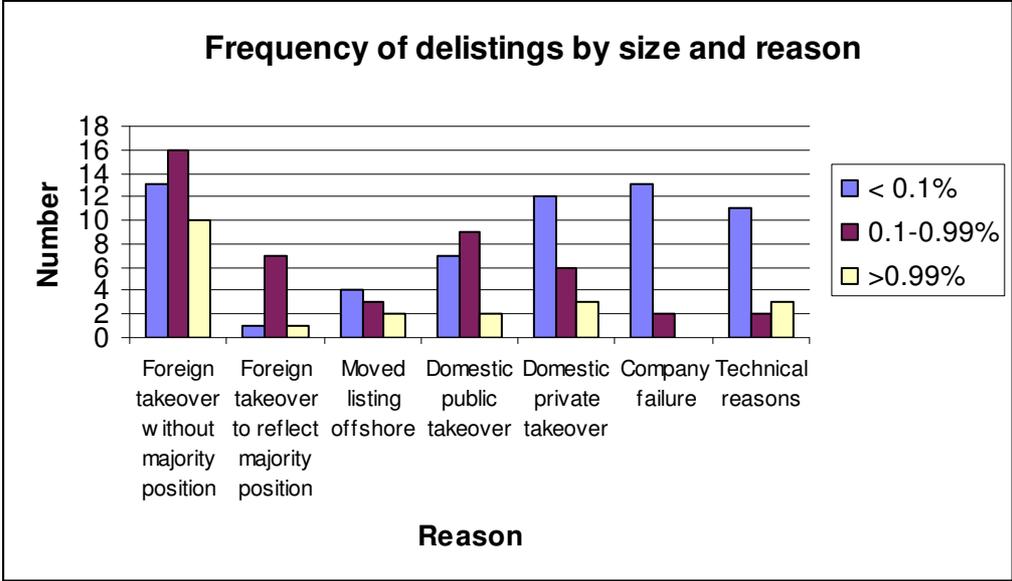
The disaggregated analysis of the graph above does not indicate particular trends in the volatile series of moving listings offshore and technical reasons, as reasons for delistings. A caveat to this analysis is that our data may not fully reflect the ownership of the ultimate parent company involved in the takeovers. Nevertheless, we do not expect any bias due to errors to be significant enough to influence trends.

Figure 8 incorporates the size of the companies delisting into the analysis of the reasons for delisting. As in the discussion above, we segregate the data further from simply delisting to go offshore versus staying in New Zealand and instead examine foreign versus domestic takeovers, moving a listing offshore, company failure and technical reasons as the reasons for delisting. For each of these categories of reasons for delisting, we present weight categories as outlined for Figure 5 and present the frequency of companies that fall in each weight category, for each reason.

The graph indicates that small companies (companies less than 0.1 percent of the board) dominate most categories of delistings. The exception being foreign takeovers

which have a higher proportion of medium (0.1 - 0.99 percent) and large (greater than 0.99 percent) companies delisting than the other categories.

Figure 8 Frequency of delistings ordered by size and reason



5.2.3. NZAX Analysis

Of the companies that delisted from the alternative exchange, 85 percent did so to list on the main NZX board, while one of the other two firms that comprised the 15 percent was privatised by the largest shareholders and the other failed. Of the companies that went on to list on the main board, only one was taken over by a private New Zealand company. All others remained listed at the end of 2007.

6. Conclusion

There has been discussion in recent years on the extent and nature of delistings from the New Zealand Stock Exchange. In particular, there is a perception that most takeover activity is due to New Zealand companies being taken over by foreign companies. In order to shed light on this discussion, we examine delisting activity over the past 15 years.

Our results show that less than half of the delistings are as a result of a takeover by an offshore company. Nor has there been an increase in takeovers over our sample

period. When the capitalisation of delisting companies is taken into account, the majority of companies delisting are small (i.e. they comprise less than one percent of the total capitalisation of the board). When we decompose the reason for delisting by the size of firm delisting, we see that smaller firms dominate most categories, but less so for foreign takeovers. This suggests that foreign companies tend to take over larger companies on average than do local New Zealand companies.

The extent of delisting activity in other smaller countries does not appear greatly out of line with that in New Zealand. And, as discussed, there is no indication that the trends in New Zealand have changed substantively in recent years.

These results imply that concerns relating to the size of the stock market and the growth of the exchange relative to other exchanges are not driven by the delistings from the NZX. The stability of the exchange (in terms of numbers and value) highlights the market's ability to replace companies that delist from the exchange. Instead, the concerns expressed in commentaries might reflect a concern at the absence of growth relative to some other exchanges. However, an examination of such issues is beyond the scope of this study.

References

Acharya, Viral, Julian Franks, and Henri Servaes. 2007. "Private Equity: Boom and Bust?," *Journal of Applied Corporate Finance*, 19(4), 1-10.

Altman, Edward. 1968. "Financial ratios, discriminant analysis and the prediction of corporate bankruptcy," *Journal of Finance*, 23(4), 589-609.

Altman, Edward. 1993. "Corporate Financial Distress and Bankruptcy," John Wiley and Sons, New York.

Angel, Jim, Jeffrey Harris, Venkatesh Panchapagesan, and Ingrid Werner. 2004. "From pink slips to Pink Sheets: Market quality around delisting from Nasdaq delistings," Working paper, Georgetown University.

Austen, Lizabeth, and Denise Dickins. 2007. "SOX Doomsday Predictions in Hindsight: Evidence from Delistings," *Current Issues in Auditing*, 31(1), 21-28.

Barnes, Paul. 2000. "The identification of UK takeover targets using published historical cost accounting data. Some empirical evidence comparing logit with linear discriminant analysis and raw financial ratios with industry-relative ratios," *International Review of Financial Analysis*, 9(2), 147-162.

Bennett, Adam. 2006. "NZX the vanishing market," *The New Zealand Herald*, 8 April.

Cameron, Linda, Bryan Chapple, Nick Davis, Artemesia Kousis, and Geoff Lewis. 2007. "New Zealand Financial Markets, Saving and Investment," Occasional Paper 07/05, Ministry of Economic Development.

Cudd, Mike, and Rakesh Duggal. 2000. "Industry Distributional Characteristics of Financial Ratios: An Acquisition Theory Application," *Financial Review* 35(1), 105-120.

Dietrich, Kimball, and Eric Sorensen. 1984. "An Application of Logit Analysis to Prediction of Merger Targets," *Journal of Business Research*, 12, 393-402.

Doidge, Craig, Andrew Karolyi, and Rene Stulz. "Has New York become less competitive in global markets? Examining foreign listing choices over time," NBER Working Paper, No. 13079.

Engel, Ellen, Rachel Hayes, and Xue Wang. 2007. "The Sarbanes-Oxley Act and firms' going-private decisions," *Journal of Accounting and Economics*, 44 (1-2), 116-145.

Hansen, Thomas, Grace Pownall, and Xue Wang. 2008. "The Robustness of the Sarbanes Oxley Effect on the U.S. Capital Market," Working paper, available at SSRN.

James, Colin. 1999. "The New Zealand economy and politics: the revolution and the future," Seminar: America's Relations with Australia and New Zealand Beyond the Turn of the Century, University of Maryland, Baltimore, 8 November.

Jensen, Michael. 1986. "Agency costs of free cash flow, corporate finance and takeovers," *American Economic Review* 76, 323-329.

Kaplan, Steven. 1989. "Management buyouts: evidence on taxes as a source of value," *Journal of Finance* 44, 611-632.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1997. "Legal determinants of external finance," *Journal of Finance*, 52(3), 1131-1150.

Leuz, Christian, Alexander Triantis, and Tracy Wang. 2004. "Why do firms go dark? Causes and economic consequences of voluntary SEC deregistrations," Working paper, University of Pennsylvania.

Levine, Ross, and Sarah Zervos. 1996. "Stock markets, banks and economic growth," Policy research working paper 1690, World Bank.

Lew, Nicholas, and Ian Ramsay. 2007. "Corporate Law Reform and Delisting in Australia," Legal Studies Research Paper No. 202, University of Melbourne.

Louisson, Simon. 2007. "NZX needs to accept problem, so it can be solved," NZPA, 2 November.

Macey, Jonathan, Maureen O'Hara, David Pompilio, Roberta Romano, and Ingrid Werner. 2004. "Down and out in the stock market: the law and finance of the delisting process," Working Paper, Cornell University.

Martin, Roger, and Gordon Nixon. 2007. "Growing global leaders: the 'Hollowing Out' solution," Newsroom, Royal Bank of Canada.

Ministry of Economic Development. 2007. "Improving the Investment environment for New Zealand firms,". Available online at http://www.med.govt.nz/templates/MultipageDocumentPage_39386.aspx?&MSHC=65001&L=0&W=Improving+the+Investment+environment+for+New+Zealand+firm+s+&Pre=%3cb%3e&Post=%3c%2fb%3e

New Zealand Herald. 2006. "Editorial: NZ business like branch of Australia".

O'Sullivan, Matt. 2007. "As companies desert, NZX questions future," theage.com.au, 8 October.

Pagano, Marco, and Paolo Volpin. 2006. "Shareholder Protection, Stock Market Development, and Politics," *Journal of the European Economic Association* 4, 315-341.

Palepu, Krishna. 1986. "Predicting takeover targets," *Journal of Accounting and Economics*, 8(1), 3-35.

Renneboog, Luc, and Tomas Simons. 2005. "Public to private transactions: Motives, trends, theories and empirical literature on LBOs, MBOs, MBIs, and IBOs," Discussion paper CentER, Tilburg University.

Sanger, Gary, and James Peterson. 1990. "An empirical analysis of common stock delistings," *Journal of Finance and Quantitative Analysis*, 25(2), 261-272.

Sorensen, Donald. 2000. "Characteristics of merging firms," *Journal of Economics and Business*, 52(5), 423-433

Thomsen, Steen, and Frederik Vinten. 2007. "Delistings in Europe and the Costs of Governance," Working paper, Copenhagen Business School.