



*The AUSTRALIAN  
PRIVATE EQUITY &  
VENTURE CAPITAL  
ASSOCIATION Limited*

# **An analysis of the performance of private equity-backed IPOs in Australia**

Getting the facts on the table

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# Executive Summary

This report seeks to answer the question of whether Australian private equity (PE)-backed IPOs consistently underperform relative to non-PE-backed IPOs, as often cited in anecdotal reports.

To address this question, the immediate-, medium- and long-term stock price returns of PE- and non-PE-backed IPOs on the ASX over a 7-year period from 2003 to 2010 are evaluated.

***The results indicate no evidence of consistent outperformance by non-PE-backed IPOs.*** An analysis of post-IPO returns yields the following results:

- PE-backed IPOs' average 1-day post-IPO returns was +3.5% (non-PE-backed IPOs: +1.6%)
- PE-backed IPOs' outperformance increased, on average, over longer horizons. PE-backed IPO share prices grew +78% on average in the three years after listing (non-PE-backed IPOs: -2%)

***Non-PE-backed IPOs' average returns appear more heavily influenced by a small number of large, well-performing stocks than PE-backed IPOs.*** Average returns may be skewed by the performances of a small number of stocks that perform either very well or very badly. Once outliers (both positive and negative) are excluded, there is little substantive evidence to suggest that non-PE-backed IPOs consistently perform better than PE-backed IPOs.

***Sectoral differences matter.*** IPOs can and will exhibit a wide spectrum of returns post-flotation, due to differences in the nature of these businesses and economic cycles in which they list and operate. Non-PE IPOs over the sample period have included companies operating in sectors where there have been no comparable PE IPO exits, such as mining, real estate, and financial services. These sectors have experienced strong returns in recent years. If only IPOs in overlapping sectors are considered, we again find little evidence indicating non-PE outperformance.

***In summary, there appears to be little solid evidence to support the notion that PE-backed stocks tend to have poorer post-listing performances than comparable non-PE-backed stocks.*** If fact, PE-backed IPOs may even be found to perform better, on average, over longer horizons.

# Sample

- The sample examines IPOs from Oct 2003 to Nov 2010.\*
- The sample only includes stocks with an IPO size greater than \$100m.
- The sample contains 14 PE-backed IPOs and 88 non-PE-backed IPOs.\*\*
- All stock prices (including issue prices) have been adjusted for corporate actions such as stock splits, stock consolidations, buy backs, and dividends.
- Where different IPO issue prices are applicable to institutional and retail investors, the institutional issue price is used.
- The market is represented by the S&P/ASX 200 Accumulation Index.
- The data has been sourced from Thomson Reuters Datastream, ThomsonONE, Bloomberg, IPO prospectuses, ASX, and company websites.

\* The first PE-backed IPO in the last decade within the sample parameters occurred in October 2003.

\*\* This report does not consider IPOs backed by venture capital (VC) firms. VC-backed IPOs often have IPO sizes below \$100m. Moreover, VC firms often list their investee companies not to exit the investment, but to raise additional capital. PE firms, on the other hand, normally list their investee companies with the intention of exiting their investment.

# IPOs by sector and year

Figure 1 – Value of PE-backed IPOs by sector (A\$m)

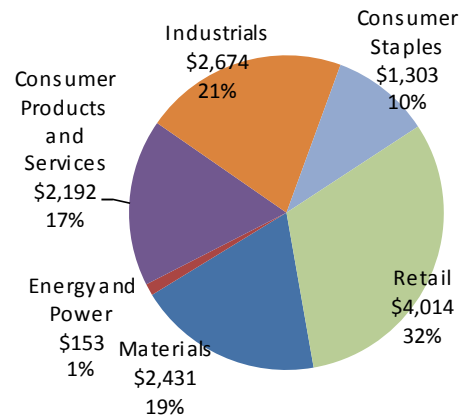


Figure 2 – Value of non-PE-backed IPOs by sector\* (A\$m)

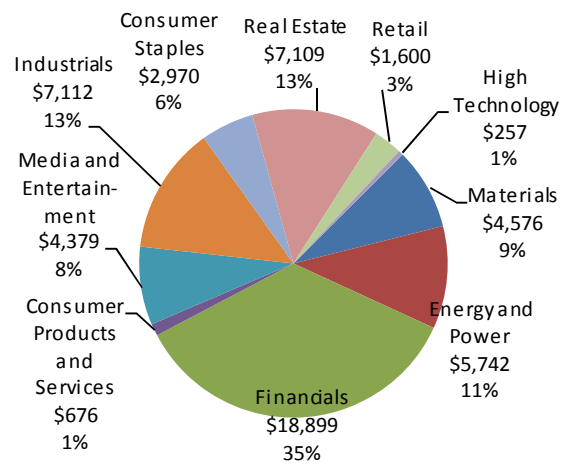


Figure 3 – No. of PE-backed IPOs by sector

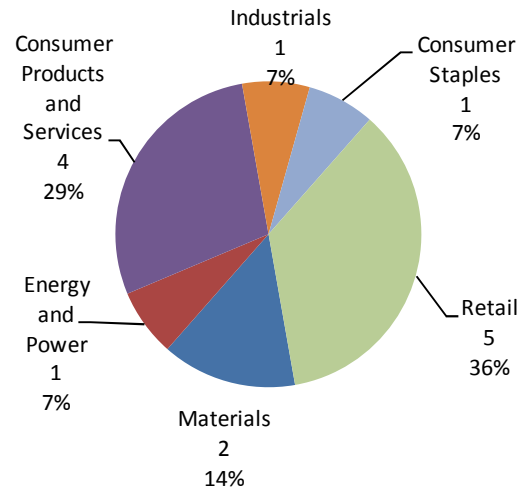


Figure 4 – No. of non-PE-backed IPOs by sector

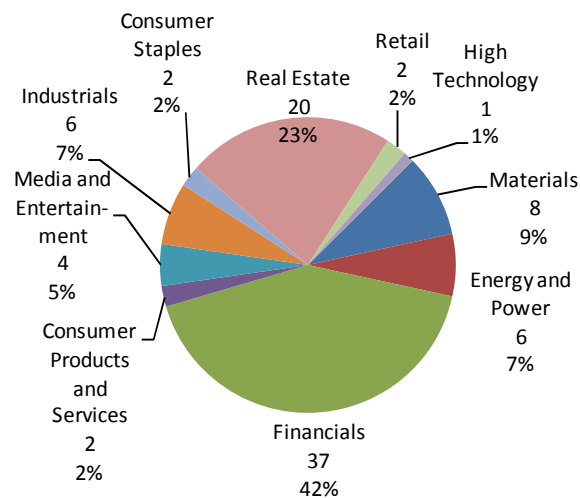


Figure 5 – No. of PE-backed IPOs by year of float

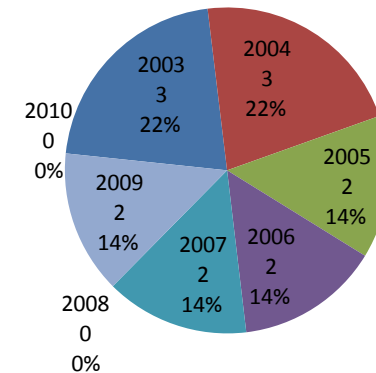
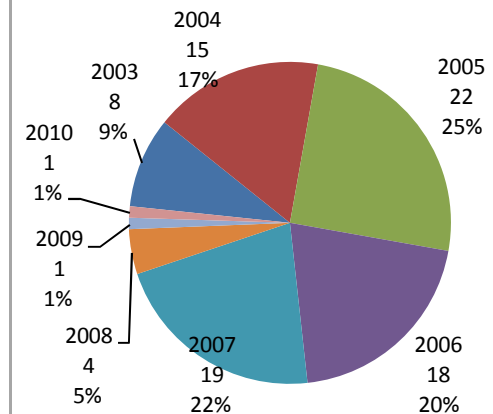


Figure 6 – No. of non-PE-backed IPOs by year of float



\* Note: Mining stocks are under the Materials sector, and infrastructure/roads stocks are under the Industrials sector .

# Methodology

The analysis is organised in two parts:

**Part 1: The time horizon analysis** examines the performance of IPOs over a range of time horizons from the date of listing.

- The average returns (equally weighted and market capitalisation-weighted) of PE- and non-PE-backed stocks are evaluated over a range of post-IPO time horizons from 1 day to 3 years.
- All IPO returns are calculated relative to the adjusted issue price.

**Part 2: The index analysis** compares the relative performances of indices constructed from PE and non-PE-backed IPOs.

- Two market capitalisation-weighted indices are constructed for the PE- and non-PE-backed IPO samples.
- To mitigate any potential bias caused by “stale” IPOs from a wide range of older vintage years, both indices start with one stock at the beginning of a given time interval, each starting from identical base values of 1,000 points. More stocks are added or excluded as new listings and delistings occur.
- The adjusted share prices of the stocks are used to calculate day-to-day index movements, with the market capitalisation of each stock used as its index weight. The indices are reweighted every time an IPO or delisting occurs. There were 19 delistings over the sample period: 3 PE-backed, and 16 non-PE-backed.
- The S&P/ASX 200 Accumulation Index (rebased to 1,000) is used as the public market benchmark.

**Robustness testing** for both Part 1 and Part 2.

- **Outlier analysis:** To assess the sensitivity of the results to outliers, the analyses in Parts 1 and 2 are repeated omitting the best and worst performing stocks from the PE sample and a proportional number of best and worst performing stocks from the non-PE sample.\*
- **Sub-sample analysis:** To assess the robustness of the results across different time periods, the analyses in Parts 1 and 2 are repeated for the following sub-periods: IPOs between 2003 and 2007, and between 2006 and 2010.

\* All analyses were also repeated omitting the top- and bottom-performing quartile PE- and non-PE-backed stocks. The results were similar to those of the analysis described above and hence not reported here.

Part 1

# **HORIZON RETURNS**

# PE-backed IPOs averaged 3.5% in 1-day post-IPO returns (non-PE-backed IPOs: 1.6%)

Figure 7 - PE-backed IPOs 1 day post-IPO returns (sample size: 14 stocks)

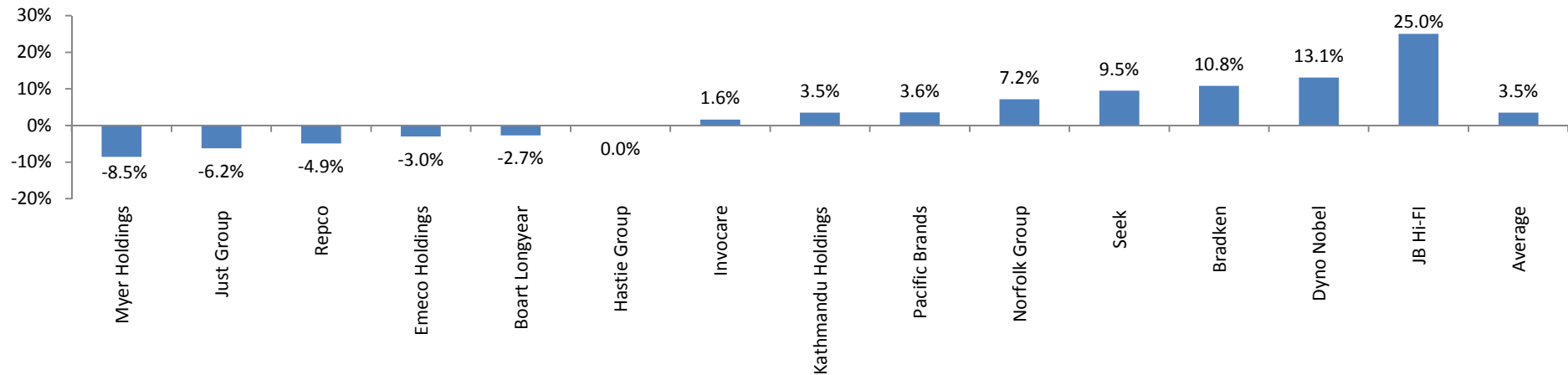
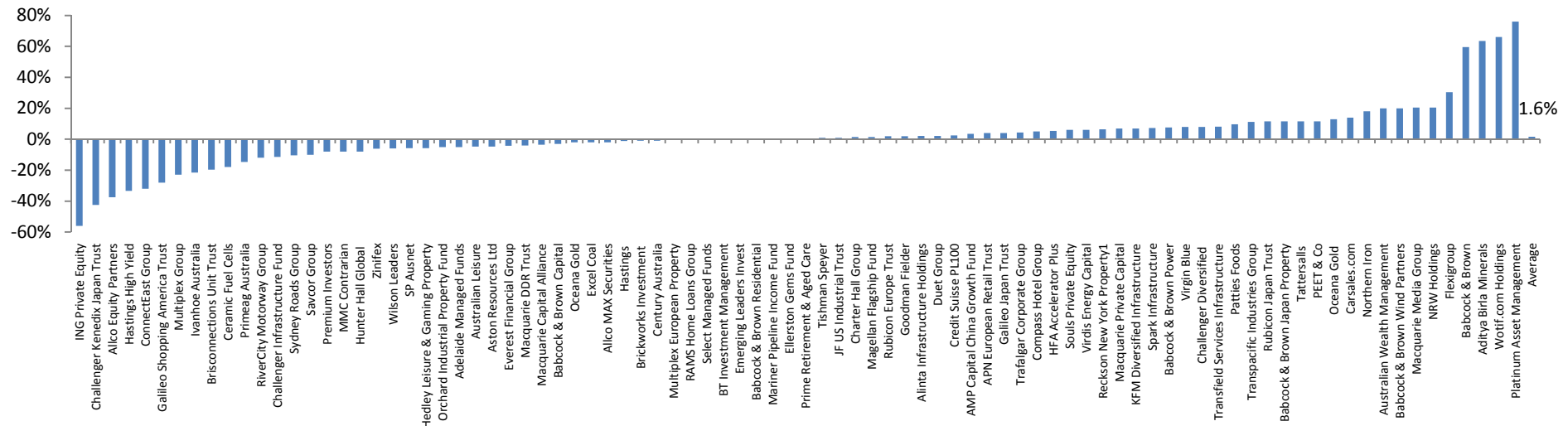


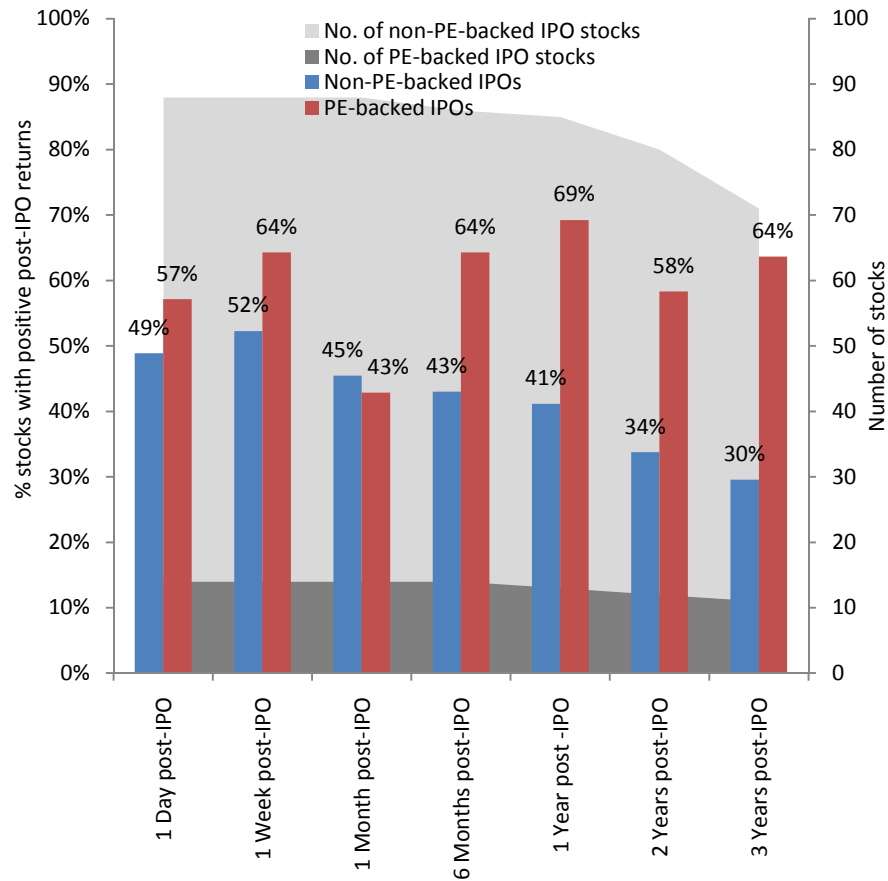
Figure 8 – Non-PE-backed IPOs 1 day post-IPO returns (sample size: 88 stocks)





# PE-backed IPOs have historically been more likely to record positive post-listing returns

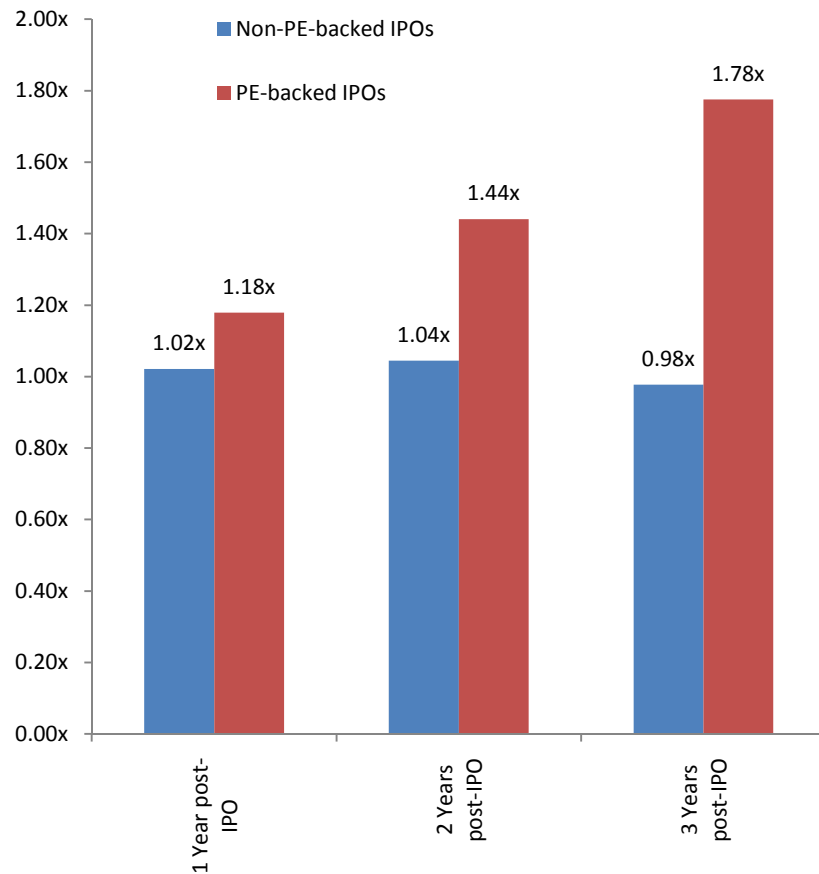
Figure 9 – Frequency of positive post-IPO returns over 1-day to 3-year horizons



- On average, approximately 60% of PE-backed IPO stocks recorded positive returns over the 1-day to 3-year time horizons, compared to 42% of non-PE-backed stocks over the same horizons.

# PE-backed IPO share prices grew 1.78x on average in the three years after listing

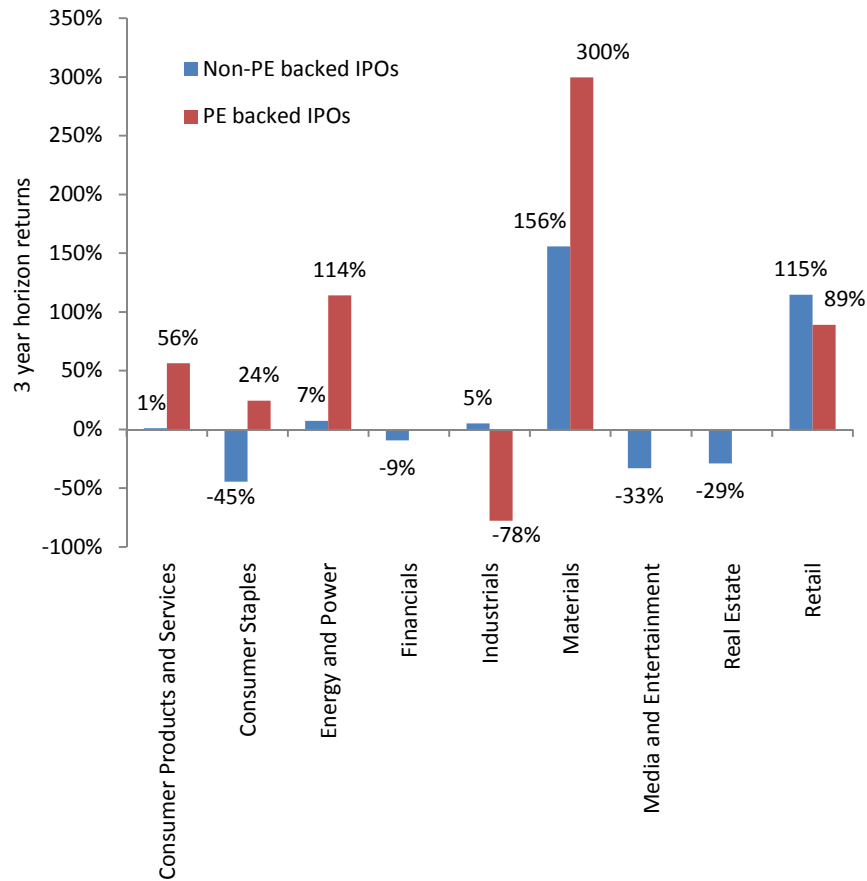
Figure 10 – Average share price growth multiples



- PE-backed IPO share prices grew at an average rate of 1.78x in the three years after listing.
- Non-PE-backed IPO share prices, on average, fell below their listing price in the three years after listing to 0.98x of their initial issue prices.

# Average 3-year returns by sector

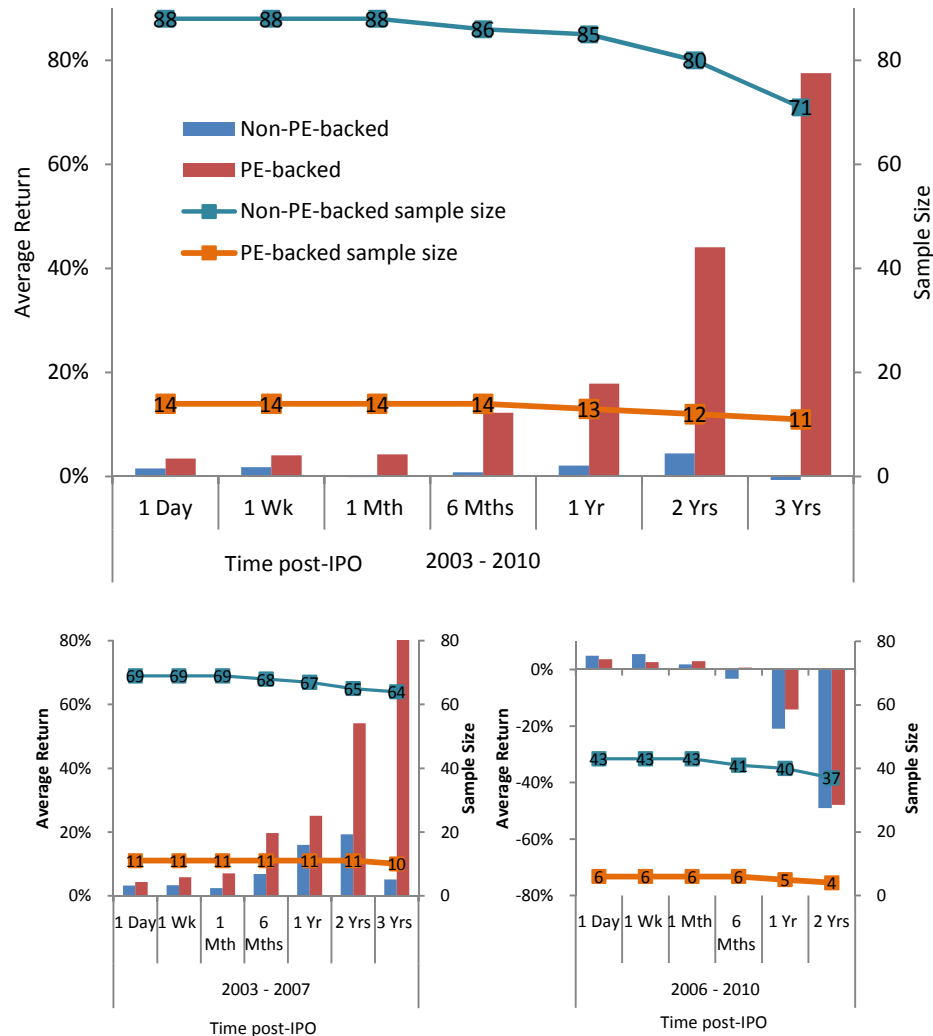
Figure 11 – Average 3-year horizon returns, by sector



- PE-backed IPOs have generally performed well on a sector-by-sector basis.
- Most of the largest positive returns generated by non-PE-backed IPOs over the 3-year post-IPO horizon were driven by a small number of stocks in the mining, real estate and financial sectors such as Zinifex, PEET & Co, and Babcock & Brown.

# PE-backed IPOs recorded higher average returns across all time horizons

Figure 12 – Average returns of PE- and non-PE-backed stocks\*

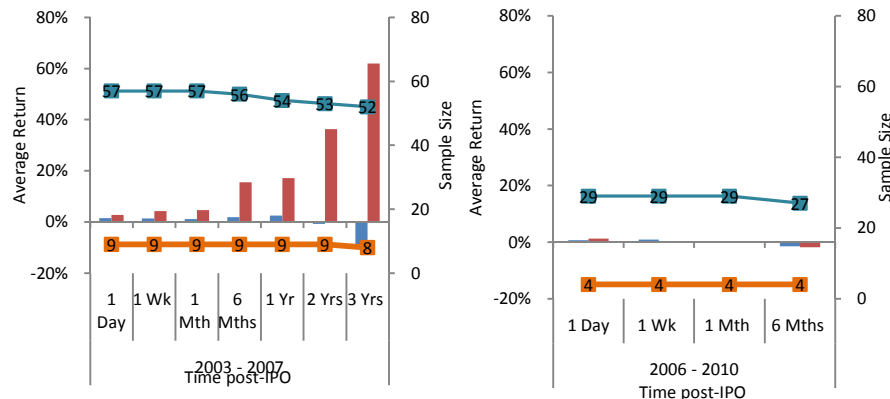
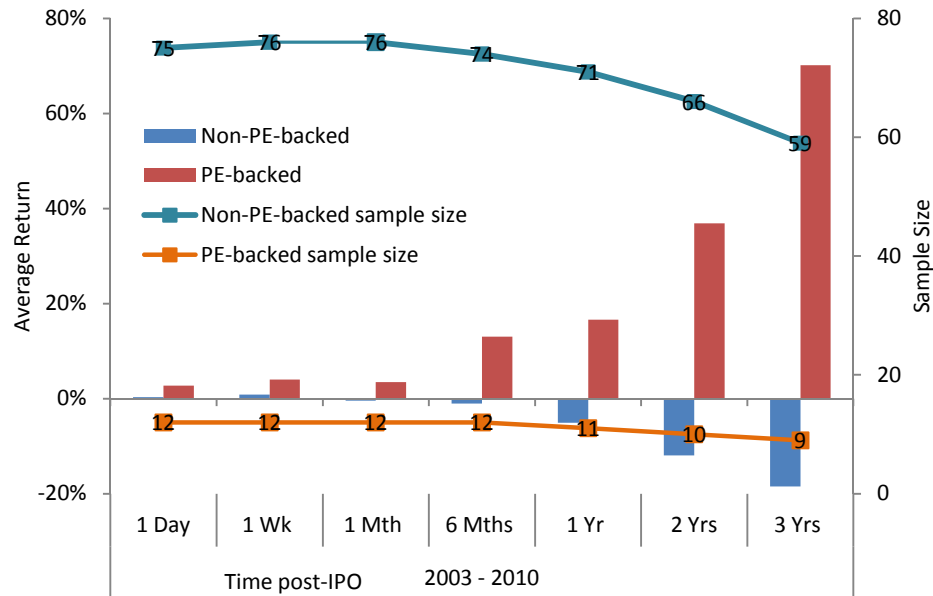


- **PE-backed IPOs recorded higher average returns in all time horizons analysed**, ranging from +4% to +78% over 1-day to 3-years post-IPO. This is in marked contrast to the average returns of non-PE-backed IPOs, which ranged from -2% to +4%.
- **PE-backed IPOs outperformance increased, on average, over longer horizons.** The average returns became even more divergent when the returns up to 3 years post-listing are compared. PE-backed IPOs averaged returns of +78% compared to -2% for non-PE-backed IPOs.
- **The global financial crisis had a negative effect on the performance and frequency of IPOs.** The number of IPOs in the sample declined significantly from an average of around 20 IPOs per year between 2003–2007 to 10 per year between 2006–2010. Both PE- and the non-PE-backed IPOs recorded poorer average returns during this period.

\* Results for the 3-year horizon for the 2006-2010 sub-sample are not reported here due to insufficient sample size to draw reliable inferences from.

# Non-PE-backed IPOs' positive returns appear more reliant on a small number of performers

Figure 13 – Average returns of PE- and non-PE-backed stocks (excl. best & worst performing stocks)\*

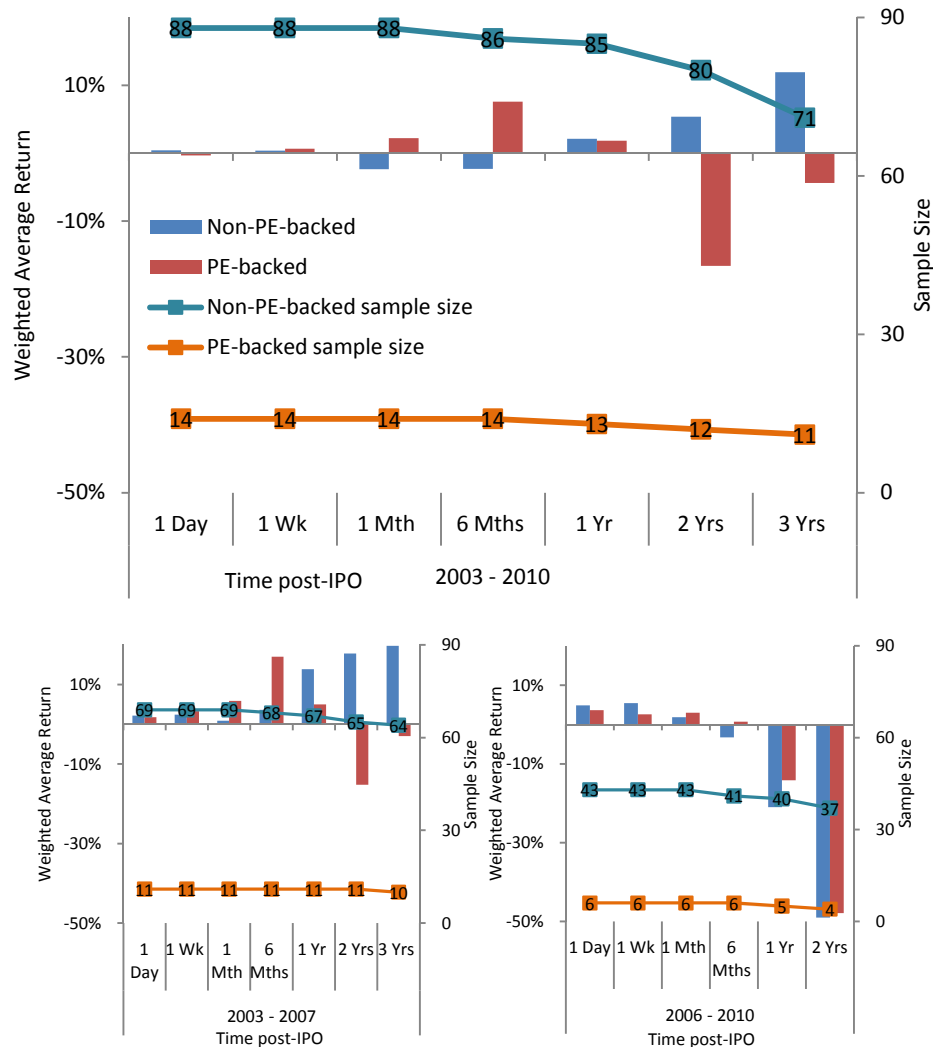


- **Average returns can be skewed by a small number of over- or under-performing stocks.** To examine if outliers had any significant effect on average returns, the horizon returns were recalculated excluding the best and worst performing stocks from the PE-backed sample and a proportional number of best and worst performing stocks from the non-PE-backed sample.
- **Even with the exclusion of its best and worst performers, PE-backed returns remained relatively consistent compared to non-PE-backed returns.** Non-PE IPOs' average returns, on the other hand, appeared to be relatively more heavily influenced by a small number of large, well-performing stocks. The omission of these stocks resulted in generally poorer average returns over longer horizons.
- While the small number of PE-backed IPOs makes it difficult to draw more definitive conclusions from the results, these results would suggest that there is little empirical support for the argument that non-PE-backed IPOs consistently record better average returns than PE-backed IPOs.

\* Results for the 1- to 3-year horizons for the 2006-2010 sub-sample are not reported here due to insufficient sample size to draw reliable inferences from.

# Weighted average returns show mixed results

Figure 14 - Weighted average returns of PE- and non-PE-backed stocks

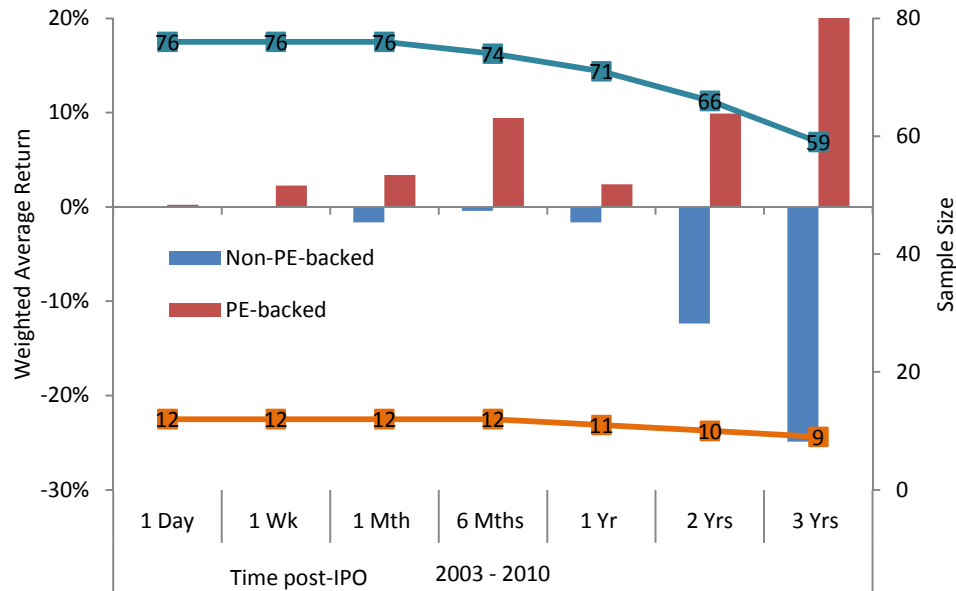


- In contrast with the results for unweighted average returns which showed consistent outperformance by PE-backed IPOs, an initial look at the weighted average returns showed mixed results for both PE- and non-PE-backed IPOs. Non-PE weighted average returns were largely driven by a handful of strong performers which listed during the 2003 - 2007 period, such as Zinifex, Excel Coal, Transpacific Industries and Babcock & Brown.
- The effect of the global financial crisis in the late 2000s was again apparent as seen in the performances of stocks which listed between 2006 and 2010. The negative weighted average returns for PE-backed stocks in the 2- and 3-year horizons during this period was mostly driven by one stock (Boart Longyear), which carried the largest weighting in the PE-backed sample and was floated in 2007 just before the full onset of the GFC.

\* Results for the 3-year horizon for the 2006-2010 sub-sample are not reported here due to insufficient sample size to draw reliable inferences from.

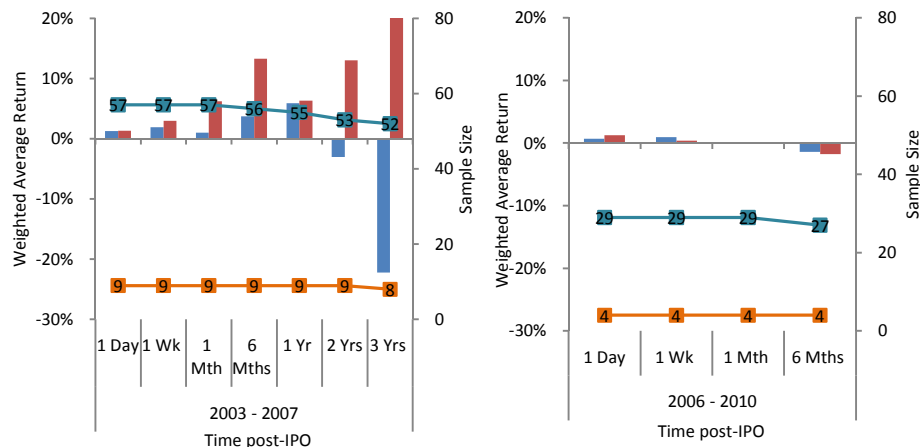
# Again, non-PE weighted average returns appear more reliant on a small number of performers

Figure 15 - Weighted average returns of PE- and non-PE-backed stocks (excl. best & worst performing stocks)\*



- Similar to the results for unweighted average returns (Fig.13), the exclusion of positive and negative outliers saw the apparent outperformance of non-PE weighted average returns disappear. The exclusion of outliers had a particularly deflating effect on the weighted average returns of non-PE-backed IPOs, particularly over the 2- and 3-year horizons.

- The exclusion of the best and worst performers from the PE sample, on the other hand, resulted in generally improved weighted average returns. The exclusion of outliers saw the PE sample's 2-year weighted average return rising (compared to Fig.14) from -16% to +10%, and the 3-year average weighted return rising from -4.4% to +21%.



- These findings support those of the equally weighted returns analysis, which suggest that non-PE-backed IPOs' average returns tend to be more driven by extreme performers than PE-backed IPOs. The overall results suggest that the performance of a portfolio that invests only in non-PE IPOs might be more heavily reliant on the performances of a small number of winners compared to a portfolio of PE-backed IPOs.

\* Results for the 1- to 3-year horizons for the 2006-2010 sub-sample are not reported here due to insufficient sample size to draw reliable inferences from.

Part 2

# INDEX RETURNS



# PE-backed IPO index increased 3.4x in seven years (non-PE-backed IPO index: 2.1x)

Figure 16 – PE-backed and non-PE-backed IPO indices

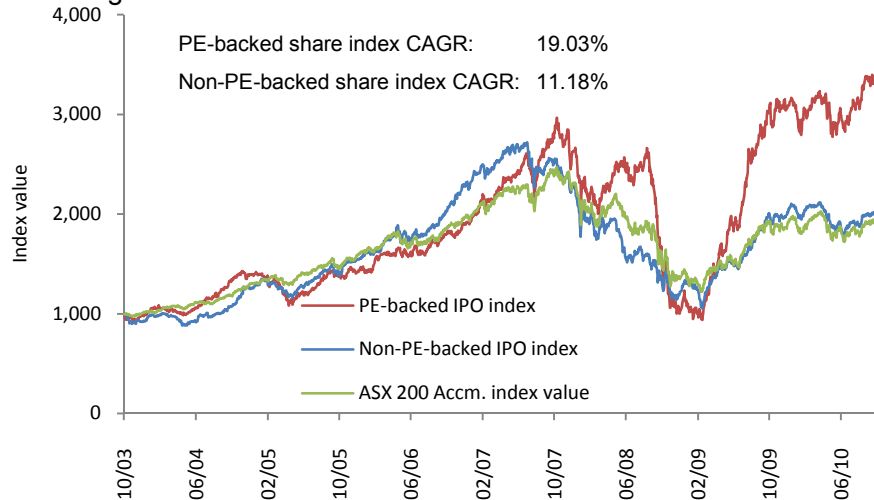
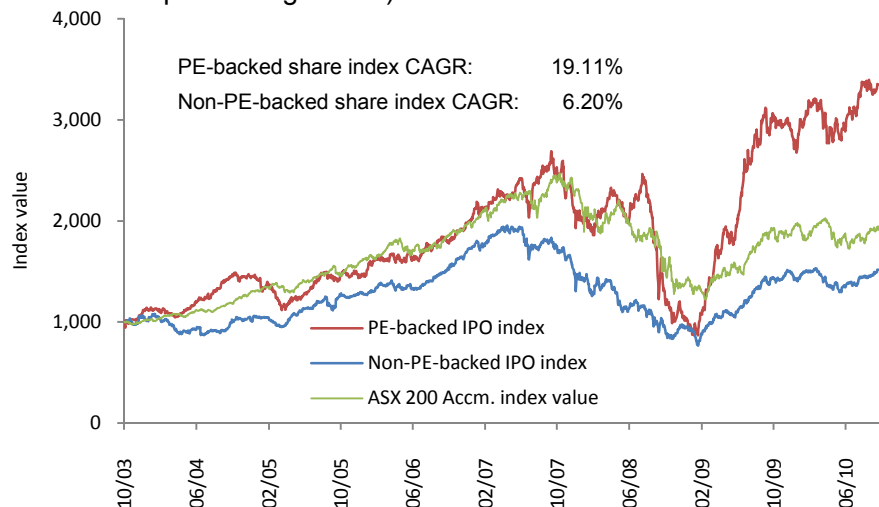


Figure 17 – PE-backed and non-PE-backed IPO indices (excl. best & worst performing stocks)



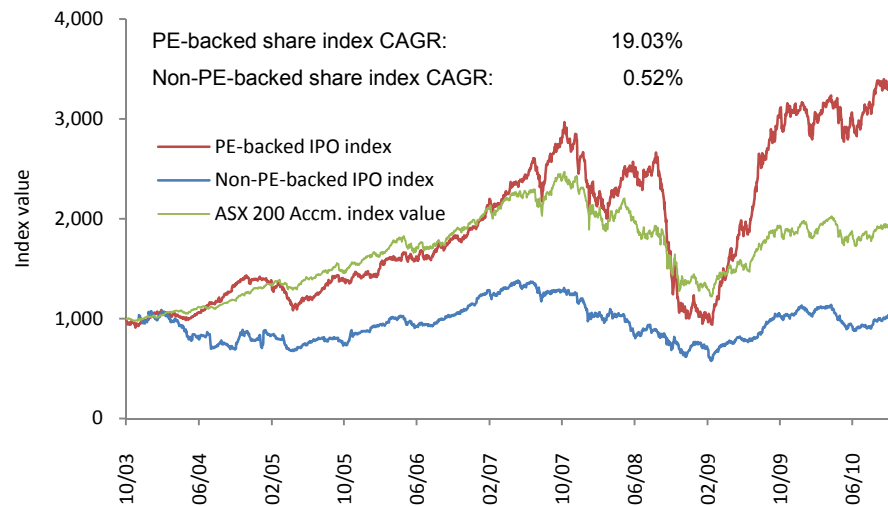
- To compare the concurrent performances of PE- and non-PE-backed IPOs over time, market capitalisation-weighted indices were constructed for both groups of IPOs. Both indices, as well as the market benchmark (S&P/ASX 200 Accumulation Index), had identical bases of 1,000 points in Oct 2003.
- By November 2010, the PE-backed index had more than tripled to 3,386 points, compared to the non-PE-backed index which doubled to 2,099 points: similar to the market benchmark which had risen to 1,985 points.\* It was further observed that:
  - During the GFC, the PE-backed index fell more sharply, but also recovered more rapidly, than the non-PE-backed index.
  - Similar to the results in Part 1, the omission of the best and worst performing stocks appear to have had a greater moderating impact on performance of the non-PE-backed sample than on the PE-backed sample.\*\*

• For completeness, the longest timeframe of 2003-2010 is displayed here. The results may vary when different timeframes are considered.

\*\* This analysis is for informative purposes only. It is not a replicable strategy as investors would not know in advance which outliers should be excluded from the portfolio. Also, the relatively small size of the PE-backed sample should be taken into consideration.

# On a sector-matched basis, the PE-backed IPO index consistently outperforms

Figure 18 – PE-backed and non-PE-backed IPO indices in comparable sectors\*



- To obtain a more balanced comparison between PE- and non-PE-backed IPOs, the analysis was repeated using only non-PE-backed IPOs in the same sectors as PE-backed IPOs.\* This reduced the non-PE-backed IPO sample size to 15. The number of PE stocks remained the same at 14.
- Similar to the effects of excluding outliers (Fig.17), the non-PE-backed index's performance (Fig.18) was markedly flatter with the exclusion of a handful of heavily-weighted financial, real estate and mining stocks. The PE-backed index consistently outperformed the sector-matched non-PE-backed index over 2003-2010, with the former recording a CAGR of 19.03% compared to the latter's CAGR of 0.52%.\*\*
- The limitations imposed by the small sample sizes notwithstanding, the index performance results lend further support to the conclusions reported in Part 1, which indicate that PE-backed IPOs neither routinely underperform relative to their non-PE-backed counterparts, nor to the broader market in general.

\* The overlapping sectors between the PE and non-PE samples were Consumer Products and Services, Consumer Staples, Energy & Power, Industrials, Materials and Retail. In addition, infrastructure/roads companies (under Industrials) and mining companies (under Materials) were omitted from the non-PE-backed sample because the PE funds in our sample did not include resources or infrastructure funds (although companies providing ancillary services to these industries such as infrastructure services and mining services companies are retained).

\*\* Similar results were obtained when outliers are omitted from the sector-matched indices. The results are not reported here given the small sample sizes involved. For completeness, the longest timeframe of 2003-2010 is displayed here. The results may vary when different timeframes are considered.

# Conclusion

- The Australian private equity industry has invested in some of the most well-known brand names in the country such as JB Hi-Fi, SEEK, Myer, Kathmandu, Just Group, Pacific Brands and Repco. The PE-backed IPOs represented in this study are companies which were listed on the market as a means to either fully or partially divest the company from the PE portfolio.
- The evidence presented in this study suggests that, contrary to many anecdotal reports, PE-backed stocks do not consistently underperform compared to the non-PE-backed stocks. In fact, PE-backed IPOs may even be found to perform better, on average, over longer horizons.
- We find that non-PE IPOs' average returns appear to be more heavily influenced by a small number of large, well-performing stocks than PE-backed IPOs. Once outliers (both positive and negative) are excluded from both samples, non-PE-backed IPOs do not appear to consistently perform any better than PE-backed IPOs, and in some instances may perform worse.
- It should also be noted that non-PE listings over this period included companies operating in sectors where there have been no comparable PE IPO exits, such as mining, real estate, and financial services. If only IPOs in overlapping sectors are considered, we again find little evidence indicating non-PE outperformance.
- These results provide some support for the argument that PE managers introduce long-lasting operational and governance improvements, and long-term growth strategies in investee companies, which are for the most part carried forward and built upon by the management teams of the investee companies even after the exit of their PE investors.

APPENDIX

# LIST OF STOCKS

# PE-backed IPOs (14)

Boart Longyear

Bradken

Dyno Nobel

Emeco Holdings

Hastie Group

Invocare

JB Hi-Fi

Just Group

Kathmandu Holdings

Myer Holdings

Norfolk Group

Pacific Brands

Repco

Seek

# Non-PE-backed IPOs (88)

Adelaide Managed Funds	BT Investment Management	Galileo Shopping America Trust	Multiplex European Property	Savcor Group
Aditya Birla Minerals	Carsales.com	Goodman Fielder	Multiplex Group	Select Managed Funds
Alinta Infrastructure Holdings	Century Australia	Hastings	Northern Iron	Souls Private Equity
Allco Equity Partners	Ceramic Fuel Cells	Hastings High Yield	NRW Holdings	SP Ausnet
Allco MAX Securities	Challenger Diversified	Hedley Leisure & Gaming Property	Oceana Gold	Spark Infrastructure
AMP Capital China Growth Fund	Challenger Infrastructure Fund	HFA Accelerator Plus	Oceana Gold	Sydney Roads Group
APN European Retail Trust	Challenger Kenedix Japan Trust	Hunter Hall Global	Orchard Industrial Property Fund	Tattersalls
Aston Resources Ltd	Charter Hall Group	ING Private Equity	Patties Foods	Tishman Speyer
Australian Leisure	Compass Hotel Group	Ivanhoe Australia	PEET & Co	Trafalgar Corporate Group
Australian Wealth Management	ConnectEast Group	JF US Industrial Trust	Platinum Asset Management	Transfield Services Infrastructure
Babcock & Brown	Credit Suisse PL100	KFM Diversified Infrastructure	Premium Investors	Transpacific Industries Group
Babcock & Brown Capital	Duet Group	Macquarie Capital Alliance	Prime Retirement & Aged Care	Virdis Energy Capital
Babcock & Brown Japan Property	Ellerston Gems Fund	Macquarie DDR Trust	Primeag Australia	Virgin Blue
Babcock & Brown Power	Emerging Leaders Invest	Macquarie Media Group	RAMS Home Loans Group	Wilson Leaders
Babcock & Brown Residential	Everest Financial Group	Macquarie Private Capital	Reckson New York Property	Wotif.com Holdings
Babcock & Brown Wind Partners	Excel Coal	Magellan Flagship Fund	RiverCity Motorway Group	Zinifex
Brickworks Investment	Flexigroup	Mariner Pipeline Income Fund	Rubicon Europe Trust	
Brisconnections Unit Trust	Galileo Japan Trust	MMC Contrarian	Rubicon Japan Trust	



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