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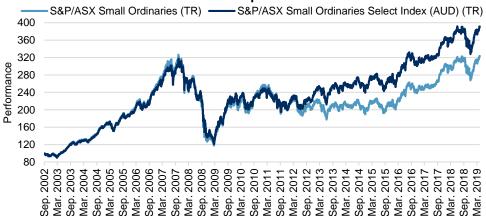
Profitability Screening in Australian Small Caps

EXECUTIVE SUMMARY

This paper examines the effectiveness of a profitability screen on improving return and reducing volatility and drawdown for Australian small-cap stocks. We also demonstrate the benefit of applying a profitability screen to the <u>S&P/ASX Small Ordinaries</u>, the benchmark for small-cap stocks in Australia.

- On average, 28% of companies in the S&P/ASX Small Ordinaries were unprofitable over the period studied, in contrast to 9% in the <u>S&P/ASX 50</u>. Small-cap companies with positive earnings per share (EPS) historically outperformed the unprofitable companies on both absolute and risk-adjusted bases.
- The <u>S&P/ASX Small Ordinaries Select</u> is designed to track profitable small-cap companies in Australia. The index's addition of a profitability screen helped it to outperform its benchmark by 1.2% per year from Sept. 20, 2002, to Dec. 31, 2019.
- Sector allocation and stock selection effects both contributed to the excess return of the S&P/ASX Small Ordinaries Select, with the sector allocation effect explaining a larger part of it.
- The S&P/ASX Small Ordinaries Select had higher dividend yield and active profitability factor exposures compared with the S&P/ASX Small Ordinaries.

Exhibit 1: Cumulative Performance Comparison



Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Index performance based on total return in AUD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

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SMALL-CAP BEHAVIOR IN AUSTRALIA

Australian small caps had the lowest correlation with Australian bonds, Australian REITs, and international equities. In 1992, the capital asset pricing model (CAPM) evolved into the Fama & French three-factor model to include size and value as risk factors in addition to market risk, with the aim to help better explain a portfolio's risk/return characteristics. Inclusion of small-cap companies offers diversification and potential for higher returns.

Exhibit 2 shows the return correlation of various common Australian investment classes. Australian small caps had return correlations of 0.83 and 0.91 with large and mid caps, respectively. Among the three size categories in Australian equities, small caps had the lowest correlation with Australian bonds, Australian REITs, and international equities.

Exhibit 2: Return Correlation of Various Australian Equity Market Cap Spectrum and Other Asset Classes						
ASSET CLASS	AUSTRALIAN LARGE CAP	AUSTRALIAN MID CAP	AUSTRALIAN SMALL CAP	AUSTRALIAN BONDS	AUSTRALIAN REITS	INTERNATIONAL EQUITIES
AUSTRALIAN LARGE CAP	1.00	0.88	0.83	-0.26	0.64	0.53
AUSTRALIAN MID CAP	0.88	1.00	0.91	-0.26	0.66	0.55
AUSTRALIAN SMALL CAP	0.83	0.91	1.00	-0.34	0.57	0.49
AUSTRALIAN BONDS	-0.26	-0.26	-0.34	1.00	0.10	-0.04
AUSTRALIAN REITS	0.64	0.66	0.57	0.10	1.00	0.45
INTERNATIONAL EQUITIES	0.53	0.55	0.49	-0.04	0.45	1.00

Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Index performance based on total return in AUD. Australian Large Cap is represented by the S&P/ASX 50, Australian Mid Cap by the <u>S&P/ASX MidCap 50</u>, Australian Small Cap by the S&P/ASX Small Ordinaries, Australian Bonds by the <u>S&P/ASX Australian Fixed Interest Index</u>, Australian REITs by the <u>S&P/ASX 200 A-REIT</u> Index, and International Equities by the <u>S&P Developed Ex-Australia LargeMidCap</u>. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance leaders and laggards rotated across investment classes over the period studied, though Australian small caps were more volatile with worse drawdown in downturns compared with Australian large and mid caps (see Exhibit 3). This segment was the best performer in 2006, 2009, and 2010, and the worst performer in 2011-2014 and 2018. While including small caps in portfolios can provide diversification benefits and potential to capture growth opportunities, carefully managing volatility and downside risk is important for small-cap investments.

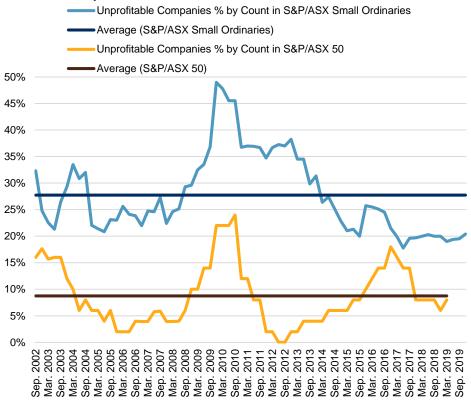
Exhibit 3:	Exhibit 3: Yearly Performance of Various Australian Equity Market Cap Segments and Other Asset Classes					
YEAR			RA	NK		
TEAR	1	2	3	4	5	6
2005	Australian Mid Cap 23.2%	Australian Large Cap 22.7%	Australian Small Cap 19.6%	International Equities 18.2%	Australian REITs 12.5%	Australian Bonds 5.9%
2006	Australian Small Cap 34.2%	Australian REITs 34.0%	Australian Mid Cap 26.0%	Australian Large Cap 23.0%	International Equities 11.5%	Australian Bonds 2.5%
2007	Australian Mid Cap 17.1%	Australian Small Cap 17.1%	Australian Large Cap 16.0%	Australian Bonds 3.1%	International Equities -1.4%	Australian REITs -8.4%
2008	Australian Bonds 17.1%	International Equities -24.7%	Australian Large Cap -35.8%	Australian Mid Cap -45.9%	Australian Small Cap -53.2%	Australian REITs -54.0%
2009	Australian Small Cap 57.4%	Australian Large Cap 36.2%	Australian Mid Cap 36.0%	Australian REITs 7.9%	International Equities 1.4%	Australian Bonds 0.8%
2010	Australian Small Cap 13.1%	Australian Bonds 6.0%	Australian Mid Cap 4.0%	Australian Large Cap 0.4%	Australian REITs -0.4%	International Equities -1.2%
2011	Australian Bonds 12.1%	Australian REITs -1.5%	International Equities -5.1%	Australian Large Cap -9.0%	Australian Mid Cap -16.3%	Australian Small Cap -21.4%
2012	Australian REITs 33.0%	Australian Large Cap 22.0%	International Equities 15.1%	Australian Mid Cap 12.8%	Australian Bonds 7.9%	Australian Small Cap 6.6%
2013	International Equities 47.8%	Australian Large Cap 22.1%	Australian Mid Cap 16.8%	Australian REITs 7.1%	Australian Bonds 1.9%	Australian Small Cap -0.8%
2014	Australian REITs 27.0%	International Equities 15.4%	Australian Mid Cap 13.2%	Australian Bonds 10.5%	Australian Large Cap 5.3%	Australian Small Cap -3.8%
2015	Australian REITs 14.3%	International Equities 12.3%	Australian Mid Cap 11.3%	Australian Small Cap 10.2%	Australian Bonds 2.7%	Australian Large Cap 1.0%
2016	Australian Mid Cap 17.8%	Australian Small Cap 13.2%	Australian REITs 13.2%	Australian Large Cap 10.9%	International Equities 8.5%	Australian Bonds 2.9%
2017	Australian Mid Cap 22.1%	Australian Small Cap 20.0%	International Equities 14.5%	Australian Large Cap 9.5%	Australian REITs 5.7%	Australian Bonds 3.7%
2018	Australian Bonds 4.7%	Australian REITs 2.9%	International Equities 1.8%	Australian Large Cap -1.5%	Australian Mid Cap -7.4%	Australian Small Cap -8.7%
2019	International Equities 28.1%	Australian Large Cap 24.4%	Australian Mid Cap 21.8%	Australian Small Cap 21.4%	Australian REITs 19.4%	Australian Bonds 7.7%

Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Index performance based on total return in AUD. Australian Large Cap is represented by the S&P/ASX 50, Australian Mid Cap by the S&P/ASX MidCap 50, Australian Small Cap by the S&P/ASX Small Ordinaries, Australian Bonds by the S&P/ASX Australian Fixed Interest Index, Australian REITs by the S&P/ASX 200 A-REIT Index, and International Equities by the S&P Developed Ex-Australia LargeMidCap. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance leaders and laggards rotated across investment classes. Of companies in the S&P/ASX Small Ordinaries, 28% were unprofitable, in contrast to 9% in the S&P/ASX 50, on average (see Exhibit 4). In the small-cap universe, the percentage of unprofitable companies was highest in the Materials sector (followed by Energy), which was dominant in the small-cap benchmark (see Exhibit 5). The higher percentage of unprofitable companies among small caps resulted in higher volatility and worse drawdown during market downturns, as the analysis later in the paper will showcase.

Research¹ published by S&P Dow Jones Indices suggests that a simple screening (or elimination) of unprofitable companies using EPS could have a positive return impact for small-cap benchmarks tested across different markets. In this paper, we study whether a profitability screen (positive EPS) may improve small-cap performance and reduce volatility and drawdown in Australia.

Exhibit 4: Percentage of Unprofitable Companies in the S&P/ASX Small Ordinaries compared with the S&P/ASX 50



Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 30, 2019. Figures are percentages of companies with negative trailing 12-month EPS in the S&P/ASX Small Ordinaries and S&P/ASX 50. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

¹ Brzenk, Phillip and Rachel Du. "Building Better International Small-Cap Benchmarks." S&P Dow Jones Indices. July 2019.

Australian small caps displayed more volatility and worse drawdown in downturns compared to the Australian large- and mid-cap companies.

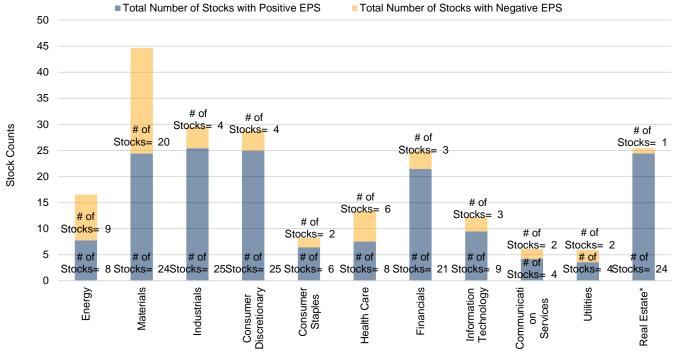


Exhibit 5: Number of Companies with Positive and Negative EPS in Each Sector

Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Chart displays average number of companies considered in each sector over the back-tested period. *The Real Estate sector has a limited history; prior to September 2016, it was part of the Financials sector. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

The portfolio of companies with positive EPS outperformed the unprofitable companies on both absolute and risk-adjusted bases, offering lower return volatility and smaller drawdown.

DOES A PROFITABILITY SCREEN IMPROVE SMALL-CAP PERFORMANCE IN AUSTRALIA?

To study whether a profitability screen (positive EPS) enables small-cap performance improvement in Australia, we divided the S&P/ASX Small Ordinaries universe into two hypothetical portfolios based on trailing 12-month (TTM) EPS.² One included stocks with positive TTM EPS; the other included stocks with negative TTM EPS. To further substantiate the hypothesis, we examined the performance of float-market-cap- and equal-weighted portfolios (see Exhibit 6).

The portfolio of companies with positive EPS outperformed the unprofitable companies on absolute and risk-adjusted bases, with lower return volatility and smaller return drawdown during the period studied (see Exhibit 6). This indicates profitability screens can be effective in improving performance and reducing volatility and drawdown of small-cap portfolios in Australia.

² TTM EPS is calculated as of the reference date and lagged appropriately by three months to avoid look-ahead bias. The portfolios are rebalanced quarterly as of the third Friday of March, June, September, and December. Reference date is the last trading day of the previous month.

Exhibit 6: Fractile Performance Analysis							
DEDIOD	S&P/ASX SMALL	EQUAL-WE	IGHTED	FLOAT-MARKET-CAP WEIGHTED			
PERIOD	ORDINARIES	NEGATIVE EPS	POSITIVE EPS	NEGATIVE EPS	POSITIVE EPS		
ANNUALIZ	ED RETURN (%)		·				
1-Year	21.4	20.1	25.5	25.6	22.1		
5-Year	10.6	13.4	8.9	14.4	10.4		
10-Year	4.1	-3.6	3.5	-0.4	6.4		
Since Inception	7.2	2.1	7.7	4.7	9.0		
ANNUALIZ	ED VOLATILITY (%)						
1-Year	11.4	13.9	10.4	14.6	11.5		
5-Year	12.4	16.2	10.9	17.2	12.0		
10-Year	14.9	18.9	13.5	19.4	14.0		
Since Inception	16.1	21.6	15.1	21.8	15.3		
RISK-ADJU	ISTED RETURN						
1-Year	1.9	1.5	2.5	1.8	1.9		
5-Year	0.9	0.8	0.8	0.8	0.9		
10-Year	0.3	-0.2	0.3	0.0	0.5		
Since Inception	0.4	0.1	0.5	0.2	0.6		
250-DAY MAXIMUM DRAW DOWN (%)							
1-Year	-15.6	-23.1	-13.4	-24.5	-13.8		
5-Year	-17.1	-25.9	-15.0	-26.3	-15.2		
10-Year	-25.8	-45.7	-23.9	-38.8	-21.6		
Since Inception	-60.1 ed and Float-Market-C	-68.3	-62.7	-71.1	-56.6		

The application of a profitability screen on small-cap companies can be seen in the S&P/ASX Small Ordinaries Select.

> Equal-Weighted and Float-Market-Cap-Weighted portfolios are hypothetical portfolios. Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Index performance based on total return in AUD. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

THE S&P/ASX SMALL ORDINARIES SELECT

The application of a profitability screen on small-cap companies can be seen in the S&P/ASX Small Ordinaries Select. This index was launched on Dec. 21, 2018, with the aim of tracking profitable small-cap companies in Australia while minimizing index portfolio turnover and tracking error against the S&P/ASX Small Ordinaries.

The S&P/ASX Small Ordinaries Select is rebalanced semiannually on the third Friday of March and September. At each rebalancing, EPS data from each of the previous two years are reviewed for all companies in the S&P/ASX Small Ordinaries. Existing constituents of the S&P/ASX Small Ordinaries Select are removed from the index if they record two consecutive years of negative EPS. Non-constituent stocks are eligible for inclusion in the S&P/ASX Small Ordinaries Select if they record two

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The S&P/ASX Small Ordinaries Select demonstrated better long-term performance than the S&P/ASX Small Ordinaries... consecutive years of positive EPS. In addition, companies that are removed from the S&P/ASX Small Ordinaries are simultaneously excluded from the S&P/ASX Small Ordinaries Select.³

The S&P/ASX Small Ordinaries Select demonstrated better long-term performance than the S&P/ASX Small Ordinaries, with an annualized excess return of 1.2%, lower return volatility, and reduced drawdown. The index recorded a small tracking error of 3% versus the S&P/ASX Small Ordinaries, with an information ratio of 0.4 (see Exhibit 7).

The S&P/ASX Small Ordinaries Select had a marginally higher average annualized one-way turnover of 36.4%, compared with 32.9% for the S&P/ASX Small Ordinaries.

0.

PERIOD	S&P/ASX SMALL ORDINARIES	S&P/ASX SMALL ORDINARIES SEL		
	ANNUALIZED RETURN (%)		EXCESS RETURN (%)	
1-Year	21.4	20.0	-1.3	
5-Year	10.6	9.8	-0.8	
10-Year	4.1	5.8	1.7	
Since Inception	7.2	8.4	1.2	
PERIOD	ANNUALIZED V	OLATILITY (%)	TRACKING ERROR (%)	
1-Year	11.4	11.3	1.6	
5-Year	12.4	12.1	1.9	
10-Year	14.9	13.9	2.7	
Since Inception	16.1	15.1	3.0	
PERIOD	RISK-ADJUST	ED RETURN	INFORMATION RATIO	
1-Year	1.88	1.78	-0.8	
5-Year	0.86	0.81	-0.4	
10-Year	0.28	0.42	0.6	
Since Inception	0.45	0.56	0.4	
PERIOD	250-DAY MAXIMUM	DRAW DOWN (%)	BETA	
1-Year	-15.6	-15.0	1.0	
5-Year	-17.1	-16.3	1.0	
10-Year	-25.8	-21.7	0.9	
Since Inception	-60.1	-56.4	0.9	

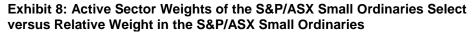
Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Index performance based on total return in AUD. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

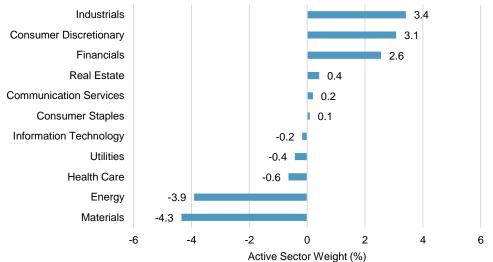
³ For S&P/ASX Small Ordinaries Select methodology details, please visit <u>https://spdji.com/documents/methodologies/methodology-sp-asx-australian-indices.pdf/documents/methodology-sp-asx-australian-indices.pdf</u>.

...with an annualized excess return of 1.2%, lower return volatility, and reduced drawdown.

Sector Allocation

Historically, the S&P/ASX Small Ordinaries Select was overweight in the Industrials, Consumer Discretionary, and Financials sectors (see Exhibit 8). It was underweight in Energy and Materials, which had a high percentage of unprofitable companies (see Exhibit 5).





Sector allocation and stock selection effects contributed to the excess return of the S&P/ASX Small Ordinaries Select...

...though the sector allocation effect explained a larger part of it. Source: S&P Dow Jones Indices LLC. Data from Sept. 20, 2002, to Dec. 31, 2019. Average active weight calculated with respect to S&P/ASX Small Ordinaries Select. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Return Contribution Analysis

Sector allocation and stock selection effects contributed to the excess return of the S&P/ASX Small Ordinaries Select, with the sector allocation effect explaining a larger part of it (see Exhibit 9). The overweight in Financials and underweight in Health Care resulted in positive contributions to excess return. The EPS screen resulted in pronounced positive stock selection effects across most sectors, apart from Industrials, Consumer Discretionary, and Consumer Staples. Therefore, the outperformance of the S&P/ASX Small Ordinaries Select was not simply a manifestation of active sector bets but also driven by the selection effect across sectors.

Exhibit 9: Allocation and Selection Effect of Positive EPS Overlay on the S&P/ASX Small Ordinaries

SECTOR	AVERAGE ACTIVE WEIGHT (%)	ALLOCATION EFFECT (%)	SELECTION EFFECT (%)	TOTAL EFFECT (%)
Communication Services	0.2	6.1	3.1	9.2
Consumer Discretionary	3.1	5.7	3.5	9.2
Consumer Staples	0.1	0.1	-3.7	-3.6
Energy	-3.9	-0.4	-4.2	-4.6
Financials	2.6	9.5	6.3	15.8
Health Care	-0.6	7.0	15.2	22.2
Industrials	3.4	2.1	-5.1	-3.0
Information Technology	-0.2	2.2	1.1	3.3
Materials	-4.3	5.2	5.2	10.4
Real Estate	0.4	2.1	2.5	4.5
Utilities	-0.4	0.7	-0.9	-0.3
[Unassigned]	-0.3	3.1	0.6	3.7
Total	-	43.4	23.5	66.9

Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to April 30, 2019. Brinson attribution is used to decompose total return differentials between allocation and selection effects, grouped by sectors. Average active weight is calculated with respect to S&P/ASX Small Ordinaries Select. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with backtested performance.

Factor Exposure

Historically, the S&P/ASX Small Ordinaries Select had higher profitability⁴ active factor exposure than the S&P/ASX Small Ordinaries, as well as offering higher dividend yield (see Exhibit 10). Profitable companies are better positioned to maintain sustainable dividends. The S&P/ASX Small Ordinaries Select also offered higher value exposure (measured by book-to-price ratio and earnings yield) and tended to have lower realized volatility and less sensitivity to exchange rates compared with the benchmark (see Exhibit 10).

The S&P/ASX Small Ordinaries Select had higher active exposure to profitability, dividends, and value...

...and tended to have lower realized volatility with regard to the smallcap benchmark.

⁴ Profitability refers to return on equity, return on assets, cash flow to assets, cash flow to income, gross margin, and sales to assets.

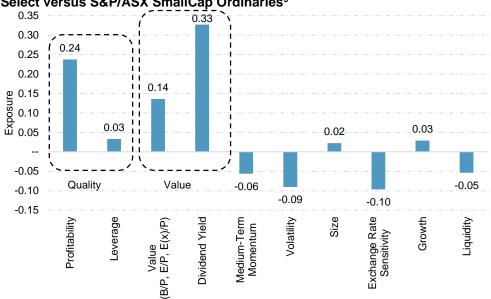


Exhibit 10: Axioma Style Factor Active Exposure of the S&P/ASX SmallCap Select versus S&P/ASX SmallCap Ordinaries⁵

Source: S&P Dow Jones Indices LLC, Axioma, and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. The Axioma Australia Fundamental Equity Risk Model MH 4 is used for the comparison of the factor portfolios against the S&P/ASX Small Ordinaries. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Performance Cyclicality

The S&P/ASX Small Ordinaries Select demonstrated its defensive nature with significant outperformance during down and neutral markets. The index recorded monthly excess returns of 0.5% and 0.3% with a win ratio higher than 65% during down and neutral markets, respectively, though it underperformed by 0.2% (monthly average) during up markets (see Exhibit 11).

Exhibit 1	Exhibit 11: Performance of S&P/ASX Small Ordinaries Select in Up and Down Market Phases				
TREND	MONTHS	AVERAGE EXCESS MONTHLY RETURN OVER BENCHMARK (%) WITH SIGNIFICANCE LEVEL	% OF MONTHS OUTPERFORMING BENCHMARK		
Up	112	-0.2*	40		
Down	63	0.5**	65		
Neutral	32	0.3*	66		
All	207	0.1	52		

Source: S&P Dow Jones Indices LLC and FactSet. Data from Sept. 20, 2002, to Dec. 31, 2019. Past performance is no guarantee of future results. Index performance based on total return in AUD. Up and Down markets are defined as months in which the S&P/ASX Small Ordinaries (TR) returned over 1% or 1% or less, respectively. **Represents significance level at 1%. *Represents significance level at 5%. The rest of the months are classified under Neutral markets. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

⁵ d'Assier, Olivier. "<u>When Size Matters</u>." Axioma. Pp 12.

The S&P/ASX Small Ordinaries Select demonstrated its defensive nature in its significant outperformance during down and neutral

markets.

CONCLUSION

Small-cap companies tend to be more volatile and may suffer higher drawdown during market downturns... tend to be more volatile and may suffer higher drawdown during market downturns. Thus, managing volatility and downside risk is important for small-cap portfolios. We observed that the portion of unprofitable companies in Australia has

Inclusion of small-cap companies in portfolios may provide diversification benefits and growth opportunities. Nevertheless, small-cap companies

been much higher in the small-cap space than in the large-cap segment. On average, 28% of companies in the S&P/ASX Small Ordinaries were unprofitable, in contrast to 9% in the S&P/ASX 50. We also found smallcap companies with positive EPS historically outperformed the unprofitable companies, with reduced volatility and drawdown. This shows the potential benefit of applying profitability screens to small-cap portfolios in Australia.

Designed to track profitable small-cap companies in Australia, the S&P/ASX Small Ordinaries Select offered better risk/return characteristics while minimizing turnover and tracking error compared with the S&P/ASX Small Ordinaries. The S&P/ASX Small Ordinaries Select demonstrated better long-term performance than its benchmark, with an annualized excess return of 1.2%, lower return volatility, and reduced drawdown.

Historically, the S&P/ASX Small Ordinaries Select was overweight in Industrials, Consumer Discretionary, and Financials, while underweight in Energy and Materials, the latter two exhibiting a high percentage of unprofitable companies. Both the sector allocation and stock selection effects contributed to the excess return of the S&P/ASX Small Ordinaries Select, with the sector allocation effect explaining a larger part of it.

The S&P/ASX Small Ordinaries Select also featured higher active exposure to dividend yield and profitability factors compared with the S&P/ASX Small Ordinaries.

...thus, managing volatility and downside risk is important for small-cap portfolios.

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PERFORMANCE DISCLOSURE

The S&P/ASX Small Ordinaries Select was launched December 21, 2018. The S&P/ASX Australian Fixed Interest Index was launched October 13, 2011. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at www.spdji.com. Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown.

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The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

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